The management of supplier relationships for medium sized retail companies: a three-dimensional segmentation model

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Abstract

Companies have limited human, financial and technical resources, which makes it crucial to allocate them in an efficient way in order to stay competitive in today's market. One way of doing this is to classify a company's suppliers into different categories, and differentiate the management of each supplier category. Previous studies within the field mostly focus on larger, manufacturing companies, and there is a lack of segmentation models suitable for retail firms. Further, existing literature on supplier relationship management fail on giving concrete actions on how to manage different types of suppliers. This study addresses this by extending the literature on supplier segmentation and supplier relationship management in the context of a medium sized retail company offering a diversified product portfolio. The study was performed as a case study on a Nordic retail company that produced both private label products and brand named products, where this study focused on its private label suppliers.

The purpose of the study was to develop a supplier segmentation model for guidance in managing supplier relationships for retail companies with diversified product portfolios, and this was met by collecting both qualitative and quantitative data through interviews, workshops, structured questions and archival data. The main findings were a number of identified characteristics of the supplier base of the case company and the determination of different types of buyer-supplier relationships. This ultimately culminated into the empirical contributions of 1) a developed supplier segmentation model suitable for medium sized retail companies offering a diversified product portfolio, and 2) recommended actions on how to manage suppliers, corresponding to each segment in the model.

Key words: Strategic sourcing, supplier segmentation, supplier relationship management

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Sammanfattning

Företag har begränsade resurser vad gäller finansiellt, tekniskt och humant kapital, vilket gör det ytterst viktigt att fördela sina resurser på ett så effektivt sätt som möjligt för att hålla sig konkurrenskraftiga. Ett sätt att göra detta är att klassificera sina leverantörer i olika kategorier, samt differentiera hur varje kategori ska hanteras. Tidigare studier inom ämnet har mestadels fokuserat på större tillverkningsindustriföretag, och det saknas segmenteringsmodeller som är anpassade för retailföretag. Vidare är befintlig litteratur på supplier relationship management knapphändig i att ge konkreta rekommendationer för hur olika typer av leverantörer ska hanteras. Den här studien adresserar detta genom att utvidga litteraturen på supplier segmentation och supplier relationship management i kontexten av ett mellanstort retailföretag med en diversifierad produktportfölj. Studien genomfördes som en case-studie på ett nordiskt retailföretag som sålde både märkesprodukter och egna märkesvaror, där den här studien endast berörde leverantörer för egna märkesvaror.

Syftet med studien var att utveckla ett övergripande ramverk för guidning av hur leverantörsrelationer i retailföretag med diversifierade produktportföljer ska hanteras, och detta uppfylldes genom att samla både kvalitativ och kvantitativ data genom intervjuer, strukturerade frågor, workshops samt arkivdata. De huvudsakliga resultaten var ett antal identifierade egenskaper hos leverantörsbasen av caseföretaget och en bestämd uppdelning av olika leverantörsrelationer. Detta mynnade tillslut ut i två empiriska bidrag i form av 1) en utvecklad leverantörssegmenteringsmodell för medelstora retailföretag som erbjuder en diversifierad produktportfölj, samt 2) rekommenderade handlingar för hur olika leverantörer ska hanteras, som svarar till varje segment i modellen.

Nyckelord: Strategic sourcing, supplier segmentation, supplier relationship management

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1. Introduction

This chapter gives an overview of the background to this study, a description of the problematization, the purpose, aim and research questions, delimitations of the research as well as the disposition of the study.

1.1 Background

This study explores the management of the supplier base of a medium sized retail company with a diversified product portfolio. In order for firms to remain competitive and maintain its business performance in today's market, strategic sourcing has become increasingly significant. (Kotula et al., 2014) In strategic sourcing, the selection and management of suppliers is two of the most important activities of the purchasing function, where the supplier selection process has become essential for reducing purchase risk and maximizing overall value to the purchaser. (Chen et al. 2005) Selecting suppliers according to certain attributes such as quality and delivery lead-time is expected to increase the buying firm's operations performance as well as their ability to gain competitive advantage. Further, managing suppliers and creating key buyer-supplier relationships are said to be another source of competitive advantage (Kocabasoglu et al., 2006; Miocevic and Crnjak-Karanovic, 2012). However, not all suppliers can or should be key suppliers, companies in fact benefit from engaging in a variety of different types of relationships. Hence, classifying the supplier base into different segments in order to most efficiently allocate a firm's human, financial and technical resources is essential for a company to generate the highest return on its resources. (Day et al., 2009; Wagner et al., 2007)

In the existing literature, there are several ways of classifying suppliers, where the portfolio model is commonly used. Kraljic (1983) is one of the first advocates of portfolio models, who created a portfolio matrix that has become a standard within the field of supplier segmentation, and several successors have built their models on the Kraljic matrix. (Gelderman and van Weele, 2005) Common to them all is that they consist of two or more dimensions that create heterogeneous segments of suppliers, each for which different strategic actions are recommended. (Gelderman and Semeijn, 2006)

Fundamental aspects such as quality, flexibility and lead-time are factors that need to be evaluated and considered when segmenting suppliers. (Åkesson et al. 2007) In addition, it is also common to take into consideration aspects such as the supplier's financial strength, co-design capabilities, as well as the technology and innovativeness level. (Araz and Ozkarahan, 2006; Talluri and Narasimhan, 2002) Further, a growing focus within sourcing is sustainability, which during the past years has become an important part of companies' strategic goals, and thus a significant part of its sourcing activities. Legislation, the company itself, end-consumers and other stakeholders require environmental and social awareness through all stages of the supply chain, meaning that firms actively must consider these issues in their sourcing activities. (Giunipero et al., 2012; Svensk Handel, 2014; Tate et al., 2012)

Appropriate strategic actions to impose for different types of suppliers vary in the literature. However, it is evident that a company's supplier base now is seen as an extension of the focal firm, where companies create cooperative, mutually beneficial relationships with some of their suppliers. Moreover, successful buyer-supplier relationships may lead to increased

flexibility, greater end-customer satisfaction, reduced costs and the development of new products faster than competitors. (Nyaga et al., 2010; O'Brien, 2014; Su et al., 2009)

From a retail perspective, companies have complex supply chains due to short product life cycles, low predictability, high volatility and impulse purchasing, and are also challenged to understand and predict the varying consumer needs and buying behaviour. (Bruce et al., 2004; Jonsson and Tolstoy, 2013; Sen, 2008) Moreover, a growing trend within retail is that companies are offering their own private label products. Retailers are continuously improving their development, promotion and sales efforts of their own private label assortment with the purpose of differentiating themselves, increasing the bargaining power and profitability. (Accenture, 2011; Nielsen, 2014) In general, retailers are experiencing increased competition, and this puts pressure on profit margins, which leads to more and more companies sourcing globally. (Perry and Towers, 2012)

Making the right sourcing activities, including supplier selection, supplier segmentation and managing supplier relationships, are crucial for any company's success and future competitiveness, and naturally for retail companies as well. Despite retailers increased exploitation in global sourcing, few studies focus on sourcing activities by retailers. There are existing studies that focus on a manufacturing context, but these are not always suitable to be applied in retail, especially not for smaller companies. Many times retail companies import finished goods and not components, and their smaller size means that their sourcing volumes are small compared to manufacturing firms'. (Cho and Kang, 2000) Hence, this study aims to address this shortcoming in the existing literature by looking into supplier segmentation and supplier relationship management in the context of medium sized retail companies.

1.2 Problematization

This study consists of a case study of a medium sized Nordic retail firm offering a diversified product portfolio of private label products. As with any other retail company, the market condition they operates in means that they are exposed to the challenges of sourcing in a company with a complex supply chain as mentioned in the background. Those challenges include the selection of suppliers, supplier segmentation and management of suppliers. The case company do not have a strategy for how to classify and manage its suppliers. Many suppliers are treated equally regardless of their performance, leading to that the case company allocates their resources inefficiently. This also limits the opportunity for exploiting the full potential of each supplier.

The case company owns a number of department stores, and has a broad assortment of products within several categories. Due to the size of the company, the order volume for each product is relatively small in comparison to many of its competitors, who mainly offer products within one or a few product categories. Existing segmentation models mainly focus on larger industrial suppliers and manufacturers, and not on retail companies that import finished products instead of parts. The use of these models, and the applicability of developed actions for how to manage the supplier base, on medium sized retail companies purchasing finished products are underexplored.

1.3 Purpose and aim

Based on the problematization, the purpose of this research is to develop a supplier segmentation model for guidance in managing supplier relationships for medium sized retail companies with diversified product portfolios offering private label products.

The aim is to define different types of supplier categories and to identify important characteristics for each category in order manage the supplier base.

1.4 Research questions

Based on the purpose and aim of this research, we have to understand how the buying company differentiates suppliers in terms of how they are classified and managed. Therefore, the following Main Research Question (MRQ) is posed:

MRQ: How is the supplier base differentiated?

First we have to understand what the characteristics of the supplier base are. Therefore, sub-Research Question 1 (RQ1) is posed:

RQ1: What are the current characteristics of the supplier base?

Characteristics of the supplier base in this study concern those that are relevant in the choice of supplier in terms of their capabilities of delivering a final product matching the buying company's business strategy.

In order to categorize the suppliers, we need to understand what determine different relationships. Therefore, sub-Research Question 2 (RQ2) is posed:

RQ2: What determines different types of buyer-supplier relationships?

The determination of different buyer-supplier relationships for this study includes the prioritization of the supplier characteristics identified in the first sub-research question.

In order to determine the level of engagement and invested resources in different suppliers, we need to understand how the different types of relationships are managed. Therefore, sub-Research Question 3 (RQ3) is posed:

RQ3: How are the existing suppliers managed?

The management of the suppliers for this study includes internal activities performed by the buying company, both activities in their daily collaboration with suppliers and more strategic activities in order to create long-term collaborations.

1.5 Delimitations

The focus of this research is strategic sourcing, and more specifically supplier segmentation and supplier management. Even though strategic sourcing covers other areas such as supplier selection, the focus is delimited to supplier segmentation and supplier management in order to not make the research to broad.

The research is conducted as a single case study at a Nordic medium sized retail company with a diversified product portfolio, thus limiting the scope of the research to the context of only one specific company. The study includes all business areas at the case company offering their private label products, and the results are derived from them all as a whole. The purpose of the study is to develop a supplier segmentation model for the whole company, and therefore the identified characteristics of the supplier base are considered appropriate for all business areas. However, only one of the case company's sourcing offices in Asian Far East is visited due to the far distance and the limited financial resources.

Further, the possible benefits of the implementation of the segmentation model is not included in the study. Focus is on how the segmentation model should be defined, and how each different type of supplier should be managed, not on how the model is to be used by the company.

1.6 Disposition

The disposition of the report is summarized in Table 1.

Table 1. Disposition of the report

Disposition of the study	
Section	**Description**
1. Introduction	Presents the background and the problematization of the study, which leads to the purpose and aim, as well as the main research question and the three sub-research questions. Finally, the delimitations are stated.
2. Literature review	Forms the theoretical framework for the study, including theory on strategic sourcing, supplier selection, and supplier segmentation. This forms the base of the proposed framework, which then is presented. Thereafter, theory and examples from other companies regarding supplier relationship management are presented.
3. Method	Describes the overall research approach, research process and quality of research. The chapter includes a figure that visualises the research process, and the quality of the research is explained in terms of construct validity, internal validity, external validity and reliability.
4. Results and Analysis	Presents the empirical results and analysis, which commence with background information about the case company, and continues with presenting the results with a structure according to the three sub-research questions.
5. Discussion and Conclusion	Presents the answers to the three sub-research questions and the main research question, followed by recommended actions for how to manage the different supplier categories. Thereafter, the conceptual and empirical contributions are discussed. The chapter ends with stating the study's limitation and gives suggestions for future research.

2. Literature review

This chapter presents a review of existing literature, with focus on strategic sourcing, supplier selection, supplier segmentation and supplier relationship management. The chapter begins with a brief introduction about the retail industry, and also includes a proposed framework for a segmentation model.

2.1 The retail industry

The retail industry is characterized by a downward price pressure, global sourcing, high volatility, low predictability and high product variety. An increased competition in the industry has led to pressure on profit margins, leading to more companies sourcing globally. (Sen, 2008; Perry and Towers, 2012) Since the 1980s, finished goods have been the number one category in global sourcing, thus making retailers an important participant. Yet, few studies have focused on sourcing activities by retailers, and the studies focusing on manufacturing firms cannot directly be applied on retail because of the fact that retail companies import finished products and not parts, and that retailers are smaller in size and sourcing volume compared to manufacturing firms. (Cho and Kang, 2000)

Jonsson and Tolstoy (2013) argue similarly and state that the retail industry has undergone an international expansion over the last 20 years. Further, the retail industry is complex and retailers are challenged to be able to meet and understand consumers' varying and changing needs as well as their buying behaviours. However, there is a lack of research on how retailers can extract value from global sourcing in order to improve their overall performance. In terms of global sourcing, Cho and Kang (2000) concludes in their study that firms with large import volumes achieve better delivery, customer service and product availability than firms with small import volumes. The reason for this is because larger volumes gives the buying firm a better bargaining position, and hence a position to demand higher service from its foreign suppliers.

A growing trend within retail is that companies offer their own private label products. Retailers are continuously improving their development, promotion and sales efforts of their own private label assortment with the purpose of differentiating themselves, increasing the bargaining power and profitability. In addition, consumers are increasingly accepting private label products. Previously, private label products were seen as low-cost alternatives of branded products, and a trade-down in comparison. Now, consumers view private label products as being on the same level as branded products, and sometimes do not even realise that private label products are store-owned because of improvements in packaging, quality, marketing and innovation. (Accenture, 2011; Nielsen, 2014)

This study focus on strategic sourcing, and more specifically supplier segmentation and supplier relationship management. See Figure 1 for an overview of the study's purpose and the main focus area for the literature review.
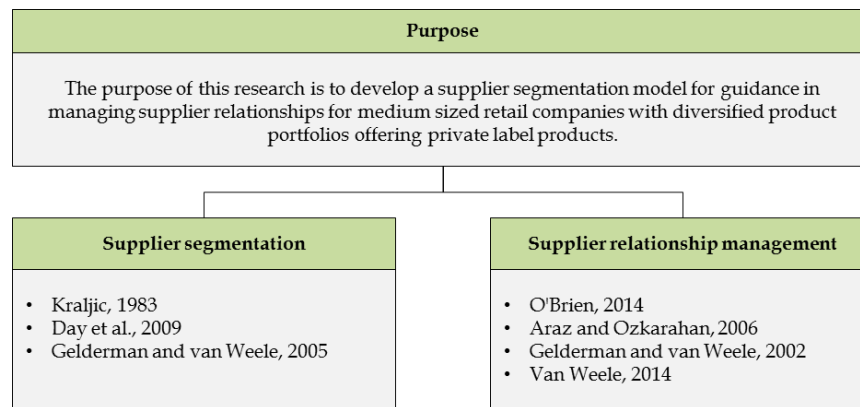
Figure 1. Overview of the main references connected to the purpose of the study

The following sections begin with presenting strategic sourcing and a brief description of supplier selection. This is followed by a presentation of different supplier segmentation models that describe how to classify suppliers according to a number of characteristics. A proposed framework built on the literature on supplier segmentation is thereafter presented. Lastly, the chapter concludes with a presentation of ways to manage different types of suppliers.

2.2 Strategic sourcing

Sourcing has for years been just another word for procurement, and has been seen as a financially material corporate function, not as strategically important. Cost reduction and better management of suppliers were the main drivers for strategic sourcing before year 2000. During the following years, until 2010, the key factor was to develop strategic supplier partnerships. Since 2010, flexibility, forward looking, and information integration have been emphasised. (Kotula et al., 2014)

Today's globalization has changed the basis of competition, and also the way of how sourcing is viewed. The company's ownership over its capabilities is not what is important anymore, instead it is the ability to control and make the most of critical capabilities that matters. (Gottfredson et al., 2005) To better use the supplier capabilities is a way towards improving the performance. Decisions made at different stages in the link will influence performance at other stages, thus it is important to manage the whole link to synchronize the entire supply chain. (Su et al., 2009) More elastic value chains and flexible organizations are characteristics of companies adopting this thinking, where sourcing has become a strategic process making it possible. (Gottfredson et al., 2005)

Both competitive advantage and business performance of a company can be influenced by sourcing (Kotula et al., 2014), where selecting and managing the supplier base is one of the main aims of strategic sourcing. This could be done by recognizing different types of suppliers, and selecting those with the possibility of building long-term partnerships with. (Talluri and Narasimhan, 2002). Developing beneficial buyer-supplier relationships is an important aspect of strategic sourcing, which has the purpose of managing suppliers as assets and integrating them into the supply chain. The relationships can lead to development of capabilities creating advantages for both parties. Operating in a supply market full of uncertainty, risk and turbulence makes it more desirable for the buyer to develop

relationships. (Su, 2013) Strategic sourcing also includes involving in supplier development initiatives through allocating resources to provide feedback to suppliers continuously, enhance supplier performance and also possibly involve in supplier pruning activities. (Kocabasoglu et al., 2006; Boran et al., 2009)

The sustainability debate has become increasingly important during the past few years, why it is now often a part of firms' strategic goals and an important part of strategic sourcing. There are several reasons for organizations to engage in sustainability issues; regulatory compliance, competitive advantage, stakeholder pressure, ethical concerns, international certification standards, changing customer demands and top management initiatives. (Giunipero et al., 2012) Perry and Towers (2012) claim that strategic sourcing is important when it comes to addressing social and environmental issues in a company. Looking at the retail industry, it is characterized by international sourcing, high volatility, low predictability, downward price pressure and high product variety. Customers are increasingly pickier and demand lower prices. Because of this, suppliers are pressured to meet buyers' cost targets, which might affect the CSR standards of a certain factory. The design of the industry requires creating long-term mutually beneficial partnerships between buyers and suppliers.

Previous studies emphasize the on-going public debate on CSR-related issues with global sourcing. Retailers are pressured to on one hand stay competitive by sourcing from low-wage countries in order to minimize costs and boost performance, and on the other hand listen to the more and more socially conscious consumers and make sure that they organize their supply chain in a responsible manner to avoid such issues as child labour, poor working conditions, bribery and corruption. (Jonsson and Tolstoy, 2013; Perry and Towers, 2012)

2.3 Supplier selection

Supplier selection is an important strategic decision, and serves as a source of competitive advantage for companies. It involves factors that are used when an organization selects and evaluates the performance of key- and preferred suppliers. The performance of suppliers is one of the aspects determining a company's success since the supplier's capabilities influence a firm's ability to produce a quality product in a timely manner and at a reasonable cost. (Su et al., 2009)

Firms have become highly selective in their choice of suppliers due to a growing emphasis on establishing long-term relationships, which in turn is derived from competitive pressure and business complexity. The supplier selection process often includes evaluating different suppliers on performance attributes such as price, delivery lead time, and quality. These criteria help companies identify competent suppliers that are appropriate for their planned production. The buying firm's operations performance and the suppliers' performance are both expected to increase when suppliers are selected according to these criteria, hence the buying firm's ability to gain competitive advantage increases. (Ho et al. 2009; Muralidharan et al. 2002; Su et al., 2009)

Different times and business environments have changed the key criteria and priorities in supplier selection. Price, delivery time, and quality have always been viewed as key criteria for strategic supplier evaluation. Other criteria such as companies' financial performance, flexibility in service and production capability, risk management, co-design capabilities, technology and innovativeness level, cost reduction capabilities, supplier's cooperative

attitude and supplier's co-design capabilities are some of the aspects that now also need to be considered as important in order to manage the challenges of dynamic markets and the competition of global and innovative environment. (Araz and Ozkarahan, 2006; Ho et al. 2009; Kotula et al., 2014; Muralidharan et al. 2002)

2.4 Supplier segmentation

Previous studies show that companies benefit from engaging into a variety of different types of relationships. (Caniës and Gelderman, 2005) Further, Day et al. (2009) claim that since a firm has limited human, financial and technical resources, it must allocate these selectively on those supplier relationships from which it expects to generate the highest return. Other authors agree and say that by managing its supplier relations, firms can achieve competitive advantage. One way of doing that is to classify suppliers according to their value-adding capabilities in order to identify different types of supplier relationships. (Gelderman and van Weele 2005; Miocevic and Crnjak-Karanovic, 2012) The classification of suppliers is in the literature referred to as *supplier segmentation* and is defined as a process that involves dividing suppliers into distinct groups with different needs, characteristics or behaviours, requiring different types of inter-firm relationship structures in order to realise value from exchange. (Day et al., 2009) Existing models for supplier segmentation have been reviewed, however, only those relevant for this study have been included. These are presented in the following section. Each model consists of a number of different supplier segments. For some, it is not always clear how to manage each type of supplier. Some models, however, do have more specific recommended actions, which are included in section 2.6. The different models are summarized in Table 2, where the perspective of the importance as well as disadvantage with each model in relation to this specific context is presented.

2.4.1 Segmentation models
A considerably large amount of segmentation models in existing literature are categorised as *portfolio models*. A portfolio model is a framework that can be used for different types of management problems, one being the management of buyer-supplier relationships, and is defined as *a tool that combines two or more dimensions into a set of heterogeneous categories for which different (strategic) recommendations are provided*. (Gelderman and Semeijn, 2006) Using portfolio models is a way of differentiating the company's purchasing strategy, and it shows that different suppliers represent different interests for an organisation. (van Weele, 2014)

In 1983, Kraljic created the probably best-known portfolio model, which has become a standard in the field of purchasing portfolio models. (Gelderman and van Weele, 2005) Kraljic (1983) identified four different categories for a company's purchased items: non-critical items, leverage items, strategic items and bottleneck items. In order to determine which category a specific item belongs to, he created a two dimensional model that considers two variables: *profit impact* on one axis, and *supply risk* on the other axis, see Figure 2. Profit impact of a specific supply item is defined in terms of purchased volume, percentage of total purchase cost, or impact on product quality or business growth. Supply risk means availability, number of suppliers, competitive demand, make-or-buy opportunities, storage risks and substitution possibilities.

After having the purchased items categorised accordingly, the company weight the bargaining power of its suppliers against its own strength as a buyer. This includes reviewing the supply market, estimating the availability of strategic materials in terms of quality and

quantity, assessing the relative strength of its existing suppliers, and analysing its own needs and supply lines. Next, the products identified as strategic items, as described above, are positioned in the purchasing portfolio matrix, visualised in Figure 2. Based on this, the company can identify areas of opportunity or vulnerability, evaluate supply risk and deduce strategic actions for these items and its suppliers. The nine segments in the purchasing portfolio matrix correspond to three basic risk categories, each connected to certain strategic actions. (Kraljic, 1983)
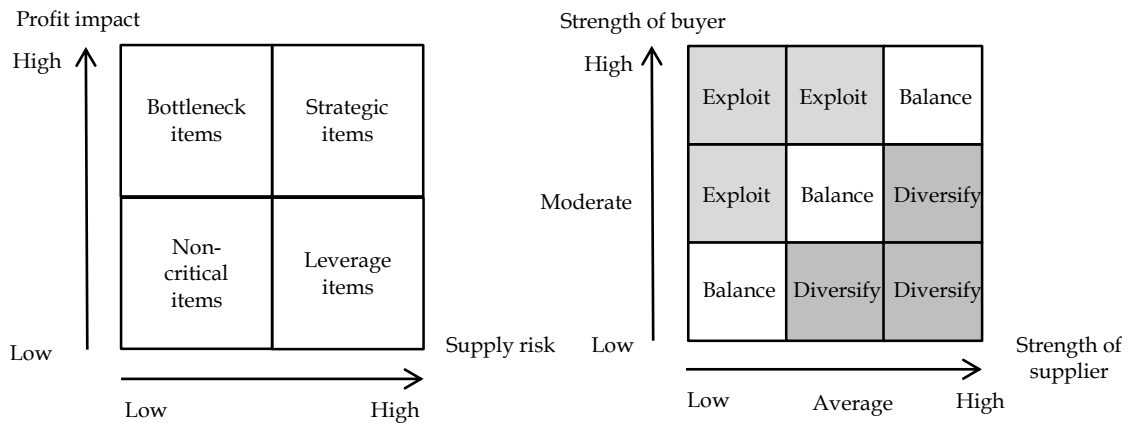
Figure 2. Kraljic's purchasing portfolio matrix (modified from Kraljic, 1983)

Subsequent to Kraljic, several authors have introduced models that are based on the Kraljic portfolio model and are quite similar in comparison. (Gelderman and van Weele, 2005) One example is Olsen and Ellram (1997) who created a two-step portfolio model with the first step including the two dimensions *difficulty of managing the purchase situation* and *strategic importance of purchase*, see Figure 3. The former includes aspects that are external to the company: the product characteristics (novelty and complexity), supply market characteristics (supplier's power and technical competence) and environmental characteristics (risk and uncertainty). The latter involves factors internal to the company: competence factors (such as purchase improves knowledge of buying organization), economic factors (such as value of purchases and the extent to which the purchase is part of final product with a great value added) and image factors (supplier critical image/brand name and potential environmental/safety concerns).

The second step of the model analyses the supplier relationship through a portfolio matrix with the dimensions *relative supplier attractiveness* and *strength of the relationship*, see Figure 3. Relative supplier attractiveness includes factors that make a company choose a specific supplier: financial and economic factors (such as supplier's margin and financial stability), performance factors (such as delivery and quality), technological factors (such as supplier's design capabilities and speed in development), organizational, cultural and strategic factors (such as strategic fit between buyer and supplier and general risk of dealing with supplier) and other factors (such as ability to cope with changes in the environment). Strength of the relationship includes factors that create bonds between two companies: economic factors (such as value of purchase), character of the exchange relationship (such as duration of the exchange relationship), cooperation between the buyer and supplier (such as integration of management) and distance between buyer and supplier (such as social and cultural distance). The analysis of the supplier relationship is combined with the analysis of the company's

purchases, and together they form strategic action plans for each relationship. (Olsen and Ellram, 1997)
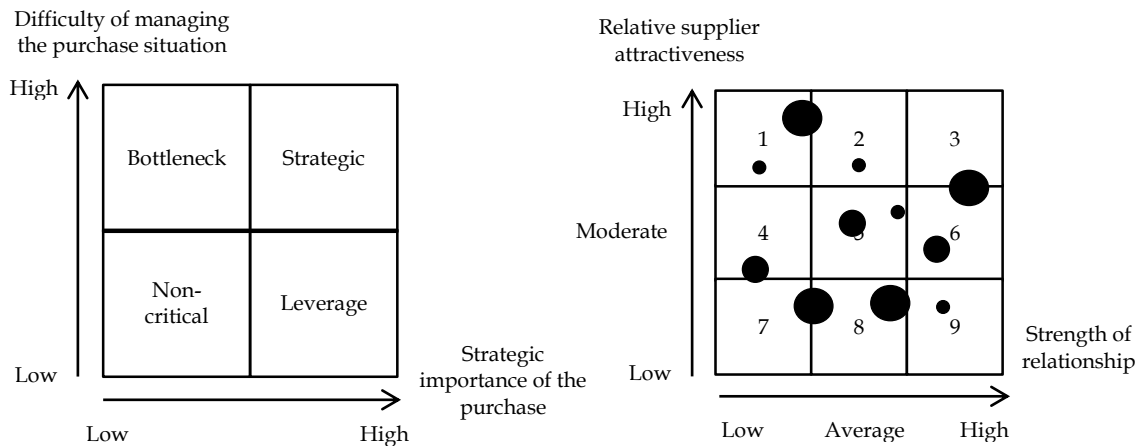
Figure 3. Olsen and Ellram's segmentation model (modified from Olsen and Ellram, 1997)

Tang (1999) presents a portfolio model with the purpose of mapping four different types of supplier relationships, and is built on two cases. In case of market risk being relatively low, the model is based on the dimensions *strategic importance of the part to the buyer* and *buyer's bargaining power*, which is visualized in Figure 4. The former dimension looks into criterion such as if the part affects the basic functionality of the product, or if the part affects the key product performance valued by customers. The latter dimension involves a number of conditions, such as the buyer's importance to the supplier, the buyer's reputation in the market and supplier switching cost. In case of the market risk being relatively high, the buyer should also investigate additional factors, such as supplier's technological capabilities, willingness to share financial risks and willingness to participate in joint research and development projects. The suppliers are mapped into one of four different segments: exclusive supplier, vendor, partner and preferred supplier. Each supplier type will be managed differently by the buying company.
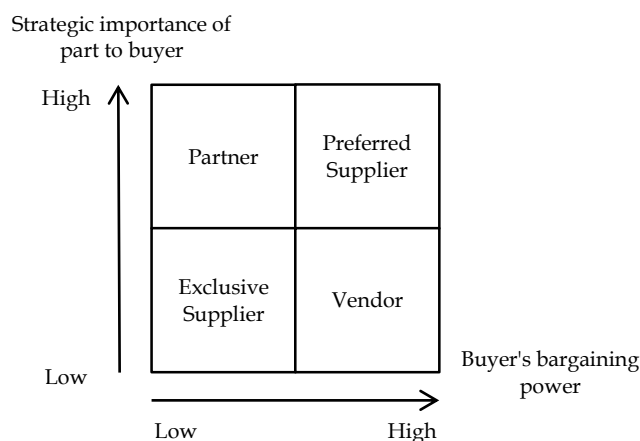
Figure 4. Tang's segmentation model (modified from Tang, 1999)

One more recent supplier segmentation model is developed by Rezaei and Ortt (2013), and is based on existing models, combining available segmentation criteria, see Figure 5. They define supplier segmentation as *the identification of the capabilities and willingness of suppliers by a particular buyer in order for the buyer to engage in a strategic and effective partnership with the suppliers with regard to a set of evolving business functions and activities in the supply chain*. (Rezaei and Ortt, 2012) The capabilities of a supplier can be assessed using different criteria such as the quality of the products, the technical capability or the design capability of the supplier. The willingness of a supplier can be evaluated looking at aspects such as communication openness and commitment to continuous improvement in product and process. Each buyer is encouraged to consider different capabilities and willingness criteria to assess and segment its suppliers. These criteria should be selected so that there is a consistency between the supplier-related strategic activities. As an example, if cost reduction is the most important driver, price should be considered one of the capability criterion. The model divides the suppliers into four different types of suppliers, Type 1-4, where each type should be managed differently. (Rezaei and Ortt, 2012)
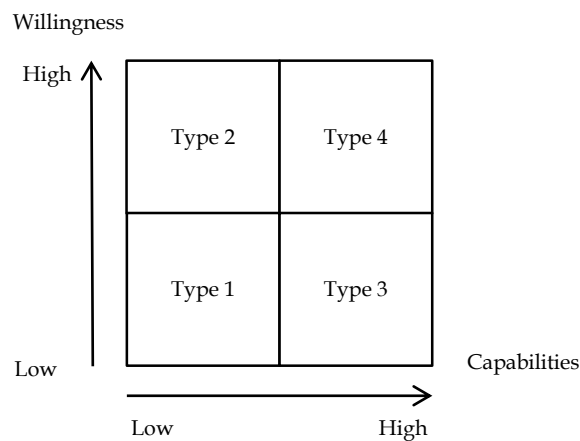
Figure 5. Rezaei and Ortt's segmentation model (modified from Rezaei and Ortt, 2013)

2.4.2 Summary of segmentation models
Existing segmentation models have been considered in relation to suitability of the case company, where both advantages and disadvantages have been taken into account. A summary of the different models and their relevance for the research context is presented in Table 2.

Table 2. Summary of existing segmentation models

	Summary of existing segmentation models			
Writer	**Portfolio model dimensions**	**Examples of aspects included in the portfolio model dimensions**	**Advantages in relation to suitability for the retail context**	**Disadvantages in relation to suitability for the retail context**
Kraljic (1983)	1. Profit impact vs. supply risk 2. Company strength vs. supplier strength	1. Total costs, profitability profile, supply, pace of technological advance etc. 2. Uniqueness of product, entry barriers, market size vs. supplier capacity etc.	Importance of profit impact and company strength vs. supplier strength.	Analysis based on items, does not include supplier capabilities and willingness. Manufacturing oriented.
Olsen and Ellram (1997)	1. Difficulty of managing the purchase situation vs. strategic importance of the purchase 2. Relative supplier attractiveness vs. strength of the relationship	1. Complexity of product, supplier power & technical skills, value of purchase, purchase is part of final product with a great value added, image factors etc. 2. Supplier's financial situation, performance factors, technological factors, character of exchange relationship etc.	Relative supplier attractiveness takes into account performance (quality, delivery, price) and technological factors (design capabilities, speed in development etc.).	Model contains a lot of overlapping aspects, which could make it ambiguous to use. Manufacturing oriented.
Tang (1999)	Strategic importance of the part to the buyer vs. buyer's bargaining power	Buyer's importance for supplier, buyer reputation, supplier's technological capabilities, supplier's willingness to share financial risks etc.	Buyer bargaining power takes into account the relative power position between buyer and supplier.	Analysis based on importance of part, does not include supplier capabilities in default model. Unclear how to use extended version. Manufacturing oriented.
Rezaei and Ortt (2012)	Willingness vs. capabilities	Cost, profit impact, delivery, industry knowledge, communication system, reserve capacity, design capability, market sensing, willingness to co-design, ethical standards, willingness to share information, ideas, technology and cost savings etc.	Model takes into account the supplier's performance and will to cooperate.	Does not distinctively take into account the relative bargaining power between buyer and supplier.

By reviewing existing literature regarding supplier segmentation and sourcing in the retail industry, relevant segmentation criteria for the retail industry were identified, and are

highlighted in Table 2. These criteria formed the basis of the proposed framework developed in the case study, which is presented in the next section.

2.5 Proposed framework

Many of the previous models in existing literature are based on Kraljic (1983) and hence, many base their classification on the purchased product at first hand, and not as much on the performance of the supplier. However, with the specific context of this study, i.e. the conditions for retail, department stores and the production of private label-products, it is necessary for a segmentation model to mainly focus on the supplier performance instead of the purchased product.

Looking at department stores, customers visit them for their wide assortment and not too often for a specific product, which makes a classification based on strategic items as in Kraljic's (1983) model, not the most suitable classification. Due to the fast-changing conditions that applies within the retail business (Bruce et al., 2004; Jonsson and Tolstoy, 2013; Sen, 2008) it is important to work with suppliers that can follow that pace, thus making it crucial to look at a supplier's performance and potential in contributing to the buyer satisfying the rapidly changing market. Finally, looking at the aspects of private label-products, in order for companies to differentiate themselves and increase the popularity of their private label brand, a supplier's performance and ability to produce what the company's end-consumer wants become very important.

Reviewing the literature on supplier segmentation, and applying it to the conditions within retail, a framework consisting of three main dimensions was proposed. Each dimension includes a number of characteristics, which is described further in the following sections.

2.5.1 Performance
As described in section 2.4 and visualised in Table 2, cost, delivery time and quality are common characteristics that are viewed as fundamental for supplier evaluation. A supplier that has a poor performance within these characteristics should not be a supplier for the company. However, a supplier that is qualified according to the minimum requirements imposed from the company can perform at different levels. Some will only reach the minimum level, and some will outperform what is required of them. Other characteristics covering a supplier's performance include their reserve capacity, technical capacity, technological capabilities, after sales support, packaging ability, and communication system. (Kraljic, 1983; Olsen and Ellram, 1997; Rezeai and Ortt, 2012; van Weele, 2014; Åkesson, 2007) Performing poorly within these fundamental characteristics, i.e. not delivering according to the promised time or delivering a different quality or price from initial agreement, may be seen as a risk to the buying company, why it is essential to include in the proposed framework.

Another characteristic within a supplier's performance that has become increasingly important is the CSR-work. The increased attention from company stakeholders for environmentally and socially sound production makes the CSR perspective an essential characteristic in a contemporary model. The same applies to CSR as for cost, delivery time and quality; there is a minimum level that needs to be fulfilled, but after reaching that level, suppliers can differ through a clear focus towards being an advocator of CSR on one end, or simply doing the minimum requirements on the other end. (Giunipero et al., 2012; Tate et al., 2012)

To summarize, these performance characteristics entail a risk for the buyer if the supplier cannot fulfil the buyer's minimum level. Therefore, identifying those suppliers that perform well on these fundamental characteristics is essential, which is why the *Performance* dimension is included in the proposed framework.

2.5.2 Business match

It is not only important to identify suppliers that are critical in their fundamental performance, but also to identify which suppliers that hold value-adding capabilities (Gelderman and van Weele, 2005; Miocevic and Crnjak-Karanovic, 2012), and are likely to be critical for future growth. To do so, it is important for the company to understand its strategic direction (O'Brien, 2014; van Weele, 2014), so that they can identify suppliers that help the company to reach its goals.

As an example, it is not unusual that private label companies use the same suppliers as brand named companies, with the difference of putting their label on the product. Thus, it is important for the buying company to have suppliers that can make the production tailored for them and their customers. The demand within retail industry is highly dependent on current trends, and many products only exist during one season. (Sen, 2008; Perry and Towers, 2012) This puts pressure on the supplier to quickly adapt to changing trends and customer requirements. In relation to this, existing literature identifies characteristics such as suppliers' ability to develop own products, their innovativeness, their ability of delivering sustainable products and materials, their knowledge in production, communication openness, market sensing and industry knowledge. (Araz and Ozkarahan., 2006; Giunipero et al., 2012; Olsen and Ellram, 1997; Rezeai and Ortt, 2012; Talluri and Narasimhan, 2002) Identifying suppliers that hold these value-adding characteristics could be critical for the buyer to stay competitive.

Further, sustainable products have become increasingly common and end-consumers more often demand for companies to expand their sustainable assortment. As mentioned in section 2.2, sustainability is an important part of any company's strategic direction. Hence, a supplier that is able to offer sustainable products and is in forefront of developing sustainable products or materials becomes important.

To conclude, identifying those suppliers that hold these value-adding characteristics and can support the company towards their strategic direction is important for long-term success. This is why the *Business match* dimension is included in the proposed framework.

2.5.3 Balance of power

Several of the existing segmentation models include or highlight the company's versus the supplier's bargaining power. (Kraljic, 1983; Tang, 1999) Many times it constitutes one of the dimensions in the models, and sometimes it is part of one of the dimensions. Small or medium sized companies with a broad product assortment end up competing with relatively small order volumes for each of their purchased products. This affects the relationship with the supplier, or more specifically the bargaining power. Even though a buyer sees a supplier as important, the supplier might not view the buyer equally important due to its small order volumes. Therefore, this is an important characteristic to consider in the relationship with suppliers.

The bargaining power is further affected by what Kraljic (1983) names uniqueness of product. This means that if the supplier is the only one that produces a certain product, the supplier has high bargaining power due to the buyer having a high switching cost of supplier.

In summary, there are some characteristics that affect the bargaining power between a buyer and supplier, which are essential to consider in the relationship with suppliers. This is why the *Balance of power* dimension is included in the proposed framework.

2.5.4 Profit impact
In addition to the three dimensions described in previous sections, a common aspect in existing literature on supplier classification is what is termed profit impact. Other writers name it the economic importance of purchase, or the profitability profile. (Kraljic, 1983; Olsen and Ellram, 1997; van Weele, 2014) As explained previously, retail companies owning department stores do not have strategic products in the same way as other industries might have, and does not focus as much on the profit impact of such products. Thus, for this specific context, it is not necessary to build the proposed framework with profit impact as one of the main dimensions. However, retail companies still have some products that constitute a larger part of the company's profit, making it an important aspect to consider. Therefore, *Profit impact* is included in the proposed framework.

2.5.5 Summary of proposed framework
All of the characteristics in *Performance, Business match*, *Balance of power* and *Profit impact* are further evaluated throughout the case study, which determine what should be included in the final segmentation model. Many characteristics are important, but they are more or less relevant for this specific context, thus making some of them more appropriate for forming the basis of the segmentation model. See Figure 6 for the proposed framework where *Performance*, *Business match* and *Balance of power* constitute the axes of the three-dimensional framework. *Profit impact* of a certain supplier is visualized by the relative size of the spheres.
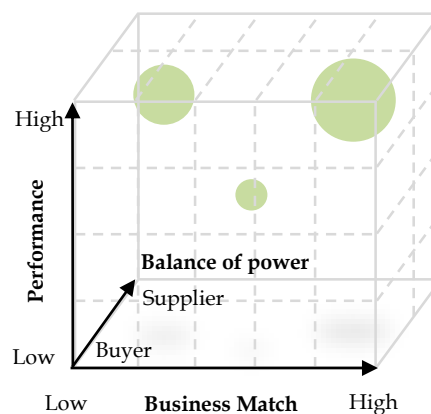
Figure 6. The proposed framework

The outcome of the proposed framework as well as the portfolio models described in previous sections give direction on the strategic and tactical planning of supply management activities, such as the formation of a certain governance structure for a relationship. (Day et al. 2009) Put more broadly, supplier management is referred to as managing supplier relationships over time and is defined by Rezaei and Ortt (2012) as *the communication, evaluation and relationship-building efforts involving suppliers*. It can be advantageous for a buyer to have a structural approach in developing and maintaining the relationship for different supplier segments, as there are no single ideal relationships for each situation. Different types of supplier relationships are further described in the following section.

2.6 Supplier relationship management

The concept of buyer-supplier relationships has during recent years changed, and thinking of the supply base as simply a collection of vendors that provide the goods and services that are requested is not the contemporary mind-set. The new view of suppliers is that they have a role that could enable success and future value, and buying companies see their suppliers as virtual extensions of their firms. Further, buyers tend to work with fewer suppliers, and suppliers seek for more long-term relationships with their customers. Companies develop cooperative, mutually beneficial relationships with their suppliers in order to achieve competitive advantage, and such relationships will create unique values that neither can create independently. (Araz and Ozkarahan, 2006; Nyaga et al., 2010; O'Brien, 2014; PwC, 2013; Su et al., 2009)

Supplier relationship management (SRM) is about motivating suppliers to act in ways so that they meet a company's needs, with the aim of separating those suppliers that are really important to the firm, and provide guidelines for how to work with different types of suppliers. (Schuh et al. 2014) SRM is a term that covers both the level of intervention and the nature of relationship needed with suppliers. (O'Brien, 2014) Key supplier relationship management is another term that focuses on the management of strategic supplier relationships, and is based on the assumption that a company's supplier portfolio consists of relationships with different levels of importance. (Gelderman and van Weele, 2002; Miocevic and Crnjak-Karanovic, 2012) Strategic suppliers are chosen based on that they can meet long-term expectations of companies in an effective way, and companies involve in strategic partnership with the aim of increasing supplier performance by providing continuous feedback to them. (Araz and Ozkarahan, 2006) Organizations need to clarify which suppliers that are important to spend time with in order to create a close relationship, and they must separate strategic from transactional partnerships. (Gelderman and van Weele, 2002; Miocevic and Crnjak-Karanovic, 2012; O'Brien, 2014)

Several authors state that supplier involvement and development is costly and cannot be made with the whole supplier base, why it is not possible to have the same relationship with all suppliers. Each supplier of a company serves the firm in different ways and has different characteristics, why companies need to allocate its management capacity, administrative time, and financial funds selectively across its relationships in order to optimize limited resources. A close and long-term relationship can therefore only be achieved with a limited number of suppliers. (Araz and Ozkarahan, 2006; O'Brien, 2014; Wagner and Johnson, 2004) Bensaou (1999) is of the same opinion, and argues that companies invest not only money, but also people and information, meaning a risk for the company, which is unnecessary if the relationship does not ask for it. O'Brien (2014) states that in order to reach increased success through SRM, it is important that the overarching strategy of the firm connects with the company's sourcing activities.

Further, mismatching a relationship or managing a good matched relationship in a bad way is supply-chain management failure. There is no point of investing time in building trust through frequent visits, guest engineers, and cross-company teams if the product and market context calls for simpler ways for handling the relationship. (Bensaou, 1999) For some suppliers the one thing asked of them is to deliver what the company wants, at the right time to an agreed price. For some, actions to keep things on track are needed. And for some, a much greater value can be secured. (O'Brien, 2014) The next section describes how it is possible to differentiate supplier relationships.

2.6.1 Differentiating supplier relationships
In a study performed by PwC regarding how key suppliers can drive a company's competitive advantage, they conclude a number of things that should be involved in a close relationship between the buyer and supplier. First, buyers should become customer of choice, which includes the benefits of getting preferential treatment regarding availability, cost, access to technology, innovation and risk. Second, the buying company should leverage on the supplier's capabilities by getting involved early in the innovation and product development process. Third, the buyer and supplier should share growth, profits, risks and investments, where there is full visibility on relevant risks and a mitigation approach for how to reduce them are developed together with the supplier. Finally, suppliers and buyers also develop performance measures, and make sure real time exchange of important information is in place. Respondents in the study mentioned that areas where they collaborated with their suppliers were within continuous improvement, joint product development, value creation, real-time data exchange, open-book contracts, integrated planning cycles and shared investments. (PwC, 2013)

It is suggested that supplier relationships can vary according to a number of aspects, such as information exchange (mutual sharing of information between buyer and supplier), operational linkages (systems, procedures, routines and technologies that are involved in the functional integration), legal bonds, cooperative norms (involves the extent to which the supplier and buyer work together toward joint and individual goals), and buyer/seller adaptations (possible investments). (Wagner and Johnson, 2004) Further, Sheu et al. (2006) describe eight relationship variables critical to collaboration between supplier and buyer. One important variable is the interdependence between the buyer and supplier, where high interdependence enables the sharing of key information and joint planning between the parties. They also describe that long-term orientation or commitment are important for long-term relationships, which is achieved when both parts are committing resources to the relationship in terms of time, money, facilities, and also by having the top management included in the relationship. Further, information sharing of things such as consumer sales and replenishment information is also mentioned as key requirements for a collaborative relationship.

There are a number of aspects in which a company can have diverse ways of working with different suppliers, and hence differentiating its buyer-supplier relationship. Such aspects include among others supplier improvement, supplier recognition, and information exchange. These are described in the following paragraphs.

Supplier improvement
Supplier improvement includes activities that identify, measure and improves supplier performance, and are undertaken in coordination between the buyer and the supplier. These activities help the continuous improvement of the overall value of the goods and services supplied by the buying firm. *(*Rezeai and Ortt, 2012) KPMG (2012) states that the need of identifying high-potential suppliers and helping them develop into strong partners is recognized by best-practice organizations. By this, they mean that best-practice organizations continuously work on identifying suppliers with the potential to grow, improve and become long-term partners with them. The organizations equip these suppliers with tools helping them to improve their performance.

Investing time, money and resources by offering supplier improvement programs is one way of developing a good relationship with a supplier, which is desirable when the supplier offers

an unique product where it is difficult to find a substitute product. (O'Brien, 2014; Rezeai and Ortt, 2012; Schuh et al., 2014; Tang, 1999) It is advantageous to work together with suppliers to jointly improve and in that way optimize the relationship, where supplier development is an essential aspect in this. (KPMG, 2012)

When suppliers show poor performance regarding e.g. cost, delivery or quality, and also lack the ability of providing differentiating factors for the buying company providing no or low strategic potential, they should be replaced with more promising suppliers. However, this could be problematic when the business is built with long-term suppliers and numerous product segments are included. The suppliers are normally given a final chance to improve where the improvement points are clearly communicated and very fact based, but they are not worth the effort of guidance, which thus will be limited. (Rezeai and Ortt, 2012; Schuh et al., 2014)

Contracts
Some buyers engage in long-term contracts with their suppliers. Whether a specific contract type is appropriate or not depends on the situation and a number of different aspects. (van Weele, 2014). Using a contract is advantageous when the commodity prices are expected to increase because the volume is bought at a previously agreed price, and the buyer will be certain of the delivery. The downside of using contracts for all the purchased volume compared to buying everything, or part of the volume, on spot basis applies for the opposite situation, when prices are expected to decrease. Another disadvantage with using contracts is that it could mean that the contact with the market is lost due to that the suppliers stop updating the buyer with the latest developments on the market since they have already secured their volume with the buyer. Most companies use a combination of contracts and spot buying in order to handle the risks and take advantages of the benefits with each. (Peleg et al., 2002; Van Weele, 2014)

In those cases where the products and suppliers are interchangeable, a purchasing policy built on competitive tendering is appropriate. In general, there are no long-term contracts for these suppliers or products. The purchasing is made from multiple suppliers, where the priority is to buy at the lowest possible price while maintaining a level of quality and supply that is required. (Bensaou, 1999; O'Brien, 2014; Sheu et al, 2006; Tang, 1999; van Weele, 2014) Longer contract types are typically used for suppliers that offer products that are more complex, and where there are fewer suppliers available. This is often because of the high switching cost for the buying company. (O'Brien, 2014; Tang, 1999)

Supplier involvement in product development
Supplier involvement in product development has emerged as an increasingly important activity in the manufacturing industry, and focus is many times put on the suppliers' design capability when assessing the performance. These capabilities are often referred to as engineering techniques in terms of product simplification, support in component selection, and support in design for manufacturing/assembly activities. (Araz and Ozkarahan, 2006) In the retail industry, buyers sometimes transfer the design capabilities to manufacturers instead of doing it themselves, in order to enhance efficiency. (Jonsson and Tolstoy, 2013)

Van Weele (2014) also emphasize the importance of getting suppliers involved in the product development process, and further explains that an increasing number of innovations come from suppliers. A close relationship to the supplier is also driven by the rapid development of technology and the high cost connected to the investments needed in order to keep up with the technology development in a broad range of areas. A buyer can create a partnership with

a supplier, where technical experts or other experts become a part of the research and development team or other relevant project teams of the buyer. When it is possible to work close together on a gain and risk-sharing basis, totally new product concepts may emerge, with the possibility of creating competitive advantage.

Starting a long-term relationship with suppliers at the product/process design and development stages have been shown to have several benefits; fast project development times, lower development and product cost, increased supplier-originated innovation and better product quality. (Araz and Ozkarahan, 2006; van Weele, 2014) It has also been emphasized that involving suppliers in the product development affects the success depending on the suppliers' design-based capabilities and practices. If deciding to include the suppliers in this process, they should be selected based on that they can meet varying conditions from the perspective of new product development, design, manufacturing processes and manufacturing capabilities. (Araz and Ozkarahan, 2006)

Information exchange
Sheu et al. (2006) explain that information exchange is identified as a key aspect in collaborative inter-organizational relationships, and that it has found to be associated with commitment. Sharing information should not be done with all suppliers, but when a supplier is very important and the collaboration is close, it is important to share information regarding sales and marketing so that the supplier clearly understands the end-customers' needs. (Dyer et al., 1998; Olsen and Ellram, 1997) Further, Kocabasoglu (2006) explains that sharing information with key suppliers is a way for reducing the risk for opportunistic behaviour by their partners. However, when the suppliers are interchangeable, the exchange of information should be minimal. (Bensaou, 1999; O'Brien, 2014; Sheu et al, 2006; Tang, 1999; van Weele, 2014)

Further, it is described that suppliers could benefit from sharing information about the production process, internal costs, and quality control process with the buyer. When the buyer has access to the supplier's costs, the two parts can have a discussion about how the supplier's cost position could be improved. Together they can then develop efficiency programmes to achieve cost reduction, quality improvements, process improvements, and improved product development. (van Weele, 2014)

Buyers could also benefit from sharing information with their key suppliers during the design phase of the product. This could help reducing the total product cost and product development time. Information regarding inventory is also common to share with the suppliers, where some buyers make the suppliers responsible for monitoring and replenishing the inventory, thus leading to reduced inventory and increased customers service. (Tang, 1999)

Wu and Angelis (2009) explain that a higher level of integration of trading partners' information systems leads to the achievement of greater corporate performance and coordination. Information system integration improves the ability to acquire and distribute information across the supply chain, and this could be information related to inventory, sales, demand forecasting, order status, production schedules and lead times.

Communication
The level of interaction differs between different suppliers. For suppliers offering products that easily can be replaced, the level of interaction is low and the only communication takes place when the buyer is placing an order. For more important suppliers, the communication

is closer and can sometimes involve several persons. (Bensaou, 1999; O'Brien, 2014; Sheu et al, 2006; Tang, 1999; van Weele, 2014)

Recognition
In order to encourage the best performing suppliers, some buying companies recognize their suppliers in different ways. Unilever recognized their key suppliers by introducing a strategic programme in 2011 called *Partner to win*, with the aim of building value relationships in order to reach mutual growth. The award celebrates suppliers who over the last year have contributed to grow their business with Unilever, in a mutually and sustainable manner. The program is also used in order for Unilever to become customer of choice for their suppliers. Doing so is according to themselves critical to be prioritized as a buyer regarding access to resources, ideas, and innovations. When the awards are given to the suppliers, it is done by the executive committee, which according to Unilever shows the commitment from the company in the chosen suppliers. (Unilever, 2012)

Further, KPMG (2012) explains that best-practice organizations have formal recognition programs for their suppliers, and 44 per cent of the companies participating in a study they performed provides some kind of recognition to its high-performing suppliers.

Growth
Growth opportunities can be communicated to some of the suppliers in the supplier base. This concern the most important suppliers, but also suppliers with poor performance having other characteristics that are valuable for the buying company's business. Communicating the growth opportunities for the latter is a way of showing trust for the company, and gives the supplier some encouragement to work with its performance. (Schuh et al., 2014)

As a part of Unilever's *Partner to win* program, they created what they call *Joint Business Development Plans (JBDP)* with their strategic suppliers. This includes setting out Unilever's strategic business plan and to provide a clear framework for how Unilever and the suppliers should work together in order to deliver according to the plan over long-term. The company emphasizes that it is important to be consistent in the message towards the suppliers, so that each part knows what is going to happen and what the partnership means. (Unilever, 2012)

PwC describes that it is common that a close relationships with suppliers are developed by the procurements function in isolation from the overall business. This means that the business objectives are not met, since the partnership only focuses on solving operational issues. To avoid this to happen, it is important to involve the business in the relationship with suppliers and to assign an executive sponsor from the board that can ensure alignment with the business objectives. (PwC, 2013)

Samsung and Unilever also describe the importance of management involvement. As a part of Samsung's support program for their outstanding first-tier suppliers, they included visits by top management to these suppliers on a regular basis. (Samsung, 2012) Further, Unilever invite their strategic suppliers to meet senior managers from the whole company in order to gain a deeper understanding of the company's strategic priorities. (Unilever, 2012)

Investments
In a close cooperation between a buyer and supplier, it is common with shared investments. Investment in dedicated plants, equipment and personnel are some of the possible investment areas, where trust between the parties is crucial in order to create willingness to invest

resources into the relationship, both in terms of money and people. (Dyer et al., 1998; Olsen and Ellram, 1997)

2.6.2 Summary of supplier relationship management
The different categories for differentiating supplier relationships described in the previous section are evaluated throughout the case study, which decide on in what way it is most appropriate to manage different categories of suppliers for medium sized companies in the retail industry. Many of the management practices for different types of suppliers in existing literature are focused on manufacturing firms, why some of them might not be relevant for this specific context.

2.7 Summary of literature review

The theoretical framework contributes to the research by providing insights to the area of strategic sourcing, and more specifically supplier segmentation and supplier relationship management, which are topics that have been broadly covered in previous research. However, after reviewing the literature and connecting this to the specific context of this case study, it is concluded that there is no existing model that is completely applicable on medium sized retail companies with diversified product portfolios. The disadvantages of each reviewed models is what makes them non-applicable, as described in Table 2. However, some of the aspects included are of interest for this context, and were included in the proposed framework presented in section 2.5. Further, looking at these models, it is also found that there is a lack of concrete actions that should be imposed when managing each type of supplier. This study addresses this by developing a supplier segmentation model suitable for this specific context, which together with the overall results from the case study are presented in chapter 4. First, the method used for this study is presented in the next chapter.

3. Method

This chapter describes the methods used in this study, starting with the overall research approach of the study, followed by a more detailed presentation of the research process. The latter consists of a description of how the literature review was conducted and how the case study was performed. Finally, the chapter presents the quality of the research in terms of its validity and reliability.

3.1 Research approach

The purpose of this research is to develop a supplier segmentation model for guidance in managing supplier relationships for this specific context. By developing a segmentation model in a new context, this study aims to contribute with knowledge to the strategic sourcing literature with focus on supplier segmentation and supplier relationship management.

The chosen research approach was a case study, which was appropriate since it addresses the purpose in a real life context. (Collis and Hussey, 2014) In addition, Voss et al. (2002) claims that a case study is beneficial since it can lead to new insights as well as the development of new theory, which is what this study aimed to do. The case study was carried out on a Nordic retail company offering both private label and branded products, where this study focused on its private label products and thereby private label suppliers. Throughout the report, the case company is not referred to by its real name, but as *the case company*.

The study was primarily based on qualitative methods, however, some quantitative methods were used as well. The qualitative data collection included performing unstructured and in-depth semi-structured interviews and conducting workshops. The in-depth interviews were held with different employees at the case company, where the majority were held with product developers and merchandisers, but also with suppliers to the case company and with external companies. The workshops were held with merchandisers at one of the sourcing offices. The qualitative data was gathered from various stakeholders in order to capture different views of important characteristics of a supplier base within retail as well as on buyer-supplier relationships. The quantitative data collection included structured questions and analysing historical purchasing data, and this was done in order to understand how to differentiate the supplier base. These data collection methods are more thoroughly discussed in the following sections.

3.2 Research process

The research commenced with identifying the root cause of the problem, which was done through initial unstructured interviews with employees at different business areas and with different positions at the case company, as well as through a discussion with the supervisors. These initial investigations were performed in order to gain an understanding of the case company's purchasing department, sourcing activities and employees' direct or indirect contact with suppliers.

Reading through existing literature was done in parallel. The information received from the unstructured interviews and existing literature, in combination with a discussion with supervisors from the case company as well as from the Royal Institute of Technology, made it possible to decide on the problem formulation. When the problem formulation was

identified, the purpose of the study and the corresponding research questions were determined. The research consisted of one main research question that was addressed through three sub-research questions. The research questions acted as the base line for the case study, where all actions were performed in order to generate results that could answer the questions.

Once decided on the research topic, a process of creating the theoretical framework began by further reviewing existing literature. At the same time, the case study was performed by conducting preliminary investigations, followed by an in-depth study phase, finishing with analysing the gathered data. In the next paragraphs, the research process is described in detail. The different parts have been performed in parallel, and not in a linear process as may be the thought when reading it through, which is visualised in Figure 7. The time aspect of when the different parts of the process were performed is included in order to give a perspective on the time allocated to each part, thus making it easier to perform the research in the same way again.
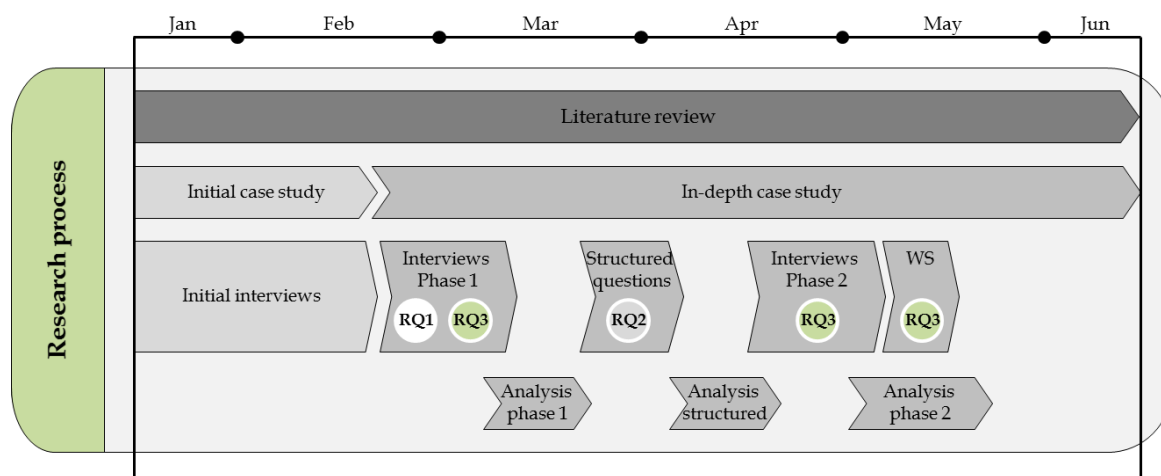
Figure 7. Overview of the research process

3.2.1 Literature review

A literature review was conducted with the purpose of evaluating the existing body of knowledge within the area of research and to better understand the problem. (Collis and Hussey, 2014) The literature review was conducted iteratively throughout the research process. Initially, a number of articles within a very broad field of knowledge were reviewed, and a summary of each article was done in bullets. These summaries were categorized into themes to simplify the review process and the forthcoming analysis of the literature. (Collis and Hussey, 2014) The review of existing body of knowledge was incrementally narrowed down to the final main focus of the research.

Ultimately, the main focus of the literature review of this study was strategic sourcing, supplier selection, supplier segmentation and supplier relationship management. The purpose of reviewing the literature on strategic sourcing was to get a fundamental understanding of why companies use strategic sourcing, and which types of strategies that exist in previous literature. Similarly, the purpose of reading through literature on supplier segmentation was to get a broad picture of what the term means, why it has become commonly practiced among companies, and what different types of segmentation models there are in existing literature. It was also done to investigate whether or not parts, or the entire, of existing models could be used in the development of the framework for this study.

Further, a review of the literature on supplier selection and supplier relationship management was done to get a deeper understanding on what aspects that need to be considered when developing a framework for the management of suppliers, and to understand if existing theory could be applied in this specific context.

Articles were received from different academic journals and were discovered by using the search engine Google Scholar and subsequently getting access and downloading the article via The Royal Institute of Technology's search engine *KTH Primo*. The researchers mainly used the terms *supplier*, *buyer*, *segmentation*, *management*, *sourcing*, *sustainable*, *selection*, *relationship*, *purchasing*, *model*, *portfolio* and *classification* in different combinations when searching for literature for the study. As the research proceeded, some of the literature was discovered when looking at the reference list of a reviewed article, or searching for articles that had been recommended in a previously reviewed article. In addition, a number of companies within different industries were reviewed in order to get some more practical examples on how they manage their supplier base.

3.2.2 Case study

As mentioned previously, a case study was chosen due to its fit with the study's purpose. (Collis and Hussey, 2014; Voss et al., 2002) A case study consists of five stages, namely: *selecting the case, preliminary investigations, data collection, data analysis* and *writing the report.* (Collis and Hussey, 2014) These are further described in detail in the forthcoming paragraphs.

A. Selecting the case

As described in the introduction, there are few studies on how medium sized companies within the retail industry should segment their suppliers and how they should be managed differently. Therefore, the case company for this study was chosen due to its size, its diversified product portfolio and due to that it operates in the relevant industry. These preconditions made it possible to answer the research questions.

The case study was performed on a Nordic retail company, which was divided into seven business areas, referred to as Business Area A-G in this paper, where six out of them offered both private label and brand named products. Since the research was focused on the case company's private label products, the study did only include business areas offering private label products. Out of the six business areas doing so, five was part of the research, namely business area A-E. The last business area was excluded due to its small size. The case company had four sourcing offices in three countries in Asian Far East and are referred to as Sourcing Office 1-4.

B. Preliminary investigations

Preliminary investigations were performed in order to become familiar with the context in which the case study was conducted. (Collis and Hussey, 2014) The investigations commenced with building an understanding of the case company's sourcing organization, including creating a picture of the problem context. This was done by conducting eight unstructured interviews with employees working at different business areas and functions at the case company, and with different positions. The interviews began by asking the interviewees to explain their role at the company and their direct or indirect connection with suppliers. Based on that, the interview continued with appropriate follow-up questions emerging on spot. An initial unstructured interview was also conducted with the Supply Chain Manager at the case company in order to get an overarching understanding of the sourcing department's view of the problem and possible contribution with this research. See Table 3 for an overview of the participants in the preliminary investigations.

Table 3. Overview of the interviewees in the preliminary interviews

Position	BA/ Function
Product Developer 16	Business Area A
Business Controller 1	Business Steering
Sustainability Manager	Sustainability
CSR Manager	Sustainability
Business Navigator 1	Business Area B
Business Area Manager 1	Business Area C
Category Manager 1	Business Area A
Supply Chain Manager	Supply Chain
Supply Planning Manager	Supply Chain

Initial observations of the sustainability work at the case company was done by attending two information meetings involving the sourcing and sustainability department. The purpose of the meetings was to present existing external sustainability regulations concerning the case company, and its own sustainability requirements including ways of working as well presenting the case company's code of conduct. Attendance to the meetings was done to bring further insight into the consequences of offering a diversified product portfolio, seen from a sustainability perspective.

The case company's purchasing data from the previous year was briefly reviewed in order to get an initial understanding of the different business areas and corresponding products as well as the scope of suppliers. A visit to the distribution centre and one of the larger department stores was also done to get an understanding of the range of product offering by the case company.

These initial investigations helped to concretise the problem and define the scope of the study. Consequently, this built the direction of the study including ensuring which relevant data for the continued research to be gathered.

C. Data collection
The collected data consisted of both primary and secondary data. Primary data was mainly qualitative data, but also quantitative data, collected through interviews, structured questions and workshops. Secondary data was quantitative data in terms of archival data from the case company's internal system. In addition to the data collection that is described in the following paragraphs, minor questions that arose during the research process were answered continuously through emails and face-to-face interaction at the case company site.

Interviews
The primary data collection for the research included semi-structured interviews with open-ended questions, which were suitable since the purpose was to understand the interviewees' perception of his or her situation (Collis and Hussey, 2014), and to get a more deep understanding of the case company (Blomqvist and Hallin, 2014). It also gave the interviewees the possibility to come up with ideas not highlighted by the researchers, but still created the conditions for comparing the answers between the interviewees. (Collis and Hussey, 2014) The interview process was divided into two phases, where the first phase concerned RQ1 and RQ3, and the second phase concerned RQ3. Both phases are described in the following paragraphs.

Phase 1

In order to understand the current characteristics of the case company's supplier base (RQ1) and to understand how suppliers were managed (RQ3), semi-structured interviews were held with product developers from business area A-E and merchandisers at three of the four sourcing offices. All 25 product developers at the case company were asked by email to participate in the interviews, whereof eleven declined the invitation for various reasons. Eight did not have the time at the moment to participate, two were on maternity leave, two were new in their role, and one were mainly working with external brands, thus not interesting for the research since it focused only on private label. 21 product developers answered the email without any reminder, and four answered after a reminding email. In total, 13 interviews were conducted with product developers from all business areas A-E.

In discussions with office managers at the sourcing offices, one senior merchandiser at sourcing office 1, two senior merchandisers at sourcing office 3, as well as one senior merchandiser and three merchandisers at sourcing office 2 were invited to participate in interviews. There were 20 merchandisers and six senior merchandisers in total, but the number of conducted interviews with merchandisers was limited due to their lack of spare time and to a time difference complicating the scheduling of interviews. Each interview with product developers and merchandisers covered four topics; the interviewees' product portfolio, sustainability, supplier selection and buyer-supplier relationship. See Appendix A.1 for an overview of the interview questions.

To further add perspective on characteristics of the supplier base (RQ1) and supplier management (RQ3), some external interviews were held with employees from sourcing departments at other companies with similar business areas as the case company. Two external interviews were held with companies with similar product offerings, with the purpose of investigating how they worked with suppliers in order to compare their answer with answers from the case company, and also to understand how other companies work with supplier segmentation and management. See Appendix A.1 for an overview of the interview questions. In addition, three unstructured interviews with experienced sourcing consultants were held to confirm that the developed model was appropriate for the specific context and to discuss possible improvements.

Phase 2

After performing semi-structured interviews in *Phase 1*, unstructured interviews were held with product developers and merchandisers in order to extend the findings from *Phase 1*. The developed segmentation model was shown during the interviews with the purpose of verifying it. Further, a preliminary mapping of the case company's current suppliers based on the segmentation model was used during the interviews in order to encourage the discussion regarding how the different suppliers were managed. See Appendix D for an example of the mapping. The purpose of the interviews was to identify possible strategic actions for how to manage different types of suppliers. Five product developers participated in the *Phase 2* interviews, whereof two of them did not participate in *Phase 1*. Merchandisers participated in *Phase 2* through workshops, which are descried later in this chapter.

In order to further understand how the existing suppliers were managed (RQ3), some selected suppliers to the case company were interviewed with semi-structured questions. One supplier in the local country was interviewed, and two suppliers located near sourcing office 2 were interviewed on site. All interviewees were contacted by email. The interviews with the suppliers mainly focused on buyer-supplier relationships. See Appendix A.2 for an overview of the interview questions.

Overall interview setup

For each interview, a time slot of one hour was booked. The actual time spent on each interview varied between 50 and 65 minutes. All interviews with product developers were conducted face-to-face in meetings rooms at the case company's headquarter, and they were performed in the local language. All interviews with the merchandisers during *Phase 1* were conducted in English through a conference telephone at the case company's office. Interviews with suppliers were conducted face-to-face on site of the suppliers' factories, and were performed in English. The interviews with external companies were held at their office or via a conference telephone at the case company in the local language. The interviews with the experienced sourcing consultants were held at the case company or at the consultants' offices at the local language. See Table 4 for an overview of the interviewees, business areas/function as well as the connection to the preliminary investigation, sub-research question 1 or sub-research question 3.

Table 4. Overview of the interviewees in Phase 1 and Phase 2

	Position	BA/ Function	RQ1	RQ3
Internal Interviews	Product Developer 1	Business Area A	X	X
	Product Developer 2	Business Area A	X	X
	Product Developer 3	Business Area A	X	X
	Product Developer 4	Business Area A	X	X
	Product Developer 5	Business Area A	X	X
	Product Developer 6	Business Area A	X	X
	Product Developer 7	Business Area A	X	X
	Product Developer 8	Business Area B	X	X
	Product Developer 9	Business Area C	X	X
	Product Developer 10	Business Area C	X	X
	Product Developer 11	Business Area C	X	X
	Product Developer 12	Business Area C	X	X
	Product Developer 13	Business Area D	X	X
	Product Developer 14	Business Area C		X
	Product Developer 15	Business Area C		X
	Merchandiser 1	Sourcing Office 2	X	X
	Merchandiser 2	Sourcing Office 2	X	X
	Merchandiser 3	Sourcing Office 2	X	X
	Senior Merchandiser 1	Sourcing Office 1	X	X
	Senior Merchandiser 2	Sourcing Office 2	X	X
	Senior Merchandiser 3	Sourcing Office 3	X	X
	Senior Merchandiser 4	Sourcing Office 3	X	X
External interviews	CEO	Supplier 1		X
	General Manager	Supplier 2		X
	Sales Manager	Supplier 2		X
	Merchandiser	Supplier 3		X
	Sourcing Manager	Company A	X	X
	Supply Chain Manager	Company B	X	X
	Senior Manager	Deloitte	X	
	Engagement Partner	Quartz+Co	X	
	Partner	Quartz+Co	X	

Both researchers were present at all interviews in order to capture different details and aspects of the answers. One of the researchers asked the predetermined questions, and the other researcher took a more observant role, asking follow-up questions in order to clarify answers and to get more detailed information. All interviews but one were recorded with the permission from the interviewees, and were later transcribed.

All interviewees were informed with the purpose of the study and what the interview would cover in advance. During the interview, they were further assured confidentiality and informed that their answers would be handled anonymously.

Structured questions
After analysing the empirical data collected for RQ1, structured questions was sent out to all product developers, merchandisers, designers, supply planners, product assistants, category managers, general managers, and the sourcing department by email. In total, the questions were sent to 95 employees, where 33 were formulated in English and the rest in the local language. 48 responded to the questions, which corresponded to a response rate of 50.5 %. The response rates for all subunits can be found in Table 5.

Table 5. Overview of the response rate for the structured questions

Position	Population/ Sample size	Responses	Response rate (%)	Number of comments
Product Developer	21	15	71.4	3
Merchandiser	29	17	58.6	8
General Manager	4	2	50	-
Category Manager	6	4	66.7	1
Supply Planner	14	3	21.4	-
Designer	8	4	50	-
Sourcing	4	3	75	-
Product Assistant	9	1	11	-
Total	**95**	**48**	**50.5**	**12**

The purpose of the structured questions was to receive quantitative data in order to evaluate perceived patterns from the previously collected qualitative data. Twelve characteristics of the supplier base were identified from the semi-structured interviews, which were asked to be weighted by the respondents in relation to their perception of their relative importance. The respondents were also asked to comment the identified characteristics, and to state additional characteristics they believed were missing.

Performing structured questions in order to confirm the findings from RQ1 is somewhat similar to the Delphi technique described by Pinheiro de Lima et al. (2012). One of the key characteristics of the Delphi technique includes *the use of two or more rounds between which summarized results of the previous round is communicated to and evaluated by panel members*. Even though this research does not fulfil all of the characteristics of a Delphi technique, the findings from the interviews were summarized and evaluated by respondents at the case company, which could be comparable to the previous quote. See Appendix B for the structured questions.

Workshops

Two workshops were conducted with employees at sourcing office 2. The purpose of the workshops were to verify the findings from RQ1 and RQ2, as well as to extend the findings from RQ3, and to discuss possible actions to pose on different types of suppliers. Eleven merchandisers, two senior merchandisers, the general manager, two social compliance auditors and one social compliance manager attended the workshops. The first workshop lasted for three hours. The second workshop was divided into three groups, where the two first lasted for two hours each, and the last for one hour. The division of the first two groups were based on the participants' business area. Participants for the last group were the social compliance team. The general manager attended to all occasions.

Both researchers were present at the workshops in order to capture different details and aspects of the discussions. All participants were informed with the purpose of the workshops, and also received background information in advance. However, the questions covered during the workshop were not sent out in advance in order to keep the participants with an open mind throughout the workshop. During the workshops, they were further assured confidentiality and informed that their answers would be handled anonymously.

See Table 6 for an overview over the participants in the workshops, and appendix C for questions covered during the workshop.

Table 6. Overview of the participants in the workshops

Position	BA/Function
Merchandiser 2	Business Area A
Merchandiser 3	Business Area B
Merchandiser 4	Business Area A
Merchandiser 5	Business Area A
Merchandiser 6	Business Area A
Merchandiser 7	Business Area A
Merchandiser 8	Business Area B
Merchandiser 9	Business Area B
Merchandiser 10	Business Area B
Merchandiser 11	Business Area B
Merchandiser 12	Business Area B
Social Compliance Auditor 1	CSR-team
Social Compliance Auditor 2	CSR-team
Social Compliance Manager	CSR-team
Senior Merchandiser 2	Business Area A
Senior Merchandiser 4	Business Area B
General Manager 1	-

Archival data

Archival data in this study included pre-existing documents regarding supplier assessment criteria, information of historical purchasing data, as well as supplier-specific data. This data was used in conjunction with the primary data in order to better understand the context of the phenomenon under study. (Shah and Gorley, 2006)

D. Data analysis
The data analysis was a within-case analysis that enabled a collection of opinions, phenomena and events in the case company that was used to discover patterns and trends. Most of the gathered data was of qualitative nature, why the main data analysis involved the three steps: reducing the data, i.e. extracting, focusing and selecting the gathered data; displaying the data, i.e. visually presenting the gathered information systematically; and drawing conclusions and verifying the validity of those conclusions by coding words and phrases, adding comments and reflections, and gradually developing a small set of generalizations. (Collis and Hussey, 2014)

In terms of reducing the data, the interview questions were formulated as thoroughly as possible in order to reduce misunderstandings or misinterpretations of the questions with the risk of receiving unnecessary data and increasing the rate of data of interest. During the analysis, a continuous reflection of the relevance of the data was done, which resulted in a small part of the data from interviews being discarded.

When displaying the data, data from each recorded interview was transcribed and sorted into the different categories created for each interviewee type. The data was sorted into four categories: product portfolio, sustainability, supplier selection and supplier relationship. The first category was included to get an understanding of the case company's product offering and its implication on sourcing for each business area. The latter three categories were included to gather data in order to answer the research questions. When compiling the data from the interviews it was sorted into these categories. As an example, data gathered from all interviewee types in the category *supplier relationship* were bunched in order to more easily display and analyse the same phenomenon from different angles.

Finally, in terms of drawing conclusions and verifying the validity of the conclusions, a number of activities were done in order to analyse the data. The researchers reviewed the transcribed interviews independently, words and phrases from the interviews were coded and sorted, and comments and reflections on some of the data were noted. The sorted data was compared between the researchers and was collectively piled into themes. These were then matched with existing theory, and culminated in various characteristics answering RQ1 and RQ3. A number of quotes were included in the report to show how the findings were connected to the characteristics.

Data collected from the structured questions were analysed by calculating mean values for all of the twelve characteristics included in the structured questions. Since the respondents of the structured questions were employees with different positions at the case company, a separate discussion regarding the different respondents' answers were done, but the overall results were based on the respondents' joint answers. This contributed in answering RQ2.

E. Writing the report
The last main stage in the case study was writing the report, which included presenting the empirical findings, the analysis and conclusion made from it together with the existing literature. It was done continuously throughout the study.

3.3 Quality of research

The quality of the research is discussed in relation to validity and reliability. More specifically these criteria are construct validity, internal validity, external validity and reliability, which are commonly used to assess the rigor of case studies. (Gibbert et al., 2008) Each is discussed in the following sections on the basis of a framework for an investigation of the methodological rigour of case studies developed by Gibbert et al. (2008). A summary of the quality of this study according to Gibbert et al.'s framework is presented in Table 7.

3.3.1 Internal validity

Internal validity refers to the extent to which a causal relationship between variables and results can be established, as well as if the researchers provides reasonable arguments and reasoning and defends the conclusions. (Gibbert et al., 2008; Voss et al., 2002) In order to enhance internal validity, three measures can be used. First, the researchers should formulate a clear research framework showing that the research framework was explicitly derived from literature. Second, the researchers should compare empirically observed patterns with either predicted patterns or ones established in previous studies and in different contexts. Third, the researcher should use theory triangulation, which means to verify findings by adopting multiple perspectives. (Gibbert et al., 2008)

In order to increase internal validity, this research developed a supplier segmentation model by matching several sources of data to already established theories, as visualised in Figure 6. However, it could have been increased further by meeting the first and third measure of internal validity, for example by extending the theoretical lens and body of literature used.

3.3.2 Construct validity

The quality of the data collection phase can be evaluated by construct validity, which refers to how well a research investigates what it is designed to investigate, and consists of two criteria. (Gibbert et al., 2008; Voss et al., 2002) The first criterion, providing the readers with evidence on the process from initial research question to final conclusion, was met through a comprehensive description of all the steps being performed in the case study. The second criterion, triangulation of data, was met by using multiple sources of data and different data collection strategies in order to investigate the studied phenomena through different angles, thus reducing bias. (Gibbert et al., 2008) The results in this research was derived from both qualitative and quantitative data through interviews, structured questions, workshops and archival data, which can be referred to as methodological triangulation (Collis and Hussey, 2014). To increase construct validity, the interviewees were carefully chosen in order to receive the right data for the desired measurements. The interviews were held with employees at the same position, both within the same business area, but also from several different business areas, which reduced personal impact and bias. In addition, construct validity was increased due to that there were two researchers performing the study, which is referred to as investigator triangulation. (Gibbert et al., 2008)

3.3.3 External validity

The third type of validity used for evaluating the research is external validity, which also can be referred to as generalizability. External validity refers to whether the findings of the research can be generalized beyond the specific case study. (Gibbert et al., 2008; Voss et al., 2002). To achieve external validity, several business areas at the case company participated in the research. Despite the fact that these business areas differed and had specific requirements

on their supplier base, findings were drawn from them all and the results were applicable on them as a whole, which showed that the results were somewhat generalizable. Further, interviews with other companies operating in the retail industry were performed to investigate whether the developed model could be used in other settings. However, the number of interviewed external companies were limited, and the research was only performed as a single case study at one company, thus made it difficult to show that the findings were applicable outside the case company. Even though several business areas participated, the workshops only included one of the sourcing offices, which limited the generalizability. Also, during the workshops, not all participants were equally active, some made their voice heard a lot more than others which further affected the external validity. In addition, the case study focused on the retail industry, thus making it difficult to generalize the results to other industries, which decreased the external validity.

3.3.4 Reliability

The reliability of a research is evaluated on whether the research can be replicated and if so, lead to the same insights as the original research. (Collis and Hussey, 2014; Gibbert et al., 2008; Voss et al., 2002) Keywords for achieving high reliability are according to Gibbert et al. (2008) transparency and replication. Careful documentation and clarifications of the research procedures, in particular the method chapter, describing the research procedures in detail means having transparency in this research. A case study database with interview transcripts, overview over used archival data, and field notes was collected and saved, which enables replication of the research. However, this material is not included in this paper due to concerns of confidentiality issues from the case company, thus decreasing the reliability.

Obtaining the exact same outcomes conducting the research again is limited, due to that the majority of the collected data consisted of qualitative data from interviews. Interviews are not as reliable as e.g. questionnaires, since the findings might be interpreted differently depending on the interviewers and their perceptions. (Collis and Hussey, 2014) Further, the semi-structured questions that were asked were open-ended in order to increase the interviewees' ability to answer honest and not according to what they believed would be the right answer. As a consequence, the follow-up questions differed among the different interviews, thus making it difficult to replicate the exact process, which decreased the reliability. The same applied for the workshops and the interviews in *Phase 2*, where the questions asked were dependent on the response of the participants or interviewees. Further, there was a language barrier during the workshops and some of the interviews in terms of them being performed in the participants' non-native language. This affected the reliability due to that it gave room for the questions and answers to be interpreted differently.

In order to increase the reliability, the supervisors at the case company reviewed the structured questions before it was sent out in order to ensure that the respondents would interpret the questions correctly. In addition, the response rate of the structured questions was relatively high, 50.5%. However, since the structured questions were conducted in two different languages there was a risk of respondents interpreting the questions differently, thus affecting the reliability. A summary of the quality of the research is presented in Table 7.

Table 7. Summary of the quality of the study

Summary of the quality of the study			
Internal validity	**Construct validity**	**External validity**	**Reliability**
Match of several sources of data to already established theories	Evidence on the process in terms of a comprehensive description of all steps Data triangulation by using multiple sources of data: • Interview data (original interviews conducted by researchers) • Workshop data (workshop conducted by researchers) • Structured questions data • Archival data (annual reports, internal reports) Reduced personal bias due to interviews with employees with various positions and within several business areas Investigator triangulation due to two researchers conducting the study	Several business areas within the case company participated in the study Interviews with other companies within the same industry were conducted	A case study database was established (incl. interview transcripts, overview of used archival data, and field notes) Structured questions were reviewed before they were sent out High response rate of structured questions

The generated results from the different methods described in the previous sections have been analyzed, and are presented in its entirety in the next chapter.

4. Results and Analysis

This chapter presents the results and analysis of the gathered empirical data. It is structured according to the research questions posed in section 1.4, beginning with some brief background information about the case company, followed by the results in chronological order answering the three sub-research questions. The development of the segmentation model is presented incrementally as each of the sub-research questions is answered.

4.1 Background information about the case company

The case company was a Northern European retail company that offered both private label and brand named products. In the study, the case company is named to be a medium sized retail company with a diversified product portfolio. The emphasis on diversified product portfolio was due to that the case company was divided into seven business areas, selling products within several product categories such as women's fashion, home, beauty and entertainment. The reason for naming it medium sized was because their main competitors had a higher turnover. One of the case company's biggest competitors was H&M, and their turnover for 2013 was about 30 times as big as the case company's turnover, including brand named products. (H&M, 2015) However, almost all competitors focused on only a few product categories so it was difficult to compare them directly to the case company. Since they owned more than 100 department stores and had 80 million visitors yearly, the case company was not seen as a small company either.

The case company had production both in Europe and Asia. The company had a sourcing department at their headquarters, and four sourcing offices in Asian Far East. Orders that were purchased from European suppliers were handled directly by employees named *Product Developers* at the headquarters. Orders that were purchased from Asian suppliers were originated by product developers, but were handled via employees named *Merchandisers* at the four sourcing offices.

When sourcing supplier for a new or existing product, the process was dependent on the situation and the product that was to be produced. Almost all product developers explained that for each specific product and material, there were a limited number of suppliers that were capable of producing it, and that they simply knew which suppliers that were suitable for a certain product. *I keep it in my head. You know what suppliers that are preferable and not, there is no clear structure for the choice of supplier.* (Product Developer 13) *A lot of the information is in here [pointing at head], you know how all suppliers work and what they are capable of doing.* (Product Developer 11) After deciding on which suppliers that were appropriate to produce a certain product, a quotation was sent to the suitable supplier/suppliers.

The Supply Chain Manager at the case company expressed a need to have a more strategic mind-set when working with their suppliers, to decide on which suppliers the case company should collaborate closer with, and to increase the transparency in how suppliers were chosen. The General Manager of one of the sourcing offices was of the same opinion stating that the case company was in need of a more holistic strategy on supplier level, and some product developers at the case company further confirmed this view. *I have requested a more clear strategy for our suppliers. That there are more people involved in the decision with suppliers… to ensure diversification of risk. To make more strategic choices that do not only lay with the product developer, but rather a more holistic view.* (Product Developer 13) And Product Developer 9 said that *I don't*

feel that we properly take care of our suppliers, and tell them how important they are. … Because there is never someone on a higher level than me going there and telling them how significant they are and how we should think about the future together. … I can't really say that I will be working with a supplier in two years from now, no one can. But having a plan together, and for example agreeing that the supplier does not work with our biggest competitor… Having guidelines on where to go together.

Further, the importance of allocating and prioritizing the time was emphasized to do in order to most efficiently make use of the case company's resources. *We need to differentiate the suppliers because everyone is different. You need to get the best out of everything.* (Merchandiser 5) Product Developer 11 also stated that *I have to prioritize my time, I can't put more time on those suppliers that represent a very small share of my turnover.*

An assessment of the case company's suppliers was performed once a year, and covered a number of aspects of their performance in the previous year. The assessment was conducted for each supplier, where product developers and merchandisers filled out the assessment separately and thereafter together discussed and concluded on a final score that was shared with each supplier. Some interviewees expressed the lack of time to actually fill out the assessment properly, and indicated that they did not see the purpose of it, and that it therefore was conducted half-heartedly. *I sometimes think that it became in a sort of routine manner. That we didn't really have the time to do it, me or the merchandisers. It was more of a copy/paste from last year's assessment.* (Product Developer 9) Linked to this, there was also a lack of clear follow-up and guidelines for how to work with suppliers after the assessment was done. Those suppliers that achieved a high score were referred to as *key suppliers*, but no concrete actions were imposed on those suppliers in comparison with other suppliers. *Yes, we did inform them, that we were very satisfied and looked forward to future work with them. But not more than that.* (Product Developer 7) The Supplier Developer at the case company also addressed the lack of a clear plan for the key suppliers, and emphasized that the assessment was time consuming, that it was mainly qualitative-based, and that it was difficult to motivate the product developers and merchandisers to perform the assessment when there was no follow-up.

Accordingly, the case company expressed a need to develop a sourcing framework that gave a more holistic view of the supplier base, and provided guidelines on how to work with different suppliers. The next sections present findings that address this and answer the sub-research questions, beginning with sub-research question 1.

4.2 Identified characteristics of the supplier base (RQ1)

In order to answer the first research question, it was necessary to understand the current characteristics of the case company's supplier base that were relevant in the choice of supplier in terms of their capabilities of delivering a final product matching the case company's business strategy. This was done through performing semi-structured interviews with mainly product developers and merchandisers, but also other employees at the case company. In order to strengthen the relevance of the identified characteristics for the retail context, external companies and experienced sourcing consultants were also interviewed. Associating the identified characteristics with previous studies strengthened the relevance further by showing that they were appropriate to include in the segmentation model. The identified characteristics were grouped into the three dimensions presented in the proposed framework, see Figure 6 in section 2.5.5, and are presented in the following sections.

4.2.1 Performance

This section presents the five characteristics that were most prominent regarding a supplier's *Performance*, and is summarized with a concluding description in Figure 8.

Integrated CSR	*Supplier is conscious and active in improving its social and environmental performance*
Reliable in quality	*Supplier is reliable in delivering a quality that has been agreed upon throughout the whole production and from one order to another*
Consistent in price	*Supplier shows consistency in cost level throughout a longer time period*
Delivers in time	*Supplier is timely in final delivery but also in sampling during the product development process*
Effective communication	*Supplier has a continuously good and quick communication on a daily basis*

Figure 8. Description of the characteristics included in the Performance dimension

Integrated CSR

Securing good working conditions, safe working environments and factories with minimal environmental impact in the supply chain was very important for the case company. They were a member of the Business Social Compliance Initiative, BSCI, which was a network that united companies around the world for a joint code of conduct and supported its members in building an ethically sound supply chain. It was a fee-based membership that included a third party performing regularly audits on suppliers that also were members. When audited by BSCI, the supplier was assigned a grade: good, improvement needed, non-compliance or non-tolerance. The idea was to use this grading to help suppliers improve. Buyers had to decide for themselves where their limit of approval was. (BSCI, 2015)

The case company had also set up their own code of conduct, which among other things meant that they required their suppliers to be a member of BSCI or that they were certified according to SA8000. If a supplier was not a member of BSCI, the case company had to perform their own audits which was costly and time consuming, and not preferable. However, there were some smaller suppliers that could not afford to be a member of BSCI, why the case company performed their own audits on these suppliers. If a member of BSCI received the grade *good*, they could become certified by SA8000. The case company had also recently become a member of Leather Working Group, LWG, and Business Environmental Performance Initiative, BEPI, which were two organizations that perform third party audits. (Sustainability Manager and CSR Manager)

The importance of CSR-work was also emphasized by several product developers, where one of them described that *we have developed a policy which we use for the base line on what our product should contain, and we want to be able to offer the customers a minimum level that is absolutely spot on and great* (Product Developer 13). The level of requirement imposed on the suppliers by the case company was described by some suppliers to be higher than standard. *Sometimes we have very high requirements compared to what others have, according to our suppliers.* (Product Developer

5) *The supplier probably thinks that the requirements we pose are tough in the beginning. But they are also on a journey and become aware of things. I believe that most of them think that it is positive, even if it requires a lot of effort.* (Product Developer 11)

Reliable in quality
Almost all product developers stated that the quality of the product was one of the most important aspects that a supplier must be able to deliver. They explained that it was not only quality in terms of getting a product which corresponded to what the supplier charged, but also in terms of the look and feeling of the choice of material. Product Developer 13 gave an example by explaining that *it is important to get the product in the right quality, you have some kind of idea about a certain type of quality you want to keep, so that is taken into account when deciding supplier for the product.* This was further expressed by Product Developer 7 when answering what aspects that was important to consider when selecting supplier. *That you know that this supplier can deliver quality through all stages [in the product development process], from a first neat style sample, to counter sample, to production, all the way out in stores.*

The risk of poor quality on the final product that arrived to the stores was described to be very important to avoid when it came to basic products that were ordered in bigger volumes. *Then we choose to work with safe suppliers so that we know that the quality will be secured during the whole production, because you don't want the tank top to look in one way in the beginning of the production and then in another, worse way, in the end.* (Product Developer 7) The risk of a change in quality from sample to final product did not only apply to basic products. Product Developer 19 described a situation where the quality of the sample was very good and the company placed the order. When the final product arrived in stores, the quality was completely changed and the product did not function as it was supposed to, and it had to be taken away from the stores.

The risk of a change in quality when placing a repeat order often occurred when the supplier changed the factory for the case company's production, or when they changed the staff that worked with the production. Both things could lead to that the product got a completely different look from the look it had at the first order/orders. In the worst cases, it could lead to many complaints from the customer and lost sales for the case company.

Consistent in price
It was understood that the price level could vary among suppliers, where a stable price level was preferable. Identifying if the supplier was raising the prices a lot without reason, and to investigate the cause for the raised prices, was described to be important. An increase in price often occurred when the currency changed a lot, but there were also other reasons described. One example concerned when suppliers used the price to attract new customers. *Some suppliers can decrease their prices just to attract customers, I'm not interested of that. I don't want to buy only one order to a certain price level, and then find out that the price level is higher the next order. I don't believe that is any good business environment.* (Product Developer 2) There were also examples on when the suppliers gave an initial price, which increased a lot after a few changes was made by the case company. A situation described to mean a risk for the case company.

Delivers in time
Several product developers stressed the importance of suppliers being good at keeping time, both in terms of sending samples in time, and in terms of delivering the final product according to what was agreed. *It is important to consider how efficient they can be in their work, how quick you can get your samples. We work after a tight time schedule all the time, so you are quite anxious not to have any delays.* (Product Developer 7) Product Developer 8 also emphasized that

delivery time was very important and that some suppliers had trouble with keeping the appointed delivery date. *We believe that they almost never keep the time. Even if it only concerns one week of delays, it is still a negative thing.*

Suppliers tended to promise a certain delivery time, but often tried to push it as soon as the case company made any small changes in the order. It could also be pushed due to that a much bigger company placed their order at the same time, which caused delays for the case company. *It lead to delays for one week, and then it was two weeks, and then three weeks. And then they try to deliver by air in order to keep the promised delivery time, which is something we don't want.* (Product Developer 11)

Effective communication
The communication aspect was described as a characteristic including several aspects. Product Developer 13 explained that *things should go fast, that you have a contact person from the supplier that is quick and understands what you want. That is really valuable, and it could be decisive in the choice of supplier.* Product Developer 7 described one of the key characteristics for a good supplier to be that the supplier was quick in their communication, and that they responded to questions quickly. Further, it was emphasized that the communication should be straightforward and honest.

A supplier that was not honest and that avoided to communicate changes in the organization or at the production site was described to mean a risk for the case company. It could lead to changes in the quality or final look of a product that was ordered on repeat, with the result of lost sales. Having a supplier informing about this on a regular basis meant that the company would have time to make a plan for how to handle the changed situation.

4.2.2 Business match
This section presents the five characteristics that were most prominent regarding the *Business match* dimension, and is summarized with a concluding description in Figure 9.

Matching quality	*Supplier shows an understanding for the buying company's business by presenting a quality that matches the company's image and price level*
Relevant product development	*Supplier drives its business forward and develops own products with design matching the buying company's image*
Sustainable offering	*Supplier offers sustainable products and is in forefront of continuously developing or searching for new sustainable products/materials*
Proactive approach	*Supplier is proactive in production related issues/opportunities, e.g. addresses possible co-production, changes in commodity prices, delivery changes due to delays*
Knowledge sharing	*Supplier shares knowledge regarding issues/opportunities related to the product development process, e.g. communicates deficiencies or improvements in design or material choice*

Figure 9. Description of the characteristics included in the Business match dimension

Matching quality
Several Product Developers described that it was essential for the supplier to have an understanding of the buying company's business in terms of its customers, the price segment that they operated in and the size of their order quantities. Product Developer 5 explained that *a key factor with a supplier is that they understand our business, know how we operate, know our requirements, and especially that they know the size of our order quantities.* When product developers sent quotations for different materials, they expected the suppliers to show the best possible option for the case company, for the volume quoted and for the planned sales price. If they had to decline the sample because it was too expensive, this was seen as negative. Merchandiser 5 gave an example of this and stated that *in the end, their understanding of what the brand is, and what we are going through, is most important.*

One external company also emphasized the supplier's understanding of the buying company to be important. The Sourcing Manager at Company A explained that one of the most important aspects when choosing supplier was that they had to understand who they were as a customer, being aware of the size of the company and the order size they were capable of placing.

Relevant product development
Several of the case company's suppliers offered their own product development, both design from scratch, design in terms of that the company could chose to buy products that already had been designed, and also in terms of that the already designed products could be modified so it matched the buying company's image. Product Developer 9 emphasized that this was one of the key characteristics that could be decisive in the choice of supplier. *It is important that the supplier drive their business forward by themselves, that they travel and are updated with what is going on in the industry so that they can present a good design department that we can use.*

This was further emphasized by Product Developer 10, who explained that *there are suppliers that we have worked with for many years that not are ahead of things, they are not innovative enough. They don't keep up with the speed, and that it is 2015 now. Then I have to tell the supplier that this product that we buy from you now, it is not modern enough, and there is a risk that I need to deselect this product.* A supplier's understanding of the case company's Nordic market was also mentioned as important. Some suppliers showed products that were better suited for the American or Southern European market, which was not appreciated. (Product Developer 5)

Not all business areas were able to design every product by themselves due to the large amount of items that were purchased, why it was beneficial to work with suppliers that could present finished products that matched the case company's image. (Business Area Manager 1) The case company's own design department was mentioned to be understaffed, which further emphasized the importance of a good supplier development department. For those business areas that used the supplier's design department more frequently, one product developer explained that one of the most important things with the suppliers was that they had good things to show in their showroom. *If they now have worked with us for a long time but don't see what we are asking for, then there will be no business.* (Product Developer 5)

Merchandiser 5 explained that suppliers had to be able to offer them some design concepts and new things in terms of e.g. colour so that they had something new to look at which could help the case company's design team. An example of a supplier being good at this did own plant research and had own design offerings where the case company could pick and choose what was appropriate for their market.

The Sourcing Manager at Company A explained that there was no advantage of designing their basic assortment by themselves since there were so many good suppliers offering such products, and that they could only be produced in such big quantities that the external company were not capable of selling. The same Sourcing Manager further described that it had become more and more difficult to find already designed products that could be produced in an exclusive way for the buying company. It was described to be important to find an unique assortment, and that the suppliers many times were not ready to take the cost for developing these types of products. And if they did, it was not always a design that matched what the end-customers wanted. Even though the company not always used the already designed products by the suppliers, it was common that the buyer used basic design and shapes that the supplier developed, and then combined it with the company's own colours and patterns.

Sustainable offering
A part of the case company's product offering consisted of sustainable products, which were products that fulfilled requirements regarding particular environmental and ethical certifications, products that took extra consideration to the environment and fellow human beings. The case company worked towards increasing the share of these products. More specifically, each business area strived towards increasing their share of sustainable products by a certain percentage until the next coming year. The company wrote in their sustainability report that the goal of a certain share of the sustainable products was difficult to achieve for the current year of the study being performed. One of the challenges with the sustainable products was explained to be the difficulties of finding interesting variations of sustainable qualities. (Sustainability report 2014, 2015)

Product developers from all business areas expressed that they tried to look for sustainable products, and often chose it when there was a suitable option. As Product Developer 1 described, *when it is good qualities, and the price difference is marginal, there is no reason for not choosing the sustainable material*. However, Product Developer 4 described that the price difference between sustainable and non-sustainable products was a problem. *The price difference between sustainable products and non-sustainable is actually quite big.* Suppliers offering sustainable products at a reasonable price were mentioned by several product developers as a strength, one explaining that *a supplier that can present something that is sustainable, it is of course a strong argument for choosing them today.* (Product Developer 12)

In order to increase the sustainable product assortment, the case company was dependent on what their suppliers could offer them, which was described in different ways. *We haven't been able to find any recycled polyester that fit our price range* (Product Developer 2), *material-wise, you are delimited on what sustainable products you can do* (Product Developer 1), and *it was difficult in the beginning because the demand of such products wasn't that big, but when other big countries also demand sustainable products they influence other to listen* (Product Developer 3). Product Developer 5 explained that one of the biggest challenges in the daily work was to find suppliers producing sustainable products that the case company could work with.

The importance of sustainable products was also emphasized by the Sourcing Manager at Company A, where one of their biggest challenges was getting the suppliers to understand that sustainability was a long-term investment. Some suppliers had invested, but there were also those suppliers that could not manage to reach the target price when changing the product into a sustainable product, which meant that the company sometimes could not source from that supplier anymore. The Sourcing Manager further explained that there also was a problem with the minimum quantities for some of the sustainable materials, that the

size of their orders was not big enough to get it through to production.

Proactive approach
The case company sometimes experienced challenges with minimum quantities when they purchased from Asian suppliers, particularly in China. This resulted in that the product developers sometimes had to compromise their order volume or purchase price resulting in decreased margins or a too large inventory, sometimes they even had to withdraw the order. *In my work, there is a certain requirement of order volume from my suppliers. So, since we are not a large actor, there is a struggle in working with suppliers and trying to decide on a suitable order volume at a good price… supplier might respond: you want 4000 pieces? … We have a minimum quantity, so you'll have to buy more if you want to be interesting for us.* (Product Developer 13) Product Developer 14 was of the same opinion, and explained that is was difficult to find suppliers that were able to produce sufficiently small orders, and that cooperation with another business area sometimes was made in order to avoid the minimum quantity problems. Some product developer expressed the advantage of a supplier communicating the possibility to co-produce with other companies. *The required minimum quantity is not always that easy to meet. Then it might be critical if a supplier has another customer that works with the same material. Then we might be able to co-produce with them.* (Product Developer 4)

Several interviewees described that it was beneficial if the suppliers were honest about future changes in their production capacity in advance. As an example, Product Developer 7 explained that *you need to be honest, and have a nice relationship with your supplier… say for example that you have a supplier that usually produce our denim collection, but then one year they say that now we work with [one of case company's main competitor], we don't have any capacity, you'll have to go somewhere else. That's mean.* This type of proactive approach was also mentioned regarding changes in the commodity prices and that it was possible to bulk up a certain amount of material in time when the currency was increasing. *Sometimes, if the cotton price is rising, the supplier wants to buy up some cotton. And then they might ask us if we know how much we would like to buy the next coming year so that they can bulk up cotton at a better price.* (Product Developer 9)

Knowledge sharing
The supplier's ability and will to share their knowledge differed among suppliers. Product Developer 4 described the importance of communication in terms of openness. *It is important that we get the look and feeling of the product that we want, and some suppliers are open saying that they won't be able to find that for us.* Product Developer 5 described knowledge sharing in terms of the supplier coming with input regarding the design the case company had made. This was described to be valuable since the case company's designers were not always a designer for that specific area originally.

There were situations where the case company had an idea on how they wanted their product to look, but that it was not possible to produce. It was emphasized by several product developers that the suppliers were honest and used their knowledge to identify these flaws in the design and adjust the design so that it became possible to produce. (Product Developer 8 and 11) Product Developer 8 further described how obedient some suppliers could be, that they followed the outlined design in the sketch in detail, even if they discovered strange things with the design that impaired the final product.

4.2.3 Balance of power

This section presents the three characteristics that were most prominent regarding the *Balance of power* between the buyer and supplier, and is summarized with a concluding description in Figure 10.

Order value	*The share of the buying company's order value in relation to the supplier's total turnover*
Unique product	*The supplier offers a unique product that is important for the buying company's product offering and that no other supplier can produce*
Brand impact	*The extent to how the buying company's brand image affect the suppliers' perception about working with the company*

Figure 10. Description of the characteristics included in the Balance of power dimension

Order value

Many interviewees expressed the concern of the case company being such a small actor, sometimes only representing a minor part of a supplier's turnover, and how that reduced their bargaining power. *The bigger, the more important you are to the supplier… if you are small, they do not spend that much time on you, that is quite clear. That you become less prioritized if you have a small business with them.* (Product Developer 13) One of the case company's business navigators explained that because they were such a small actor, their purchasing order could sometimes be removed because of lower priority. One example where the case company faced difficulties from having small order volumes concerned the membership of BSCI. *Because our turnover per factory is so small, we don't have any power to convince them to carry out BCSI.* (Merchandiser 1)

Even though some suppliers were used by several business areas and thus several product developers at the case company, joint orders were a rare occasion. However, some product developers and merchandisers claimed that larger orders could strengthen the case company's bargaining power, and that there were examples of when they had done this with the result of getting better price and delivery times. *There is always an advantage if we are a big customer of a supplier. We get better prices when we buy larger volumes of course, and we become a more important customer for them, and can get better deliveries sometimes. They prioritize us in a different way.* (Product Developer 9) *If it makes it easier to negotiate with larger volumes? Yes, for sure!* (Merchandiser 2) It was evident that many employees at the case company believed that large volumes were the main reason that made suppliers satisfied, where Product Developer 7 said, *For suppliers, it is the volumes that matter. They want you to buy a lot, and that you buy regularly for a long period of time.*

Many product developers expressed that the order volume made difference for the bargaining power, but there was also one opposing view. Product Developer 2 believed that joint orders did not make much of a difference since the case company was such a small customer anyway, compared to its competitors. *It doesn't matter, we have such small order volumes anyway. I mean if [one of case the company's competitor] comes and puts an order for 100 000 items, that's different. But 1500 or 3000… it doesn't really matter.* (Product Developer 2)

There were examples of when the case company had imposed requirements on a supplier who responded positively and did make changes accordingly. *Those suppliers that want to stay as our suppliers, they have really made an effort. We have one fantastic supplier that is our biggest supplier in my area… even before our environmental requirements. But after our requirements he did exactly what we asked for, and a little bit more. So now he has his own sewage treatment plant… where he recycles 90 % of the water from the production.* (Product Developer 9) Another example came from a supplier of which the case company was the supplier's biggest customer. This supplier supported the case company and was always positive and listened to their suggestions. The same supplier also listened to the case company's feedback on flaws in its design department, and went ahead and hired a new designer. (Merchandiser 3)

The Sourcing Manager at Company A also explained that the size of their company was not always very big compared to other customers sourcing from the same supplier. The size of their order quantities was nothing that the suppliers were dependent upon, and that the name of the company was not well known among suppliers they hadn't worked with before. When the requirements of the order volume were bigger than what the company could order, the Sourcing Manager at Company A explained that they simply had to do without that order from that specific supplier.

Unique product
Another aspect that was shown to affect the bargaining power with suppliers was how specialized the supplier's production was and whether or not the supplier offered a product that no, or few, other suppliers could produce. *Well, sometimes I really don't have a choice. We have one supplier, and there is not that many that can produce within certain areas…* (Product Developer 11)

Brand influence
The knowledge or perception of the case company's brand was the third mentioned characteristic affecting the bargaining power. For European suppliers, some product developers stated that the case company could get an advantage because of their brand. *I believe that we are a well-known brand… that suppliers always have wanted to work with us. So, it is very calming to know that you work for this company, and you get a lot for free. Then of course, there is a totally different thing in Asia, because there you are no-one basically.* (Product Developer 13) Even if the case company not always was not such a big actor in the Asian market, Product Developer 5 stressed that the suppliers wanted to broaden their market, and that suppliers thought of promising business when they heard the number of department stores the case company held in the local country.

The case company's local country and the city of the headquarters were described to be factors of importance for some suppliers. One example was given regarding the Indian market where the case company was not so big, but where the company received positive feedback from the supplier regarding the importance of working together with the case company, despite their size. (Merchandiser 5) Several product developers further expressed that they believed that the case company had a good reputation among suppliers. The fact that they paid their bills in time and that they kept on ordering continuously, even during more tough economic times. (Product Developer 11 & 12)

4.2.4 Profit impact
It was understood that the case company did not have any products that stood out in terms of contributing to a large part of the profit impact. However, the product developers mentioned some products that were seen as slightly more important than others. These were

products that were sold in very large volumes or that had sold well and were seen as so called cash cows. The products could vary depending on the current season and trend, and these were products that everyone agreed it was important to keep track of, and to make sure they were always in stock.

4.2.5 Association to previous studies

In the previous sections, the identified characteristics were presented within its corresponding dimension. The results indicated that the identified characteristics were associated with parts of existing models. However, they also showed that no existing model covers all of the identified characteristics why none of them can be applied in the context of this study. How the identified characteristics were linked to previous studies can be seen in Table 8.

Table 8. Overview of how the identified characteristics has been associated to previous studies

Identified criteria	Association to previous studies	Dimension
Integrated CSR	Rezeai and Ortt (2012)	Performance
Reliable in quality	Rezeai and Ortt (2012)	Performance
Consistent in price	Kraljic (1983); Olsen and Ellram (1997)	Performance
Delivers in time	Olsen and Ellram (1997)	Performance
Effective communication	Rezeai and Ortt (2012)	Performance
Matching quality	Olsen and Ellram (1997)	Business match
Relevant product development	Olsen and Ellram (1997); Rezeai and Ortt (2012)	Business match
Sustainable offering	Rezeai and Ortt (2012)	Business match
Proactive approach	Rezeai and Ortt (2012)	Business match
Knowledge sharing	Olsen and Ellram (1997); Rezeai and Ortt (2012)	Business match
Order value	Kraljic (1983); Tang (1999)	Balance of power
Unique product	Kraljic (1983); Tang (1999)	Balance of power
Brand influence	Olsen and Ellram (1997); Rezeai and Ortt (2012); Tang (1999)	Balance of power
Profit impact	Kraljic (1983); Olsen and Ellram (1997)	Profit impact

The left column in Table 8 shows the identified characteristics from the qualitative data, which were important to consider when segmenting suppliers. These characteristics were linked to different aspect of previous studies presented in the theoretical framework, which confirms that the identified characteristics were relevant to consider when segmenting suppliers. The association to previous studies can be seen in the middle column. The right hand column summarizes which dimension in the proposed framework each identified characteristic is included in.

4.2.6 First step of segmentation model

With the characteristics of the current supplier base being identified, the first step of developing the segmentation model was accomplished. The next step was to determine different types of buyer-supplier relationships, which is covered in the next section.

4.3 The determination of different types of buyer-supplier relationships (RQ2)

In order to determine different types of buyer-supplier relationships, it was necessary to understand what it was that determined the separation between different categories of suppliers as well as the different characteristics' relative importance. This was done through collecting quantitative data from secondary archival data as well as from structured questions. This section presents the separation of supplier categories, the weighting for the identified characteristics, as well as the second step of the segmentation model.

4.3.1 Separation of supplier categories

In order to determine the separation between different supplier categories in the proposed framework seen in chapter 2.5, it was necessary to decide the division of different segments. To define what was *high* and what was *low* in the dimensions *Performance* and *Business match*, as can be seen in Figure 6, the evaluation of suppliers regarding the identified characteristics had to be decided. At the time of the study, the case company performed a supplier assessment on its suppliers with a certain scoring system, which was mentioned in section 4.1. For each aspect the suppliers were evaluated in, they could either receive the grade *Excellent* (2 points), *Pass* (1 point) or *Insufficient* (0 points). A supplier was considered to be a *key supplier* if they gained an average score of 1.5 on each characteristic. The same structure of the scoring system was used for this study in order to determine the different supplier categories for the segmentation model.

The *Performance* dimension contained of five characteristics, leading to the maximum possible score of 10 points. Using the reasoning above, the limit for reaching *key supplier* level was 7.5 points. The *Business match* dimension also contained of five parameters, with the maximum possible score of 10 points. Similarly, the limit for reaching *key supplier* level was 7.5 points.

The characteristics of the *Balance of power* dimension was not something that the case company kept statistics of, why a qualitative discussion was necessary in order to decide whether it was the buyer who had a higher bargaining power over the supplier, or the other way around. Hence, where the boundary between the buyer power and supplier power laid was more of a subjective evaluation. The segmentation model, including the boundary for the different types of relationships, is presented in Figure 11.
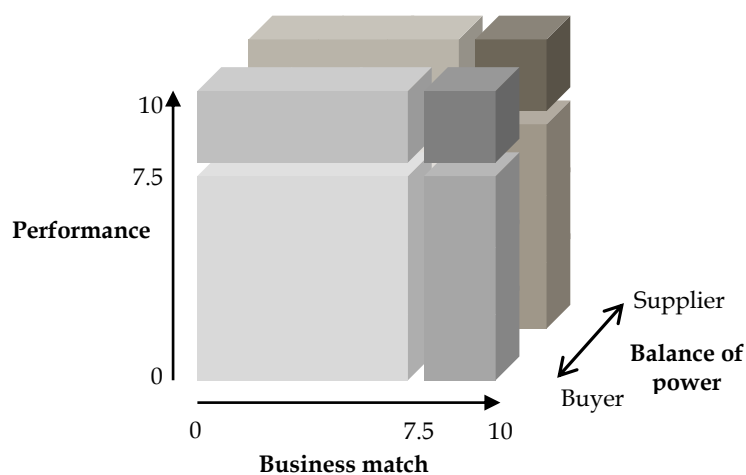
Figure 11. The segmentation model, including the determined limits for each category

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Accordingly, there are eight possible categories wherein a supplier could be classified, and hence eight different buyer-supplier relationships. The different categories of suppliers are visualized in Figure 12, and were named 1-8 until further notice. Table 15 gives an overview of the ranges for each of the categories.
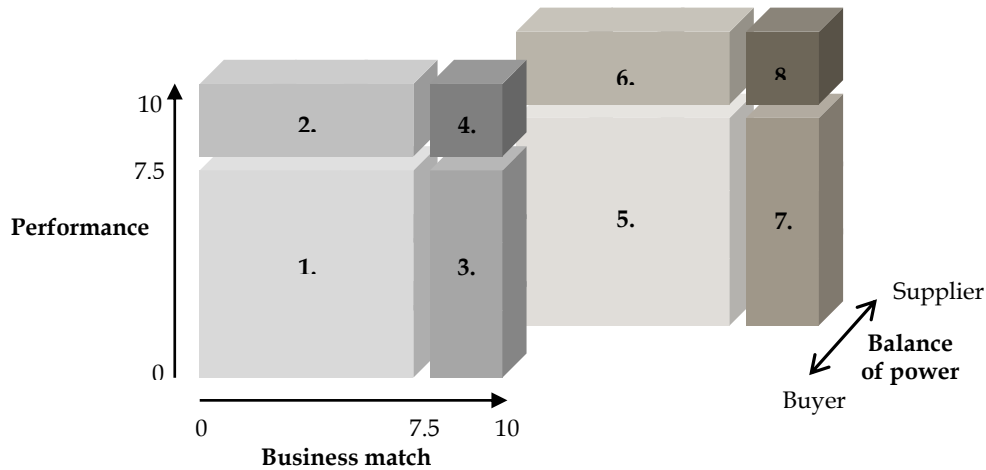
Figure 12. Overview of the different types of supplier categories

Table 9. Overview of the ranges for the different supplier categories

Supplier category	Performance	Business match	Balance of power
1.	Low (<7.5)	Low (<7.5)	Buyer power
2.	High (7.5-10)	Low (<7.5)	Buyer power
3.	Low (<7.5)	High (7.5-10)	Buyer power
4.	High (7.5-10)	High (7.5-10)	Buyer power
5.	Low (<7.5)	Low (<7.5)	Supplier power
6.	High (7.5-10)	Low (<7.5)	Supplier power
7.	Low (<7.5)	High (7.5-10)	Supplier power
8.	High (7.5-10)	High (7.5-10)	Supplier power

4.3.2 Weighting for identified characteristics

After deciding on how the suppliers were evaluated, and what the difference between the segments in terms of evaluation score was, it was necessary to determine how each supplier should be mapped into the segmentation model. To do so, each characteristic relative importance was evaluated through structured questions that were sent out to employees at the case company. The results from the structured questions determined how each characteristic should be weighted in order to conclude on the final score for the dimensions *Performance* and *Business match*.

The respondents of the structured questions were asked to assign a weighting to twelve out of the thirteen identified characteristics presented in section 4.2, depending on their perception of each characteristics' relative importance. The thirteenth characteristic, *Effective communication,* was identified after the structured questions were sent out, why this was not included. The respondents had a total score of 20 points to allocate for *Performance*, 25 points

for *Business match*, 15 points for *Balance of power*, where the average score amounted to 5 points. The following sections present the results from the quantitative data connected to the three identified dimensions. The results from each dimension is summarized in Tables 9-14, and are both visualized according to the respondents' different positions at the case company, and also as a total weighting representing all respondents.

Performance

Looking at the results for the *Performance* dimension, the different respondents answered quite similarly; they consider the four parameters almost equally important. The results can be seen in Table 9. What stood out were the supply planners' responses, who scored the *Delivers in time* characteristic slightly higher than the rest. This could be explained by the fact that supply planners were not involved in the whole product development process, but mostly in the parts concerning orders and deliveries. One supply planner responded to the structured questions and explained that he/she believed it was better if he/she did not answer the questions due to that it would be misleading. The designers gave the highest score for *Reliable in quality*, which could be explained by the fact that designers' work is mostly connected to the quality aspect of the products.

Table 10. Results from the structured questions concerning the Performance dimension

Position	Integrated CSR	Reliable in quality	Consistent in price	Delivers in time
Product Developer	4.93	5.53	4.73	4.80
Merchandiser	4.39	5.24	5.31	5.06
General Manager	4.64	5.09	5.28	5.00
Category Manager	4.25	5.75	5.25	4.75
Supply Planner	3.67	5.33	4.00	7.00
Designer	4.75	6.25	4.50	4.50
Sourcing	5.00	5.67	5.00	4.33
Product Assistant	5.00	5.00	5.00	5.00
Total	**4.59**	**5.48**	**4.95**	**4.98**

As the respondents had the possibility to add comments after each structured question, a fifth important characteristic was discovered and added to the *Performance* dimension. This characteristic was *Effective communication*, which several respondents acknowledged missing.

There was a minor difference in the respondents' view of each characteristics' relative importance, where the lowest total score was assigned to *Integrated CSR*. However, the final weighting for each characteristic was set to be equal, as shown in Table 10. The reason for this was since the case company prioritize working with CSR, the *Integrated CSR* characteristic should therefore be seen equally important to the rest.

Table 11. Overview of the weighting of the characteristics included in the Performance dimension

Performance	Integrated CSR	Reliable in quality	Consistent in price	Delivers in time	Effective communic.
Weighting	**1**	**1**	**1**	**1**	**1**

Business match

The result from the questions regarding the *Business match* characteristics showed more variation compared to the *Performance* characteristics, as visualized in Table 11. Looking at the overall score representing all respondents, the characteristics that received the highest scores were *Matching quality* and *Sustainable offering*. *Sustainable offering* was the characteristic that received a score above average looking at all positions at the case company, indicating that the respondents' valued this characteristic more than the other.

The characteristics that received the lowest scores were *Relevant product development* and *Proactive approach*. These two characteristics ended up below average from almost all individual positions, indicating that the respondents valued these characteristics as slightly less important than the other.

Table 12. Results from the structured questions concerning the Business match dimension

Position	Matching quality	Relevant prod. dev.	Sustainable offering	Proactive approach	Knowledge sharing
Product Developer	6.07	3.46	5.79	4.38	5.30
Merchandiser	5.94	4.50	5.08	5.06	4.42
General Manager	3.97	3.88	6.63	4.81	5.71
Category Manager	6.21	2.99	6.29	3.37	6.14
Supply Planner	4.73	4.40	5.42	5.06	5.38
Designer	7.40	4.48	5.67	2.28	5.17
Sourcing	5.83	4.46	5.16	3.46	6.09
Product Assistant	5.00	5.00	5.00	5.00	5.00
Total	**5.64**	**4.14**	**5.63**	**4.18**	**5.40**

Overall, the total scores for each characteristics regarding *Business match* varied to some extent. Looking at the answers from each position, they varied more, thus indicating that there were a differentiated view from the case company's employees regarding what supplier characteristics that could bring more value to their business. The final weighting was based on the total score, and is presented in Table 12.

Table 13. Overview of the weighting of the characteristics included in the Business match dimension

Business match	Matching quality	Relevant prod. dev.	Sustainable offering	Proactive approach	Knowledge sharing
Weighting	**1.2**	**0.8**	**1.2**	**0.8**	**1**

Balance of power

The result from the structured questions regarding characteristics connected to the *Balance of power* dimension is presented in Table 13. The respondents were asked to assign points to different characteristics with regards to how they valued their relative impact on giving the supplier stronger bargaining power compared to the other characteristics.

Looking at the scores for each position at the case company, they differed and there was no clear pattern for what was thought of being the characteristic giving the supplier the most

bargaining power. However, the average score in total indicated that the characteristics had different effect on the supplier's bargaining power.

Table 14. Results from the structured questions concerning the Balance of power dimension

Position	Order value	Unique product	Brand influence
Product Developer	5.89	5.00	4.11
Merchandiser	5.84	4.69	4.47
General Manager	6.88	4.07	4.07
Category Manager	5.00	6.81	3.19
Supply Planner	4.67	6.33	4.00
Designer	5.75	4.50	4.75
Sourcing	6.00	6.00	3.00
Product Assistant	5.00	7.00	3.00
Total	**5.74**	**5.16**	**4.11**

The characteristic that received the highest score, thus indicating that the characteristic gave the suppliers the strongest bargaining power, was *Order value*. The characteristic seen as affecting the supplier's bargaining power the least was *Brand influence*. The final characteristic, *Unique product*, received a score close to average. The final weighting is presented in Table 14.

Table 15. Overview of the weighting of the characteristics included in the Balance of power dimension

Balance of power	Order value	Unique product	Brand influence
Weighting	**1.2**	**1**	**0.8**

The weighting of the different characteristics was used together with the scoring system described in section 4.3.2 in order to map each supplier in the segmentation model. The maximum score for *Performance* and *Business match*, including the weighting, was still 10 points each. Thus, a supplier with the score 2 for all characteristics on these dimensions ended up either in the supplier category 4 or 8 visualised in Figure 12. The dimension of *Balance of power* was not evaluated by a score, but by a qualitative discussion taking the weighting into consideration, which decided whether the supplier ended up in category 4 or 8.

4.3.3 Second step of segmentation model
Having the different supplier categories determined, and hence the different buyer-supplier relationships, the second step of developing the segmentation model was completed. The next step was to decide how suppliers in each category were managed, which is covered in the next section.

4.4 The supplier management (RQ3)

The current management of the supplier base was analysed in order to determine the level of engagement and invested resources in different supplier categories. This is presented in the following sections. The findings were derived from semi-structured interviews with employees with various positions within the case company as well as workshops performed at one of the case company's sourcing office. The sections include findings from how the case

company managed its suppliers at the time of the study, as well as their view on possible ways of managing them.

4.4.1 The overall view of the case company's supplier relationships
The following paragraphs present how the case company differentiated the management of different types of suppliers, their view of long-term relationships, and how strategic products affected their relationships with suppliers.

Differentiating supplier relationships
Asking the employees if they differentiated how they worked with their suppliers, the common answer was no. This aside from the fact that the time spent on communicating with suppliers differed depending on the number and size of the orders. *Obviously I spend more time with that supplier since I place more orders there. But otherwise I don't work any differently than with the rest. (Product Developer 9)* The geographical location of the suppliers also seemed to play a certain role in what type of relationship the product developers had with them. *If I work with the Asian Far East offices, the supplier seems very far away because you have the merchandiser intermediary, and we travel quite seldom so I don't get to meet them that often. … To have a supplier more geographically close that I can meet with… that really affects the collaboration.* (Product Developer 13)

Merchandisers also worked quite similar with all of their suppliers, with the main difference regarding the time spent on improving suppliers' performance. One merchandiser explained that they did have some suppliers they defined as key suppliers at their sourcing office. These suppliers were defined based on the order value, the type of item they produced and their result in the yearly assessment that were performed. However, these suppliers were not treated in any different way compared to other suppliers. *There is no difference, the key suppliers are familiar with us. There is no need for extra treatment.* (Merchandiser 2)

Long-term relationships
The case company had used many of its suppliers for a long period of time, one of the longest collaborations with a supplier had lasted since 1932. The relationships with suppliers had been going on for a long time without specifically stating them to be long-term or writing any agreement of it. There seemed to be a subconscious arrangement between the suppliers and the case company. Product Developer 5 said that *No specifically expressed long-term. But they [the suppliers] know that we are important to them.* Also, Product Developer 3 stated *No, not specifically expressed. Anything can happen. It has just become long-term.*

It seemed as the product developers always strived for long-term relationships with all of its suppliers, or at least looked for potential in having a long-term relationship. *I think we have that opinion with all of our suppliers. Today, it is quite complicated and costly to add a new supplier, so if they can't offer anything where we can grow together long-term, then it is almost no use in adding that supplier.* (Product Developer 12) Further, Product Developer 2 stated that *we believe in continuity. To have a long-term relationship is positive.* However, Category Manager 1 felt that it was unclear whether it was stated to the suppliers that they were important and seen as long-term or not. The same category manager explained that putting continuous orders was the answer to how the case company nurtured their long-term relationships.

Even if most of the product developers explained that they did not explicitly state the long-term relationship with the suppliers, there were also examples of the opposite. Product Developer 8 had three suppliers that were told that they were thought of as long-term suppliers, where long-term in this case meant one year. The relationship included that the

suppliers sometimes stored material and that the case company for some of the products told the suppliers how much they calculate to buy the coming year. *If the suppliers always give us a good price and quality, and what we look for, you get a good cooperation and then you have the predictability.* (Product Developer 8)

Relationship with suppliers offering strategic products
As stated in the literature review, several previous segmentation models include the strategic importance of the products, and that it should affect the relationship towards the supplier offering that product. Asking the product developers at the case company if they believed they had any strategic products among their range of assortment, the answers differed, where some believed they had and some did not. They were also asked if the relation towards the suppliers offering the strategic products looked any different from the rest, where the overall answer was that it did not differ. Product Developer 1 explained that they had product categories that were cash cows over a longer period of time, but that the orders for these products were spread among a variety of suppliers that could differ from year to year.

However, several product developers described the opposite, where the product seen as strategic in the business areas was sourced from the same supplier order after order. This was done due to that the customers really liked the quality of the product they produced, and that the product sold really well. It was described that the risk of changing the look and feeling of the product was the main reason for not looking for optional suppliers. (Product Developer 4 and 5) Product Developer 5 further described that it was important that the supplier of the strategic products was a well performing supplier, that it should be one of the company's biggest suppliers and that the factory where the products were produced should be completely flawless. However, as described by others, the case company did not work any different with its important suppliers. (Product Developer 5)

4.4.2 Possible ways of supplier management in the case company
The following paragraphs present some of the aspects in which supplier relationships can be differentiated, which were identified in the literature. It also includes how the case company managed its suppliers at the time of the study, as well as their view on possible ways of working with suppliers in relation to actions suggested within these aspects.

Supplier improvement
The literature on supplier development includes the buying company to engage in activities to measure and improve supplier performance. As described previously, one way the case company differentiated the relationship to their suppliers concerned the performance improvement. Less time was spent on the suppliers that performed well, and more time and effort on the suppliers that did not perform as good. However, for the suppliers that needed to improve, the process very much looked the same. It was described that the key was to have meetings and discussions with the suppliers, informing them about the situation. The suppliers were also provided with an action plan and a timeline for when the improvements had to be done during these meetings.

Further, several merchandisers explained why the suppliers who performed poorly were given a chance to improve. The chance was given because the suppliers still offered such a good price so that it was not possible to drop them immediately. They invested time in them by having continuous meetings so that they understood on what parameters to improve. If a supplier did not improve after they had been given the chance, the company would start replacing some of the supplier's styles and order them from other suppliers instead, preferably within their already existing supplier base.

One way of getting the supplier to really understand the importance of the improvement plan was to inform the management at the factory about the situation. They did not always keep track of all buyers and their products, so when they found out what was going on they could make things happen. (Senior Merchandiser 4)

When discussing how time spent on each supplier could be allocated differently depending on the type of supplier in the workshop, the participants agreed that it would make sense to spend less time on the suppliers not showing any signs of wanting to improve, and gradually phase those supplier out. But they also stated that it was not possible to work in that way if the supplier produced a product they wanted to keep, and if that supplier was the only supplier that produced it. Further, they also said that for those supplier they saw potential in, even with a poor performance, they wanted to help by spending time on them.

Contracts
As stated in the literature, writing long-term contracts with suppliers is something that is common for suppliers that offer more complex products. In general, a combination of contracts and spot-buying is what most companies do. At the case company, many product developers were critical to the idea of writing some kind of agreement with suppliers or promising them future orders. One interviewee said *No, I don't think we have ever promised the suppliers that we are going to work with them. It is more stating to the supplier that - we would like to work long-term and close with our suppliers, and we hope you want that as well? So you speak quite openly about that, but never that you write an agreement.* (Product Developer 7) It was also described as a risk of stating long-term relationships, and that it was difficult to promise the suppliers that they would receive orders year after year. Committing orders to some suppliers could lead to big problems for the company if something happened with the supplier's production. (Product Developer 5)

The case company did not use any contracts regarding the purchasing quantity, so the suppliers could never be sure of the size of the orders received from the case company during a year. (Product Developer 12) The reason for not using contracts was explained to be due to the difficulties of thinking long-term for a large range of the product assortment. The seasonal assortment was often changed; the trend for one year could be a certain material, and the next season could be focused on a completely different material. Very often a supplier could only produce products made of one of these materials, thus making it unfavourable to be tied up in a contract. However, there were also some benefits of contracts identified, which concerned that the price would not be affected by currency changes, and that the contract would mean that they bought big quantities at one time, thus making it possible to decrease the price. (Product Developer 9)

During the workshop it was discussed that contracts would not be suitable today according to the merchandisers. However, if the company would go global and increase their volumes, the use of contract might be possible.

Supplier involvement in product development
As described in the literature, to have the supplier involved in product development has become increasingly important among manufacturing companies. When asking about the extent to which the case company had its suppliers involved in product development, one product developer said that it always depended on what type of supplier it was. During the workshop it was stated that those suppliers that lacked in product development, but performed well on quality, price and delivery were suppliers that the case company still used.

These were suppliers that were suitable for more basic products, where the case company provided them with the design and artwork.

There was a rare occasion for the designers to visit suppliers, most often it was the product developer or the merchandiser who visited, which reduced the extent to which the supplier was involved in product development. The case company had chosen to do much of its design locally with its own design team, who did not always appreciate the supplier's development. However, how this was done differed between business areas at the case company. The home department used a lot of the suppliers' design and product development, while the fashion team did most of their design by themselves.

Senior merchandiser 4 explained that for suppliers that were really good in product development, it could be advantageous to use their knowledge if the case company wanted to develop a new concept. During the workshops, one participant suggested that the case company should take advantage of those suppliers by visiting them and getting inspiration from the products they sold to other customers in other markets. It was also emphasized that it was good to involve suppliers by sending inspiration and trends in order to provide them with a clearer picture of what the case company was looking for. The participants of the workshop also believed that the case company perhaps could use suppliers' design capabilities more than they did, because that could save them both time and money.

Information exchange
In the literature review it is stated that sharing information with key suppliers is an important part of supplier relationships. This can be information regarding things such as forecasting, sales, marketing or the production process.

The case company did not have any forecast system in place during the time of the research, and it was very much up to each product developer to calculate how much they estimated to buy during a certain period. This was more important to do during periods of time when the currency was not beneficial for the case company. For such periods, forecasting one year ahead for the basic assortment could mean that the supplier could bulk some material bought at a better price for the case company. The possibilities to forecast and block some material for the repeat orders of the basic assortment was further confirmed by both product developers and participants of the workshops, who also explained that it was more uncertain to do that for the seasonal assortment. The reason for this was that seasonal products mostly were bought style by style, which made it difficult to forecast how much of each fabric that should be bought during more than one season at a time.

The participants of the workshop saw the benefits of a potential forecasting system to be that the case company could get a better position in the price negotiating process and that the supplier could buy material earlier at a better price. They also emphasized the importance of committing to these volumes promised to the supplier in order to avoid violating the trust that existed between the buyer and supplier. Business Navigator 1 had the same opinion and believed that the case company could become better at annual planning in terms of forecasting how much of a product they would buy throughout the year and communicate it to the suppliers. That would give the company better bargaining power due to higher volumes, which would make it easier to get a better price compared to ordering small batches successively.

Supplier 2 explained that many of their customers forecasted for a year in advance and asked them to give a price based on the yearly quantity. The case company never forecasted for this

specific supplier, and only purchased order by order. The supplier talked about advantages with both using forecasting and purchasing order by order. Order-by-order was easier to control and to communicate to the different workshops at the factory, while the advantages of forecasting were that it was easier to order material at a better price and it meant more money because the supplier would probably get more orders from that buyer. Supplier 1 explained that they preferred a combination of forecasts and order-by-orders, where forecasting was thought to be appropriate for repeat orders. Further, they said that they did not prefer forecasts for longer periods of time, one year was enough due to that they could not be sure of what the future would look like, making it difficult to promise the buyer anything. The best situation for forecasting was when a buyer had difficulties with reaching the minimum quantity levels. Forecasting the coming year made it possible for the supplier to buy the total amount of material that was needed, and produce at different times.

From the suppliers' perspective, it differed between different suppliers whether they shared information with buyers. One supplier shared information regarding fabric costs, material costs and average salary, and also said that they would provide the buyer with more information if they requested it, while another supplier did not share any information at all.

Senior Merchandiser 4 suggested that it was important to create a platform where the supplier and buyer could exchange information as a part of education and training. This platform could mean that suppliers were invited to listen to different speakers talking about a specific subject, such as sustainability. Sharing information this way by including the suppliers in the whole process was seen as very effective. The same senior merchandiser emphasized the importance of more clearly focusing on key suppliers, and to keep them more informed in order to always have them on their best, since they were very much important for the case company's business.

Communication
As described in the literature review, the level of communication between the buyer and supplier looks different depending on the importance of the supplier. At the case company, the communication with the suppliers in Asian Far East was mainly done through merchandisers at the sourcing offices and occurred in several different ways; by e-mail or telephone, and meetings either at the supplier's office or at the sourcing office. The communication with suppliers in other parts of the world was made by product developers, who also normally travelled to Asia to visit the suppliers either at a fair, at their showroom or at their factory once or twice a year. It was explained that they prioritized the bigger suppliers during these trips, but if a smaller supplier's factory was located nearby, they would visit that factory as well. During the workshop, it was stated that it was not important to visit the factories every year, but that it was most important to see the supplier's products, which could be done at other places than the factories.

In exception of the biggest suppliers, it was mentioned that the time allocated for visiting suppliers' factories were mostly spent on new suppliers or suppliers that recently had experienced some troubles regarding their production, and that the old suppliers mostly were visited during fairs. The explanation for not visiting the old suppliers were that since they had worked together for a long time, they were familiar to each other and knew each other's working ways.

One product developer described that one of the merchandisers was very proactive in giving suggestions on new fabrics and suppliers, and believed that this was because this merchandiser spent time visiting the suppliers' factories. This indicated that visiting both new

and old suppliers would be beneficial in terms of discovering new opportunities with these suppliers. (Product Developer 8)

The case company rarely or even never invited the suppliers to their headquarters. When suppliers visited, it was on their own initiative because they were in the country for other matters as well. When discussing potential benefits of inviting the most important suppliers to the headquarters, Product Developer 8 said that it would be good since the suppliers could get a better understanding of the company and the parties could further discuss what the company looked for in terms of materials and products in the future.

According to the interviewed suppliers, it was important to meet face-to-face at least once or twice per year, and that email and phone was enough for the rest of the time. Supplier 2 emphasized that it was beneficial that the case company had a sourcing office with employees communicating in the same language as the supplier because it made the communication a lot easier. The benefits of meeting face-to-face was also explained by Product Developer 12 that described a situation where a great potential in a supplier was discovered just because they met in person. The importance of meeting the suppliers was further emphasized by other product developers who explained that problems and opportunities were discussed during these meetings more easily than over phone or by email.

Recognition
Recognition in terms of providing awards to top performing suppliers or having the CEO visit suppliers is something that companies in other industries give examples of. This was not too common at the case company, but Senior Merchandiser 3 did explain a situation where they had recognized one of their key suppliers. *We gave that supplier recognition through writing about him in an article.* (Merchandiser 3) Another example included the case company's CEO, who visited one supplier a couple of years ago, which was much appreciated according to the supplier. As a supplier, it was important to know that they were one of the few suppliers that he visited during his trip to Asia. The same supplier also mentioned that it would be nice to be invited to buyers' headquarters. The times that they did visit buying companies' offices was most often because the supplier invited themselves, and not so often because that they received an invitation from the buyer. (Supplier 1)

Further, the participants of the workshop stated that suppliers generally appreciated visits, and that it was interesting to be noticed by the management of the buyer. The General Manager of sourcing office 2 emphasized that Asian suppliers generally appreciated being recognized, and that this was something that the case company should do. However, one merchandiser had a different view of this and stated that it did not matter if the CEO would visit the supplier, and that suppliers only cared about the product developer visiting, since they were in charge of driving the business.

Two of the case company's suppliers were asked about their opinion on buyers recognizing suppliers, and how they wanted to be recognized. They both were of the same opinion; that it was very important to hear that the customer appreciated their products because this made them more confident, proud and willing to work harder. However, Supplier 1 emphasized that buyers seldom told the supplier this, and that it rather was implicitly understood in terms of the buyer spending time visiting the factory and showroom, talking about new development and trends, and selecting new items from the supplier. They gave examples of possible ways of being recognized, including meetings with or visits by the buyer's top management, receiving invitations to visit buyer office or invitation to opening of new store. However, Supplier 2 finally stated that giving more orders is the best way to get recognition.

Product Developer 9 expressed a need for giving more attention to the well performing suppliers. *This supplier is great. But I don't feel that we properly take care of our suppliers, and tell them how important they are. … Because there is never someone on a higher level than me going there and telling them how significant they are and how we should think about the future together.* Further, the same product developer mentioned that Asian suppliers appreciated to receive diplomas and awards, or to be invited to the buyer's office as its top ten suppliers or similar, and that this was something that the case company should do. Product developer 12 and 14 gave further examples on possible ways of recognizing suppliers, which included showing the case company's club magazine for suppliers who had had their products published in it, and taking pictures of suppliers' products in store and showing them to the supplier.

Growth
As mentioned in the literature, it is common that a buyer and supplier sometimes create joint teams talking about future long-term growth and strategy together. However, the case company did not have a similar way of working, and they lacked a strategy for which suppliers to grow with. One example of this was that their way of allocating their orders could be a little bit ad hoc. *I have actually reallocated my orders during the years. But if I still want to keep a supplier I'll have to make sure he gets something else instead. So you'll have to feed them just enough. But it's not definitely decided where to put the orders…* (Product Developer 1) Further, Product Developer 8 explained that the exchange rate for different currencies could determine where the order was placed, making it difficult to have a growth plan together with any supplier.

Also stated in the literature, top management is sometimes included in the relationship with the buying company's suppliers. Product Developer 9 gave an example from a previous employer within retail, where top managers travelled to some of its biggest suppliers to have meetings where they talked about long-term strategy together. During the workshop, it was concluded that it was difficult for the case company to promise the suppliers anything long-term due to the changing environment in the industry. However, if the supplier was very important for the case company, it was agreed that it might be beneficial if someone from the management of the organisation had a meeting and talked about the future plans for the company.

One way of growing with the supplier that was discussed during the workshops was to make sure top suppliers were included in one campaign each year. The benefits of this was stated to be that it would mean an opportunity for growing business with those suppliers since campaigns meant bigger order quantity. However, since campaigns were based on what products the market wants, it was also stated that it would be difficult to promise any supplier that their products would be part of a campaign only based on their performance.

Investments
As described in the literature review, it is common with shared investments between buyers and suppliers in close collaborations. However, it was stated that such investments were not financially possible for the case company. (General Manager and Sustainability Manager)

Sustainability
In section 2.6.1 in the literature review, it was not explicitly stated how companies differentiate the management of suppliers in terms of a sustainability perspective. Despite this, it was revealed during the case study that sustainability was an important issue for the case company, which is why it is included in the following paragraphs.

The Sustainability Manager and the CSR Developer of the case company clearly expressed the need for a more holistic strategy of how they worked with their suppliers. If the case company decided on which their key suppliers were, they would be able to impose more requirements on them, both in terms of how they should improve quality wise, but also in terms of sustainability requirements. They mentioned that suppliers needed incentives to improve their sustainability work. Having a closer, long-term relationship with a supplier could give those needed incentives.

Further, they explained that they did not know which suppliers that were more important than others today, which made their work more difficult. Sometimes it turned out that the supplier they had started to work with in order to improve its CSR performance was a supplier that would be phased out, which made their sustainability work unnecessary. They also explained that a supplier could receive many orders one year, and the year after they might have received almost none. Without stable orders and a long-term relationship, it was difficult to require sustainability improvements.

The Sustainability Manager believed that the case company should put time and effort on those suppliers that performed well, and as an example invite them to different trainings and help them being updated on social and environmental issues. It was also stated that it was wanted that those suppliers were audited by a third part, in order to save time and money compared to if the case company performed its internal audit. Further, the good suppliers should be encouraged and supported in performing additional environmental work.

Further, the Sustainability Manager was of the opinion that those suppliers that performed well on sustainability in terms of production related factors, but lacked in providing any sustainable products, should be invited to seminars to discuss the advantages of adding more sustainable products to the assortment. Those suppliers that performed poorly on sustainability in terms social or environmental issues in production should be supported and provided the needed material in order to improve. If necessary, those suppliers should be visited more frequently and invited to education opportunities.

4.4.3 Third step of segmentation model
After identifying how the suppliers were managed at the case company, and the possible ways of managing suppliers in this context, the third step of developing the segmentation model was completed. The final step included recommendations on how to manage different types of suppliers, corresponding to the categories in the segmentation model, which is covered in the *Discussion and Conclusion* chapter.

4.5 Summary of results

The *Result and Analysis* chapter covered the answers for the three sub-research questions. First, the current characteristics of the supplier base were identified. These were associated to parts of previous segmentation models. Second, the different types of buyer-supplier relationships were determined. Third, the current management of suppliers were identified, as well as possible ways of managing the supplier base. The answers to the three sub-research questions contributed to the development of the segmentation model. Based on the three dimensions of the model, *Performance, Business match* and *Balance of power*, eight different supplier categories were determined. Recommendations on the management of each of the eight categories are further discussed in the next chapter.

5. Discussion and Conclusion

This chapter commence by reconnecting the study's findings to the posed research questions, and thus its overall purpose. It continues with presenting the conceptual as well as the empirical contribution, where the latter includes a discussion regarding general insights from the study, recommended actions for how to manage each supplier category of the developed segmentation model, as well as the potential benefits and limitations of the model. The chapter ends by addressing reflections on sustainability and limitations of the study as well as suggestions on future research.

5.1 Reconnection to the study's purpose

The purpose of this research is to develop a supplier segmentation model for guidance in managing supplier relationships for medium sized retail companies with diversified product portfolios offering private label products. In order to achieve the purpose, an overall research question was formulated. Further, three sub-research questions were posed in order to answer the main research questions, and thus helping to achieve the study's purpose. The sub-research questions were addressed by performing a case study on a medium sized retail company. The *Result and Analysis* chapter presents the findings for each of these questions. A conclusion of the findings is presented below.

RQ1: *What are the current characteristics of the supplier base?*

From the empirical results and conducted analysis, 13 characteristics of the current supplier base that were relevant in the choice of supplier in terms of their capabilities of delivering a final product matching the buying company's business strategy were identified. These 13 characteristics were grouped into the three dimensions *Performance, Business match* and *Balance of power.* Each characteristic was ranked according to their relative importance, which is presented in conjunction with the answer for RQ2.

The *Performance* dimension reflected the supplier's ability to perform well at risk factors, and included the characteristics *Integrated CSR, Reliable in quality, Consistent in price, Delivers in time,* and *Effective communication.* The *Business match* dimension reflected the extent to which the supplier's capabilities matched the case company's business and provided competitive advantage. This dimension included *Matching quality, Relevant product development, Sustainable offering, Proactive approach,* and *Knowledge sharing.* The last dimension, *Balance of power,* reflected the balance of bargaining power between the supplier and the case company and included *Order value, Unique product,* and *Brand influence.* All of the identified characteristics could be associated with parts of previous studies, and were combined in order to match the specific context of this study. The identified characteristics were confirmed to reflect the situation at the case company by the merchandisers at the workshops. Further, they were confirmed to be appropriate for the specific context by the experienced sourcing consultants.

RQ2: *What determines different types of buyer-supplier relationships?*

Each characteristic for *Performance* and *Business match* could receive a score of maximum two points, which was multiplied with a weighting factor that is described below. The total receivable score for these dimensions was 10 points each. In accordance with the scoring

system of the current supplier assessment at the case company, the boundary between different supplier segments was set to 7.5 (an average of 1.5 points per characteristic). The score for *Balance of power* was decided through a more qualitative approach, and not with a quantitative measurement. Combining the results for all dimensions led to that the segmentation model was divided into eight different supplier categories, and hence eight different buyer-supplier relationships.

To decide where each supplier should be mapped, a weighting of all the identified characteristics according to their relative importance was performed. This was done based on the results from the structured questions answered by employees at the case company, which showed that all characteristics of the *Performance* dimension were equally important and thus weighted equally by a factor 1, see Table 16. The result was rather expected since it was understood by the in-depth interviews that all *Performance* characteristics, expect from *Integrated CSR*, were somewhat connected to each other. *Integrated CSR* got the lowest score, but was weighted as the other characteristics due to that CSR work was important for the case company.

Table 16. Overview of the weighting of the characteristics included in the Performance dimension

Performance	Integrated CSR	Reliable in quality	Consistent in price	Delivers in time	Effective communic.
Weighting	1	1	1	1	1

The results for the characteristics of the *Business match* dimension showed that *Matching quality* and *Sustainable offering* were seen as slightly more important than average, and were weighted 1.2. *Relevant product development* and *Proactive approach* were seen as slightly less important than average, and were therefore weighted 0.8. Finally, *Knowledge sharing* was seen as average, thus resulting in it being weighted 1, see Table 17. The different weightings for the *Business match* characteristics could be explained by the different opinions between the different positions and business areas. For example, *Relevant product development* was of more importance for some business areas than for other, thus led to that employees prioritized the score differently.

Table 17. Overview of the weighting of the characteristics included in the Business match dimension

Business match	Matching quality	Relevant prod. dev.	Sustainable offering	Proactive approach	Knowledge sharing
Weighting	1.2	0.8	1.2	0.8	1

The findings for the characteristics of the *Balance of power* dimension showed that *Order value* was seen as slightly more important than average, *Brand influence* was seen as slightly less important than average, and *Unique product* was seen as average. Hence, they were weighted 1.2, 0.8 and 1 respectively. See Table 18 for an overview of the results.

Table 18. Overview of the weighting of the characteristics included in the Balance of power dimension

Balance of power	Order value	Unique product	Brand influence
Weighting	1.2	1	0.8

RQ3: *How are the existing suppliers managed?*

The empirical findings showed that the case company did not differentiate its suppliers in a systematic or conscious way. They said that they strived for long-term relationships with their suppliers, but there was no plan on which suppliers to prioritize and orders were placed ad hoc. Moreover, the results indicated that the case company did perform certain activities to manage its suppliers, which could be related to activities that were exemplified in existing literature and companies in other industries. However, these activities were not performed consistently and without connection to a holistic company view.

MRQ: *How is the supplier base differentiated?*

Answering the three sub-research questions: identifying the current characteristics of the supplier base; determining different types of buyer-supplier relationships; and, understanding how existing suppliers were managed, contributed to answering the main research question. This ultimately resulted in that the supplier base was differentiated in accordance with the developed supplier segmentation model.

5.2 Conceptual contribution

This study contributes conceptually to the strategic sourcing literature, and more specifically to supplier segmentation and supplier relationship management, by using the concepts in a new setting. The conceptual contribution can be seen as twofold.

First, this study contributes to the extension of existing supplier segmentation models. Since previous developed models, such as the most famous model by Kraljic (1983), mainly focus on how bigger companies within the manufacturing industry can categorize their suppliers, it is not always possible for medium sized retail companies to use these models in order to manage their supplier base. (Kraljic, 1983; Olsen and Ellram, 1997; Tang, 1999; van Weele, 2014) Many of the existing models base the categorization on the product and market, and do not take into consideration the suppliers' capabilities. These models normally identify strategic products important for a company's business. (Carlsson, 2015; Rezaei and Ortt, 2012) This however, does not say anything about the performance of the supplier providing these products, which also can affect how they are managed.

Further, the products sold by companies in this specific context are generally of low complexity, making it easier to switch suppliers. Comparing this to the manufacturing industry, where the different parts bought for the assembly of the final product often is of high complexity, the number of suppliers capable of producing the different parts is limited. For retail companies not owning the production by themselves, the suppliers' understanding of the buying company's market and their ability to deliver a final product according to agreement is what determines how the different suppliers are managed. Existing models that take into account suppliers' capabilities and will to cooperate do not, however, consider the relative bargaining power between the buyer and supplier. (Rezeai and Ortt, 2012) For medium sized retail companies with diversified product portfolios, the volume will many times be of small size compared to their competitors, which influences the relationship towards the supplier. The first conceptual contribution of this study is thus that it provides a

segmentation model that categorize the suppliers based on the prerequisites within the retail context of a medium sized retail company with a diversified product portfolio.

Second, actions to be imposed on different suppliers based on their categorization in previous models are mainly focused towards suppliers providing a strategic product. (Kraljic, 1983; Olsen and Ellram, 1997; Tang, 1999) Moreover, the actions that are proposed are adapted to big companies and include actions such as investing in high technological equipment together. (Bensaou, 1999; Dyer et al., 1998; Krause et al., 2006; van Weele, 2014) Such actions are too costly and not always suitable to the context of medium sized retail companies. The fast changing trends and short seasons control the fabrics and materials that the products need to be made of, thus the choice of supplier may vary more often compared to the manufacturing industry. Further, even though actions on how to manage the relationship with suppliers are suggested in previous research, these actions are not adapted to different types of suppliers, but more gives an overall view on how suppliers can be managed. (KPMG, 2012, PwC, 2013; Sheu et al., 2006; Wagner and Johnson, 2004)

One of the often mentioned actions for different types of suppliers concerns forecasting, and that forecasting information should be shared with a number of suppliers. (Kocabasoglu, 2006; Sheu et al., 2006) The majority of all interviewees in the study stated that it was difficult to do more long-term forecasts to share with suppliers. They claimed that because of the industry conditions with trends shifting so quickly, it was difficult to predict what products that would be relevant for the next season, and therefore difficult to conduct forecasts for longer periods than one season at a time. The trend-driven industry affect the relationships towards the suppliers in other ways as well, not only the example of forecasting. Even though forecasting will be possible for the case company's basic assortment that do not vary much from season to season, the recommended actions in previous literature and from other companies are not completely suitable for the context of a medium sized retail company with a diversified product portfolio. The second conceptual contribution of this study is thus that it provides actions for each different type of supplier derived from the segmentation model suitable for this context.

To conclude, the segmentation model for this study contributes conceptually by theories regarding both a new way of categorizing the supplier base of a medium sized retail company with diversified product portfolios, and also appropriate actions regarding how to manage the suppliers within the different categories.

5.3 Empirical contribution

The main empirical contributions of this study can be summarized as:

1) a developed supplier segmentation model suitable for medium sized retail companies offering a diversified product portfolio, and;
2) recommended actions on how to manage suppliers, corresponding to each segment in the model

The segmentation model was developed by first identifying characteristics of the current supplier base (RQ1), second by determining the different types of supplier relations (RQ2), and third by identifying how the existing suppliers were managed (RQ3). The answers to these questions provided insight regarding what characteristics to take into consideration in

a segmentation model adapted to the case company, and what characteristics that were more important when differentiating suppliers. Further, they also revealed the lack of management of the suppliers by the case company. Suggested activities for the management of the suppliers were developed in a combination of existing literature, examples from other companies as well as interviews and workshops regarding possibilities at the case company.

This section begins by discussing some general insights from the case study and continues by presenting recommended actions for how to manage the supplier base when using the developed segmentation model. Thereafter, potential benefits as well as a number of limitations with the segmentation model are explained.

5.3.1 General insights
The case company owned department stores that offered a very broad product assortment, thus resulting in a diversified product portfolio, which in this case connected them to having a diversified supplier base. Talking to the product developers and merchandisers at the case company, they were of the opinion that all products they purchased were of importance. However, it emerged that some products were purchased from a supplier that only produced one specific product, with sometimes only one single order per year. Since it is resource consuming to handle a supplier, it is not only important for the case company to decide how to manage each supplier most efficiently, but also to decide if all of their products are necessary, in order to avoid the risk of spending more time and effort than what they earn. In terms of sustainable products, the case company had a goal of increasing the sustainable assortment for the year of the study. It was stated that the goal was difficult to meet, partly due to that there was a challenge to find suppliers offering sustainable products, and partly due to that the price of sustainable products was too high compared to what customers were prepared to pay. When management state goals like these, it is important that it permeates the whole company, and that they provide the necessary conditions to reach the goals. Overall, it is crucial that the case company review their product assortment and decide on a strategy for which products that should be phased out and which that should be seen as more important. Further, they need to align this product strategy with their goals on increasing the sustainable assortment, and connect this with the overall business strategy. If the case company does this, in combination with using the segmentation model developed in this study, the outcome of the model will be of the highest value.

During the study, it was evident that there was a lot of tacit knowledge in the case company. Merchandisers and product developers stated that all information regarding their suppliers and how to work with them was information that they simply knew; it was *in their heads*. This can be problematic in two ways: first, if the company does not have any established system for this information to pass on, this could complicate the work of successors. Second, if every employee has their own way of working, this could mean that the organization eventually becomes fragmented, and does not work towards the same goals. One example from the case company was that information sharing between the different employees and business areas was limited. They did not cooperate that often in terms of using the same supplier, and when they did use the same supplier, orders were seldom placed jointly. Sometimes it was not possible to cooperate due to the very different products and materials that were purchased. However, some employees mentioned that there were more opportunities for collaboration between them than what was actually exploited. But due to lack of time and an established way of recognizing these opportunities, they were often overseen. It is important to have someone with a more overall responsibility of the suppliers, besides product developers and merchandisers, in order to avoid overlooking opportunities for collaboration. This could lead

to an advantage for the company in terms of enlarged order quantities that could mean better prices. When implementing the segmentation model, it is important that the case company appoints someone to take the overall responsibility for the holistic view of the supplier base so that internal synergies like these can be captured.

Implementing the segmentation model developed in this study means a new way of working for the case company. The impression when showing the segmentation model to merchandisers at the workshops was that they at first did not see the value of such a model. They all stated that they knew their suppliers and already had an established way of working with them. Using the segmentation model means a new way of allocating time between suppliers, and could as an example mean prioritizing orders to some of the suppliers and decrease business with others. It also means that the case company's management needs to engage more in the work with suppliers, and allocate time to meet with those that have potential in contributing to the company's future growth. It is essential to make sure that all stakeholders understand how to use the segmentation model and the benefits this implies for the company and for each employee, in order to avoid resistance and increase the success of implementation.

5.3.2 Recommended actions for how to manage each supplier category

The implementation of the segmentation model do not only mean new ways of working for merchandisers and the management, as mentioned above, it also means implications for the whole case company. In order for the implementation to be successful, it is essential that the case company manage its suppliers in a clear and unified way. Based on the empirical results, existing literature, examples from other companies as well as overall impressions throughout the case study, a number of actions are recommended for the eight different categories of suppliers presented in the segmentation model. Figure 13 gives an overview of the categories with given names based on the recommendations for how to manage each supplier category. Thereafter, the recommendations are presented.

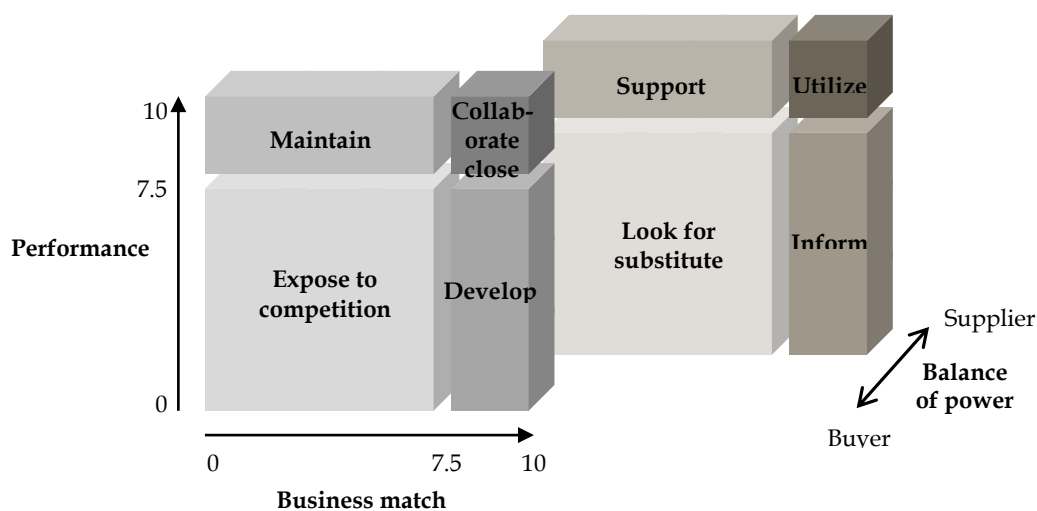*Figure 13. The segmentation model visualising the different supplier categories*

Expose to competition

These are suppliers with an unsatisfactory low level of *Performance* that hold few *Business match* characteristics that can bring extra value to the case company. The *Balance of power* is in favour of the buyer, why the supplier should be *exposed to competition,* where one of the main

goals is to drive down cost. These suppliers generally lack in product development, so the case company should limit the involvement of these suppliers in the product development and provide them with their own design or use already developed products when appropriate. These suppliers have the lowest priority when it comes to visits, the case company should only visit them when absolutely necessary. In terms of improving the suppliers' performance and business match characteristics, an improvement plan including clear targets should be sent by email to the suppliers. The suppliers should be supported with the necessary material and information in order to improve e.g. its quality, CSR and environmental work. However, the case company should limit the time and resources to help the suppliers to improve, and simply provide them with the right conditions to improve by themselves. If the suppliers do not show any ability or will to change its performance or business match characteristics, the case company should consider replacing suppliers in this category, and consolidate volume to other suppliers.

Look for substitute

Similarly to the suppliers within *Expose to competition,* these are suppliers that have an unsatisfactory low level of *Performance,* and that hold few *Business match* characteristics that can lead to extra value for the case company. The same actions as for suppliers in *Expose to competition* should be imposed on these suppliers. However, in this case, the *Balance of power* is in favour of the supplier why it might be difficult to impose the same requirements as stated above. The case company should consider the importance of the specific product that the supplier produces, and if possible, *look for substitute* and/or replace suppliers and consolidate their volumes to other suppliers.

Maintain

These are suppliers that have a high level of *Performance*, but the majority of them only hold few *Business match* characteristics that can lead to extra value to the case company. The *Balance of power* is in favour of the buyer, and can be used in order to require some suppliers to make an effort to improve the *Business match* characteristics. These suppliers generally lack in product development, so the case company should limit the involvement of the suppliers in product development and provide them with their own design or use already developed products when appropriate. Consequently, these suppliers generally provide products within the basic assortment that are not in need of any product development. Therefore, the case company should share forecast information with these suppliers in order to open up for possibilities to bulk up material at cheaper prices, and to avoid major changes in raw material prices. Since these suppliers keep a satisfactory high level of performance, consolidate basic assortment volume to them.

Prioritize to meet with these suppliers at least once a year during one of the international fairs. The case company should also recognize these suppliers for their good performance by continuously putting orders to them, and occasionally inviting them to events. Regarding supplier improvement, the case company should invest time in those suppliers that show potential in business match characteristics that are valuable for the buyer, and invite those suppliers to seminars to inspire them to e.g. broaden its sustainable assortment. Send improvement plan regarding performance aspects by email. For those suppliers that show no potential or need to improve, the case company should *maintain* a good, self-sufficient relationship in order to retain the high level of performance.

Support

Similarly to the suppliers in *Maintain,* these are suppliers that have *Performance* on a high level, but the majority of them only hold few *Business match* characteristics that can bring extra value

for the case company. The same actions as for suppliers in *Maintain* should be imposed on these suppliers. However, in this case, the *Balance of power* is in favour of the supplier, why it might be difficult to impose the same requirements as stated above. Therefore, the case company should *support* the suppliers with necessary information in order to retain a good, self-sufficient relationship and to keep the high level of *Performance*, but without spending too much time on these suppliers. Consolidate orders to these suppliers if potential to shift *Balance of power*.

Develop

These suppliers have an unsatisfactory low level of *Performance*, but do offer *Business match* characteristics that can bring extra value for the case company. The *Balance of power* is in favour of the buyer, which should be used in order to impose requirements on the suppliers to *develop* and improve their *Performance*. Since these suppliers often have expertise in product development, the case company should take advantage of that by involving them in an early stage and have an interactive relationship with the suppliers' product development teams. Prioritize to meet with suppliers at least once a year during one of the international fairs, or at the suppliers' showrooms or factories. Also, the case company should prioritize for the designer to meet with the suppliers once a year. In terms of recognition, the case company should put continuous orders to the suppliers and occasionally invite to events or to meet with the general manager with the purpose of showing that their work is appreciated in terms of their *Business match* characteristics and to inspire them to improve their *Performance*.

These are suppliers that hold *Business match* characteristics that bring extra value for the case company, which are characteristics that not too easily can be trained. Therefore, it is important to take advantage of these suppliers, so the case company should prioritize to help improve their *Performance* level. This should be done by involving suppliers' management teams and go through improvement plans in person, as well as emphasizing strategic potential if improvements are shown. In terms of information sharing, the case company should make sure to share trends early to the supplier, and require information regarding the production process so that they can help discover possible improvement areas together with the supplier.

Inform

Similarly to the suppliers in *Develop,* these are suppliers with a low level of *Performance*, but that hold *Business match* characteristics that can bring extra value for the case company. The same actions as for suppliers in *Develop* should be imposed on these suppliers. However, in this case, the *Balance of power* is in favour of the suppliers, why it might be difficult to impose the same requirements as stated above. Therefore, the case company should *inform* the supplier on how to improve its *Performance*, and especially emphasize the possible benefits of improving and of creating a more close relationship with the buyer. Consolidate orders to this supplier if potential to shift *Balance of power*.

Collaborate close

These are suppliers with a high *Performance*, and that also hold *Business match* characteristics that can lead to extra value for the case company. The *Balance of power* is in favour of the buyer, which should be used to impose different requirements. These are suppliers that the case company should prioritize and involve in the overall business strategy. Therefore, the case company should *collaborate close* with these suppliers, and build a joint team with them to create a growth plan in order to create a mutually beneficial relationship. Put continuous orders to supplier, and recognize them by e.g. inviting them to events, to meet with CEO or to new store openings. Also award these suppliers with a diploma stating that the case company is very satisfied with their performance.

These suppliers often have expertise in product development, so the case company should take advantage of that by involving them in an early stage and have an interactive relationship with the suppliers' product development teams. Prioritize to meet with suppliers at least once a year during one of the international fairs, or at the suppliers' showrooms or factories. Also, the case company should prioritize for the designer to meet with suppliers once a year. Regarding information exchange, prioritize to share trends early with supplier, and also share forecast information and information regarding sales of suppliers' products. The case company should require the suppliers to share information regarding the production process and other internal costs, in order to together discover improvement areas that will benefit both parts. In terms of improvement, prioritize time and resources to help supplier improve if necessary. The case company should do this by creating a joint team with suppliers to together develop efficiency programs. They should require the suppliers to engage in additional social or environmental projects in order to improve their CSR-work further.

Utilize
Similarly to the suppliers in *Collaborate close,* these are suppliers that with a high *Performance*, and that hold *Business match* characteristics that can lead to extra value for the case company. The same actions as for suppliers in *Collaborate close* should be imposed on these suppliers. However, in this case, the *Balance of power* is in favour of the suppliers, why it might be difficult to impose the same requirements as stated above. Therefore, try to make the suppliers understand the benefits of a close relationship, the advantages of working with the case company, and *utilize* the suppliers' great *Performance* and *Business match* characteristics to the highest extent possible.

5.3.3 Potential benefits with the segmentation model
The developed segmentation model enables the case company to think and act more strategically in its sourcing activities. A number of benefits with differentiating the relationship with suppliers were described in the theoretical framework. One of them concerned the limited resources a company has, and how they could be allocated in a more effective way when differentiating the relationship to different types of suppliers. A company offering a wide assortment of products within several business areas, similar to the case company, requires a lot of different expertise and time-consuming administrative work. Several of the interviews revealed a feeling of being understaffed, so a tool that would relieve their work and optimize their time was seen as beneficial. The segmentation model contributes to that the limited resources can be allocated in a much more efficient way and thus saving time where possible. By mapping the suppliers according to the dimensions *Performance, Business match,* and *Balance of power,* the case company can discover where and how it is necessary to distribute its resources in order to receive the highest possible return. The model makes it possible to identify different types of suppliers, such as those that need extra treatment in order to improve its performance, those suppliers that should be phased out, and those suppliers that have potential in becoming future growth partners. Time should not be spent on improving a supplier that is on its way to be phased out, but instead on a supplier that the buying company believes they have the potential to grow with.

Moreover, the segmentation model offers various options regarding aspects that can be visualized with the size and colour of the circles representing the different suppliers. One way is to visualize those suppliers offering a product being of big importance for the company. Most companies have some products that could be seen as slightly more important than the rest of the assortment due to things such as that the products contribute much to the company's profit or that they are a part of the set business strategy. Due to the importance of

these products, it is of extra interest that the suppliers producing them work in a way that is consistent with what the case company requires. Identifying these suppliers enables the case company to prioritize that time is spent on these suppliers and that appropriate actions are taken in relation to how they are performing.

Further, the model provides an overarching view of the case company's suppliers, which is essential in order for the whole company to strive towards the same goals and future strategy. In the case study, the structured questions revealed that there were numerous views on what characteristics of a supplier that were more important. This indicated that there was no clear strategy for what aspects that were more important on a company level. With the supplier segmentation model, all stakeholders involved in the sourcing activities at the case company see the same picture of how suppliers perform, which gives a better understanding of the different decisions related to sourcing that is made within the organization. Further, there were indications of competition between the different sourcing offices and that there was a lack of transparency at the case company, leading to each office working independently instead of united. Also, there was limited collaboration between business areas regarding sourcing and the choice of supplier; using an existing supplier from another business area was rather an exception than a rule. Hence, the segmentation model provides the conditions for each employee, each business area and each sourcing office to widen its perspectives and to see the overall company perspective regarding things such as what suppliers that should be prioritized at order placement and what suppliers that should be phased out.

With the competitive and fast-changing environment within the retail industry, it is important for the case company to always be up to date with their product assortment. This could mean that they need to start working with a new type of material or product that they have not worked with before. Therefore, it is important to find suppliers that can bring that extra value to the case company in terms of sharing their knowledge regarding the production. Suppliers are experts in what they do and they can provide the case company with information regarding material choice, regulations or production related opportunities that the case company might not be familiar with due to the new material or product. The dimension *Business match* takes this into consideration and hence helps the case company to identify suppliers holding those extra characteristics and makes it possible to get the most out them.

Finally, during the case study, it was recognized that is was not always a benefit to be a large buying company, placing big volume orders to a supplier. One supplier mentioned that their larger customers were less understanding and often imposed more strict requirements on delivery time and would expose them to competition in order to push down prices, which meant that the supplier would take the order with lower margins. Therefore, they appreciated companies with smaller order volumes as well. However, this do mean that buying companies with larger volume orders have the mandate to impose more requirements on its suppliers, indicating that the order value do play a role in the bargaining situation, and hence confirming it to be important to consider the *Balance of power* dimension. The segmentation model addresses this and gives recommendations for how to manage different types of suppliers in relation to the relative bargaining power.

5.3.4 Limitations with the segmentation model
The two dimensions *Performance* and *Business match* are meant to be built on quantitative measurements, why the segmentation model entails the case company to perform some kind of assessment and rating of its suppliers in order to perform the actual mapping. Assessments

like these are most often quite subjective, meaning that everyone makes their own personal judgement of each supplier, leaving the evaluation not always completely objective.

The segmentation model was developed based on the characteristics of a medium sized retail company with a diversified product portfolio. This implies that it might not be perfectly matched with larger, global companies where the third dimension, *Balance of power,* could be excessive. However, in those cases, that dimension would simply be excluded, and a two-dimensional model could be used.

Even if the model was developed to be suited for medium sized retail companies with a diversified product portfolio, there will always be exceptions. It is difficult to develop a general model that applies in all possible cases, specifically since the case company for this specific study offered so many different products within different business areas. The recommended actions to pose for each of the eight supplier relationships are held on a very general level in order to always be applicable. However, there is still need to take every single supplier into consideration when posing the actions, and if necessary, make some case-by-case adjustments to the action.

5.4 Reflections on sustainability

This study has taken the perspective of sustainability in significant consideration during the research. The case company expressed that this was an important aspect for them early on in the research process, and that it was essential to include sustainability in their work with suppliers. Looking at the empirical findings for RQ1, two out of the thirteen characteristics of the supplier base are related to sustainability. The first one is *Integrated CSR,* which is related to sustainability in terms of suppliers having a socially and environmentally sound production. The second one is *Sustainable offering*, which is related to sustainability in terms of suppliers offering sustainable products and being in forefront of continuously searching for sustainable materials and/or products.

Both of the sustainability-related characteristics were included in the developed supplier segmentation model, which means that the case company considers these aspects when segmenting and managing its supplier base. More concretely, this helps the case company to map the sustainability performance of their suppliers, in order for them to know where to put their efforts to improve its overall sustainability work. Indirectly, this also entails a helping hand to suppliers that are in need of improvement since the case company will pinpoint its poor performing suppliers and choose to assist some of them to improve.

Overall, the segmentation model creates an increased awareness for sustainability since it gives a more holistic view of the segmentation and management of the supplier base, including the sustainability perspective, that all stakeholders at the case company takes part of. When each supplier is mapped in accordance with the supplier segmentation model, the case company can share each supplier's result with them with the purpose of improving their sustainability performance, which in turn also increase the suppliers' awareness.

5.5 Limitations with the study and future research

The development of a segmentation model adapted to a medium sized retail company with a

diversified product portfolio was performed as a single case study on a Nordic retail company. The findings derived from the case study were the base for the segmentation model, thus making the result adapted to this specific company and therefore decreasing the generalizability to other companies. One way to increase the generalizability was to interview external companies. However, the number of such interviews were only a few due to that requested companies refrained from participating because they saw the case company as a competitor. Even though many of the identified supplier characteristics were confirmed by the external companies, it would be of interest to increase the number of external interviews to further validate the findings of this research in order to make the model applicable for other companies. Further, the size of the case company and the business areas that they were operative within were quite unique in the local country of the case company's business, thus making it of interest to perform a similar study on a firm offering products from only a few of the business areas in order to see if the findings are generalizable on an industry level of retail.

This study focused on buying companies perspective and how their suppliers perform, and how they can work in different ways depending on the relationship towards the supplier. A limited number of suppliers were interviewed in order to get the suppliers' perspective on the buyer-supplier relationship, and how the quantity of the orders affected how they collaborated with the suppliers differently. However, an addition to this paper, or a topic for future research, would be to investigate suppliers' view on how they differentiate their collaboration with the buying company further.

Moreover, a limitation of this study was the collected data for the suggested activities for the different relationships. The view from only one sourcing office was considered, together with the view from a number of product developers, thus restricting the different opinions on what was possible to do in the management of different suppliers. Further, the workshop conducted at the sourcing office was held in English, and not the local language of the sourcing office. This might have limited the outcomes of the workshop due to a possible language barrier for the merchandisers to express their opinions. Even though all the sourcing offices were a part of the case company, different working ways and procedures with the suppliers might have been differently. In order to get a fair view, all sourcing offices should have been included in the data collection for the suggested activities.

In addition, this study focused on developing a segmentation model and corresponding activities for each type of relationship. It did not focus on what difference the use of the model could create for the case company, both in terms of increased internal efficiency in the allocation of resources, and also in terms of managing the suppliers in a more efficient way. The potential benefits of implementing the segmentation model is therefore a case for future study.

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7. Appendix

A. Interview topics

The semi-structured interviews that were held in *Phase 1* consisted of a number of interview questions. These were determined before the start of the interviews. However, not all questions were asked due to that they were covered in another answer by the interviewee. All interviews also included a number of follow-up questions that looked differently depending on what the interviewees answered. The questions between the product developers, the merchandisers, the external companies and the sourcing experts varied to some extent. The interviews were mainly based on all or some of the following topics: the interviewees' product portfolio, sustainability, supplier selection and buyer-supplier relationship The questions were held in both the local language and in English. Due to confidentiality of the case company, only the English version of the questions will be presented. See all questions below.

A.1 Product Developers, merchandisers and external companies

Product portfolio

1. What is your purchasing/sourcing area and how many product to you purchase?
2. How many suppliers do you work with?
3. Is there any collaboration between the departments and business areas?

Sustainability

4. How are the CSR requirements affecting your daily work?
5. What determines the choice of purchasing a product that can be classified according to *good choice* criteria?
6. How is the BSCI-ranking or other audit results affecting your choice of supplier?

Supplier selection

7. What aspects do you consider the most when choosing supplier for a certain product?
8. Do your area purchase any extra important products?
9. Are you using any framework or tool today that facilitate the purchasing process?
10. How is the result from supplier assessment affecting the work with your suppliers?

Supplier relationships

11. Do you have different types of relationships to different suppliers?
12. Do you have any suppliers that you have explicitly stated to have a long term collaboration with?
13. Do you work in any way to improve both the case company's and the suppliers' business besides the purchasing order?
14. How does the size of the company affect the collaboration with the supplier?

A.2 Suppliers

1. Do you have different relationships with your customers?
2. What determines the different relationships?
3. How do you view the case company as a customer?
4. How does the relationship with the case company differ from your other bigger customers?
5. What's your view on information sharing (in terms of forecasts, production costs, inventory etc.)?
6. What's your view on long-term relationships?
7. Is it important to be recognized as a good supplier?
8. How do you want to communicate with your and how does it differ between your customers? (in terms of meetings, visits, daily communication)?

B. Structured questions

The structured questions were formulated in English and in the local language. Due to confidentiality of the case company, only the English formulation will be presented below.

Introductory questions

1. What business area do you belong to?
2. What is your position at the case company?

Ranking characteristics of the Performance dimension

Distribute 20 points on following aspects with regards to how you value their relative importance. I.e. if you assign one aspect 5 points and another aspect 4 points, it means that the aspect you have assigned 5 points is slightly more important than the aspect you assigned 4 points.

In total you have 20 points, meaning that you can give each aspect 5 points in average. Please check that the total score adds up to 20 points when you have assigned points to all aspects.

1. The supplier works with CSR-related questions
2. The supplier maintains the quality that was promised at order placement
3. The supplier maintains the price that was promised at order placement
4. The supplier maintains the delivery time that was promised at order placement
5. Please state other characteristics that you believe is more important than the ones mentioned above concerning a supplier's performance

Ranking characteristics of the Business match dimension

Distribute 25 points on following aspects with regards to how you value their relative importance. I.e. if you assign one aspect 5 points and another aspect 4 points, it means that the aspect you have assigned 5 points is slightly more important than the aspect you assigned 4 points.

In total you have 25 points, meaning that you can give each aspect 5 points in average. Please check that the total score adds up to 25 points when you have assigned points to all aspects.

1. The supplier presents a quality that matches the case company's price level and price level early in the process
2. The supplier runs its own product development
3. The supplier offers sustainable products
4. The supplier is proactive regarding things such as possible co-production opportunities with other companies, future changes in production capacity, or future changes in commodity prices
5. The supplier communicates flaws in design or material choice that did not reach the case company's attention
6. Please state other characteristics that you believe is more important than the ones mentioned above concerning a supplier's business match

Ranking characteristics of the Balance of power dimension

Distribute 15 points on following aspects with regards to how you value their relative impact on the balance of power. I.e. if you assign one aspect 5 points and another aspect 4 points, it means that the aspect you have assigned 5 points gives the supplier a slightly stronger bargaining power compared to the aspect you assigned 4 points.

In total you have 15 points, meaning that you can give each aspect 5 points in average. Please check that the total score adds up to 15 points when you have assigned points to all aspects.

1. The case company's purchasing volume represents a small share of the supplier's turnover
2. The supplier is the only one in the market that can produce a certain product
3. The supplier has low awareness of the case company's brand
4. Please state other characteristics that you believe is more important than the ones mentioned above concerning the balance of power between the buyer and supplier

C. Workshop topics

The workshops held at one of the sourcing offices were divided into two sections. The topics covered in those are presented below.

1. The segmentation model
2. Possible actions to pose on different types of supplier categories without any suggested areas
3. Possible actions to pose on different types of supplier categories with suggested areas such as information sharing, recognition and growth.

D. Example of mapping of the supplier base

Due to confidentiality, the mapping of the case company's supplier base used for discussion during the interviews in *Phase 2* is not included.