Supplier segmentation from the perspective of internal knowledge sharing: A case study in the retailing business

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Abstract:
Supplier segmentation is identified to be a crucial part of supplier relationship management. Yet, no specific study concerning supplier segmentation in the retailing business has been accomplished. As the retailing landscape is changing rapidly, and the management of supplier relationships getting more and more complicated – there is a need to address this gap in the literature.

The aim of this thesis is to explore the supplier segmentation process in the retailing context, and to construct a typology of it. The exploration takes a perspective of knowledge sharing, as it is identified to be closely connected with supplier relationships and thus supplier segmentation.

Five elements are identified, based on the literature, to construct the actual supplier segmentation process; sourcing strategy, supplier information, segmentation, outcome of segmentation and improvement. These are elaborated in the conceptual framework, which structures the data gathering of this thesis. Data is gathered through several observations and semi-structured interviews within the case company, Kesko. Findings from these represent two business areas, the grocery trade and the building and technical trade – as well as two countries; Finland and Poland.

This thesis identified that suppliers in a retailing company are segmented for multiple different needs, and that none of the models covers all of the needs. It was further noted that the more complex the organization in a retailing company is, the greater the amount of knowledge sharing barriers regarding supplier information there are. Thereby, this drives for an internal knowledge sharing platform allowing to create different segments of suppliers. It was identified that an internal knowledge sharing platform can make the segmentation process faster and more accurate, which allows better external knowledge sharing as well.

Keywords: Supplier relationship management, supplier segmentation, internal knowledge sharing, knowledge sharing barriers, knowledge sharing platform, retailing
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1 INTRODUCTION

Increased product/service complexity, e-business, outsourcing and globalisation drives supply networks towards more complexity (Harland, Brenchley & Walker, 2003). As a result of this more turbulent and competitive business environment, Tseng (2014) argue that supplier relationships can nowadays be seen as strategic assets for companies. Hence, the pressure on the purchasing function has increased, leading to more interest on supplier relationship management (SRM) systems (Park, Shin, Chang & Park, 2010). SRM is nowadays even seen as one of the main business processes of supply chain management (Lambert & Schwieterman, 2012; Teller, Kotzab, Grant & Holweg, 2016).

Due to limited resources, not all suppliers can be treated in the same way – nor is it beneficial for the focal company. Therefore, many scholars have identified supplier segmentation (also called supplier categorization; supplier classification; supplier ranking; identification of key suppliers) as a fundamental part of supplier relationship management (Kraljic, 1983; Croxton, Garcia-Dastugue, Lambert & Rogers, 2001; Choy Lee, & Lo 2003; Lambert & Schwieterman, 2012; Andersen, Ellegaard & Kragh, 2016) or as a step between supplier selection and supplier relationship management (Rezaei & Ortt, 2013).

It is further noted that the importance of supplier segmentation increases when the number of suppliers increases (Rezaei & Ortt, 2013), as it is hard to manage a large number of suppliers individually and thus they should be treated as segments (Rezaei, Wang & Tavasszy, 2015). Despite the identified benefits, Day, Magnan and Moeller (2010) and Rezaei and Ortt (2013) claim that supplier segmentation is in its infancy.

1.1 Research gaps

The focus in previous studies concerning supplier segmentation has been either on the criteria for classifying suppliers, or on the methods for selecting and weighting the multiple criteria (Andersen, Ellegaard & Kragh, 2016). In some of the previous studies (e.g Lo & Sudjatmika, 2016), supplier segmentation is considered the same as supplier ranking. Additionally, previous studies have either focused on manufacturing companies, or on no specific industry. Any particular supplier segmentation model for the retailing business has not been found – which is somewhat surprising considering that larger retailers typically deal with hundreds or thousands of suppliers.
Further, as the retail landscape is changing rapidly, turning most of the retailers into multichannel operators (Sorescu, Frambach, Singh, Rangaswamy & Bridges, 2011) – the management of supplier relationships in the retailing business is getting more and more complex. Retailers are today doing much more than concentrating on price negotiations (Sorescu et al., 2011). The relationship between the retailer and the supplier can contain several people, for instance purchasers, sales personnel, marketers and social responsibility managers – all with different interests and different needs. Consequently, the more people involved in the process there are, the greater the amount of information, knowledge, experiences and opinions regarding the suppliers there are.

Most of the current studies concerning supplier segmentation have focused on four theories: transaction cost economics (TCE), resource-based view (RBV), industry analysis and inter-organizational theory, with TCE as the most prevalent (Day Magnan & Moeller, 2010). There appears to be no study concerning supplier segmentation from the perspective of knowledge management theories, despite the fact that supplier segmentation is identified to involve multiple actors from the buying organization (Andersen, Ellegaard & Kragh, 2016).

Moreover, many previous studies can be claimed for being loosely tied with what is actually going on in purchasing organizations (Andersen, Ellegaard & Kragh, 2016:79). This has also been the case within supplier relationship management, where previous studies have had too narrow focus (Park et al., 2010). Therefore it is motivated to broaden the view on supplier segmentation, and to closer link it to practice and to the other activities of supplier relationship management.

As Day, Magnan and Moeller (2010:633) point out, "[i]f the aim of a segmentation exercise stretches beyond tactical supply base management then it will be important to look behind the purchase of goods and services to take a more critical and constructive review of the relationship... [and] ...to assess the multiple connections that supplier and buyer's share" - it is of importance to look at supplier segmentation from a new perspective and within a different business.

1.2 Aim of the thesis

In response to the identified research gap, the aim of this Master's thesis is to explore the supplier segmentation process and the supplier relationship activities in the retailing business. The focus is to identify how internal knowledge sharing could improve the supplier segmentation process, and what restricts the internal knowledge sharing.
In order to enable the exploration of the process, a conceptual framework based on the literature is developed, where aspects from the broader topic of supplier relationship management is included. This framework is further processed based on the findings, and a typology of supplier segmentation in the retailing context is developed. The framework and the typology aims to bring this topic closer to practice, and to illustrate how the supplier segmentation process can be improved by internal knowledge sharing.

Thereby, the research questions are:

RQ1: How could internal knowledge sharing improve the supplier segmentation process?

RQ2: Which barriers are restricting the internal knowledge sharing related to supplier relationships?

1.2.1 The case company

As the focus in this thesis is on internal knowledge sharing practices, it is motivated to have a rather complex organization as the case company. Thereby, Kesko Oyj, my current employer – is a suitable case for this study.

Kesko, a Finnish listed retailer, form the K-Group together with the K-retailers, who are individual entrepreneurs in Finland and Norway. In order to achieve competitiveness, purchasing, selection management, logistics and development are centralized to Kesko (Kesko, 2017a) – however the K-retailers actively participate in the decision making, and in the end decides on issues regarding their own store. Altogether, the K Group has over 2,200 stores in Finland, Sweden, Norway, Estonia, Latvia, Lithuania, Belarus and Poland, employs around 42,000 people – and had total sales of €13 billion (pro forma) in 2017, making it the third largest retailer in northern Europe (Kesko, 2018a).

Kesko, with its mission "[t]o create welfare responsibly - for all our stakeholders and for all society" is awarded the world’s most sustainable retailer (Corporate Knights, 2017). This is expected to give a specific feature for this thesis, as sustainability should be seen through the supply chain, and not only in the focal company (Krause, Vachon, and Klassen, 2009).

Interesting for this thesis is also that Kesko operates in three business areas; the grocery trade, the building and technical trade and the car trade. It is identified that these business areas share some common suppliers – which complicate the supplier relationship management process, and consequently the supplier segmentation process
as well. Furthermore, Kesko did three major acquisitions in 2016 (Kesko, 2017a; Kesko, 2017b & Kesko, 2017c) – which means a lot of new suppliers. Some of these suppliers were the same as Kesko used before, meaning double contracts but also double knowledge about the suppliers. Obviously, some suppliers were totally new – which on the other hand could, but not necessarily, mean overlapping.

Figure 1 below is a simplified and fictive illustration of the relationship between Kesko and its suppliers. The figure show some of the brands in order for the reader to understand the diversity of the operations. Multiple arrows between different departments under one brand or business area are excluded to keep the figure understandable.

![Diagram of the relationship between Kesko and its suppliers](image)

**Figure 1** The relationship between Kesko and its suppliers

Source: Own elaboration, brands from Kesko (2018b)

The purple lines mirror the exchange of information between Kesko and its suppliers. As can be seen in Figure 1, some suppliers (eg. Supplier E) serve both the grocery trade and the building and technical trade. The orange arrows, illustrating the knowledge sharing between Kesko’s business areas and knowledge sharing within the business areas, are of specific interest in this thesis. Figure 1 also support the limitation of this thesis to the
grocery trade and the building and technical trade, as these business areas share more common suppliers than the car trade – thus the dotted line around this business area.

By studying the supplier segmentation process in this case company, I should be able to contribute with new insights in the academic field of supplier segmentation – as well as help Kesko to implement a supplier relationship management system – as exploring the supplier segmentation process consequently includes exploring many of the attributes which are closely related with supplier relationship management. And lastly, this thesis should contribute to the implementation of the case company’s strategy: "A single, unified Kesko, seeking synergies and efficiently shared functions" (Kesko, 2017d).

1.3 Limitations

This thesis has certain limitations due to the chosen method, approach, case company and availability of data. Since I gather data via qualitative interviews, observations and documents, as this study is of explorative nature, the findings should be examined on a larger scale before the generalizability of them could be defined. Further, this thesis does not capture all aspects of supplier segmentation, as I mostly focus on issues related to knowledge sharing.

Moreover, as I conduct the analysis at the company level, with a retailer as the case company, applying the findings on companies from other business areas or in other kinds of relationships should be done with caution. Certain findings may be applicable on the case company only, due to the nature of the business. Likewise, as I gathered data mainly from Finland and partially from Poland due to limited time resources, this might limit the results to these countries and their cultural and geographical features. Lastly, the empirical research only covers two out of three business areas of the case company, excluding the car trade. The focus areas are the building and technical trade and the grocery trade, as these business areas share more common suppliers or overlapping suppliers than the car trade – which is of interest for this thesis.

Notwithstanding, it should also be mentioned as a limitation that I am in employment in the case company and thus the perspective of this thesis is from inside the company and possibly not purely objective. This issue is elaborated more in chapter 3 with the discussion of the quality of this thesis.
1.4 Research methodology

As this is an initial study concerning supplier segmentation in a retailing context, and from a knowledge sharing point of view, this research is exploratory in nature. With the intention to gather an in-depth understanding of the activities and processes related with supplier segmentation, I chose a qualitative method for this thesis – as Yin (2003) suggest for describing studies as this. Furthermore, I decided to choose a case study approach – which is suggested by Voss, Tsikriktsis & Frohlich (2002) for studies looking for new insights.

Based on the literature review, where previous studies on supplier relationship management, supplier segmentation and knowledge sharing are elaborated, I developed a conceptual framework. This framework structures the empirical research, which consist of both semi-structured interviews, participatory observations and documents.

Notwithstanding, my previous experience in the case company in addition with informal conversations before conducting this thesis has also provided knowledge on the theme in this context. The fact that I have an employment in the case company’s commerce department gives a further unique possibility to study the process of supplier segmentation and supplier relationship management closely.

1.5 Definitions

Following comes definitions of four frequently used terms in this thesis.

**SRM** – Supplier relationship management is about developing and maintaining the relationship between the buyer and the key suppliers (Lambert & Schwieterman, 2012:337), where the ultimate goal is to generate added value beyond what is negotiated in the contract.

**Supplier segmentation** - "a process that involves dividing suppliers into distinct groups with different needs and characteristics or behaviour" (Kotler, Wong, Saunders & Armstrong, 2005:391) and requires “different types of inter-firm relationship structures in order to realise value from exchange” (Day, Magnan and Moeller (2010:626).

**Knowledge** – in this thesis, knowledge is used as a synonym for information and data, including both the tacit and the explicit form, as Nonaka & Takeuchi (1995) suggests.
Knowledge sharing – is the activity of transferring or absorbing knowledge to or from a person, group or organization (Lee, 2001) and thus always include interaction. Knowledge sharing in this thesis is additionally considered to include giving meaning to information, and thus is a step deeper than information sharing.

1.6 Structure of the Thesis

The rest of the thesis is structured as follows. Chapter 2 reviews the relevant literature concerning supplier relationship management, supplier segmentation and knowledge sharing. Thereafter, in the end of chapter 2, the conceptual framework of the thesis is presented and described. Chapter 3 explains the chosen method, data gathering, research quality and thus also the limitations of this thesis. In chapter 4, a comprehensive discussion and analysis of the findings from the research are provided, which then are used to construct the typology. Lastly, chapter 5 presents the overall conclusions of the thesis, implications for practitioners and suggestions for future research.
2 SUPPLIER RELATIONSHIP MANAGEMENT

As before mentioned, supplier segmentation is a crucial part of supplier relationship management (SRM), and it is closely linked with the other activities of SRM. Thereby, the following chapter starts with an introduction to SRM, leading on to a discussion of current studies in this field. Thereafter, studies on supplier segmentation are reviewed. Further, studies and findings related to knowledge management and knowledge sharing are discussed. In the end of this chapter, these topics are discussed together to then form the conceptual framework which serve as the basis for the empirical research of this thesis.

2.1 The components of supplier relationship management

Lambert and Schwieterman (2012) provide a framework for implementing supply chain management (SCM), including eight processes identified by The Global Supply Chain Forum. These processes are:

- Customer relationship management (CRM)
- Customer service management
- Demand management
- Order fulfilment
- Manufacturing flow management
- Procurement
- Product development and commercialization
- Returns

This framework continues on a previous study by Croxton et al. (2001), who interestingly renamed the process procurement to supplier relationship management – as procurement has been defined narrowly as the act of buying (see for example Novack & Simco, 1991), and thus does not represent their view of the process. The purpose of the study by Croxton et al. (2001) was to provide more detailed guidelines of the sub-processes and activities of each of the above-mentioned processes. When it comes to supplier relationship management (SRM) they argue that it is about defining and managing Product and Service Agreements (PSAs) (Croxton et al., 2001).

Since this, the view on SRM has been broadened. For instance, Lambert and Schwieterman (2012) describe SRM as "the business process that provides the structure for how relationships with suppliers are developed and maintained" (Lambert & Schwieterman, 2012:337). Their study, which takes a cross-functional view on SRM, continues on the framework (figure 2) presented by Croxton et al. (2001), and provides
more extensive descriptions of the sub-processes, helping managers to implement the SRM process.

**Figure 2  Supplier relationship management**

Source: Adapted from Croxton et al. (2001) and Lambert & Schwieterman (2012)

The benefit of the framework presented in figure 2 on the strategic process level is the understanding of the link between the strategy and the supplier relationships – as well as the segmentation of the suppliers (Croxton et al., 2001; Lambert & Schwieterman, 2012). On the operational side, the framework helps to develop and manage PSAs, as well as to measure the performance of the suppliers (Croxton et al., 2001:25; Lambert & Schwieterman, 2012).

In contrast to Croxton et al. (2001), Lambert and Schwieterman (2012) do however emphasize more the importance of sharing process improvement benefits with suppliers on the strategic level. Furthermore, they suggest future research to consider what potential benefits there might be in involving representatives from each function to the SRM process.
Park et al. (2010) followed on the notion to broaden the perspective on SRM, and claimed that previous research focused on domain-specific issues, creating a need for integrating all of the components of SRM into one framework. They incorporated purchasing strategy, supplier selection, collaboration and supplier assessment and development in addition to continuous improvement to their framework presented in figure 3.

![The integrative SRM framework](source)

Figure 3     The integrative SRM framework

Source: Park et al. (2010:499)

Park et al. (2010) argue that understanding the relationships between the components is crucial, as, for instance, suppliers which are not in line with the purchasing strategy may otherwise be selected. If the whole picture is not clear and the parts do not support each other, the single components – how good they are, do not contribute to the company's performance. Therefore, continuous improvement is also taken into account (Park et al., 2010).

Wilson and Barger (2015) followed on this conception, and recommended that internal data concerning supplier relationships should be shared. In their paper, which focuses on automating SRM (or SRM system solutions), they suggest that companies should start the implementation of a SRM system by surveying which stakeholders produce, handle or need data concerning supplier relationships (Wilson & Barger, 2015).

This process can generate beneficial returns in terms of reduced supply risk, better utilization of supplier capabilities and ultimately reduced costs – as well as increased internal knowledge sharing (PwC, 2013).

2.2 Supplier segmentation

Suppliers are different, perform differently and develop differently. Thus, a company should avoid to make a single strategy for all of its suppliers (Dyer, Cho & Chu, 1998). Instead, Rezaei and Ortt (2013) suggest that suppliers should be segmented and separate strategies made for segments.
In its simplest form, supplier segmentation is about categorizing suppliers according to their similarities (Rezaei & Ortt, 2013). Kotler, Wong, Saunders and Armstrong (2005:391) define supplier segmentation as "a process that involves dividing suppliers into distinct groups with different needs and characteristics or behaviour", to which Day, Magnan and Moeller (2010:626) added “requiring different types of inter-firm relationship structures in order to realise value from exchange”.

The outcome of supplier segmentation is expected to be 1) a reasonable number of segments for which separate strategies are made (Rezaei & Ortt, 2013), 2) an identification of those relationships with suppliers which are expected to give the highest return (Choi & Krause, 2006), 3) a review of the impact of past relationships (Day, Magnan & Moeller, 2010) or 4) an identification of suppliers holding value-adding capabilities (Gelderman & van Weele, 2005). Most recently, supplier segmentation is connected to supply resilience and robustness (Brown & Badurdeen, 2015; Brown, 2017).

Day, Magnan and Moeller (2010) propose that a segmentation model can attend many purposes – thus, all of the above mentioned are considered in this thesis in order to not exclude any of the desired results when exploring the segmentation process in a retailing company.

### 2.2.1 The purchasing portfolio

Many of the current methods for supplier segmentation are built on the most popular approach presented by Kraljic (1983) (Day Magnan & Moeller, 2010; Rezaei & Ortt, 2013). The fundamentals in Kraljic's (1983) approach is to measure the profit impact and supply risk for the different products supplied to a company (Kraljic, 1983). Based on this, a simple 2x2 matrix is constructed, consisting of four segments, as in the figure 4 below:
This segmentation is then followed up by the development of separate strategies for each segment (Kraljic, 1983). Micheli, Cagno and Giulio (2009) argue that additionally to this, the supply risk could be adapted in supplier selection and ongoing supplier evaluation processes, and thus an effective supply risk mitigation strategy can be received. Hence, it is not surprising that in a study by Hudnurkar, Rathod and Jakhar (2016), it was found that Kraljic's model is still widely in use – even though practitioners necessarily do not acknowledge that they are using this specific model. Gelderman and van Weele (2005) even pointed out that portfolio models tend to get critics from theoretic studies but to be supported by qualitative case studies.

### 2.2.2 Supplier segmentation trends

However, Pagell, Wu and Wasserman (2010) noted a shift away from the traditional Kraljic’s model towards more focus on sustainable sourcing, resulting in companies treating previously segmented non-critical suppliers as strategic suppliers (Pagell, Wu & Wasserman, 2010). The studied companies in their research – all of which emphasized supplier continuity, tended to view supply risk as a combination of risk to profits, the environment and the society (Pagell, Wu & Wasserman, 2010). This broader view on supply chain risks goes under the concept supplier sustainability risks discussed by Foerstl, Reuter, Hartmann and Blome (2010:119-120).

Overall, risks are now studied from various perspectives, with for instance Reuter, Foerstl, Hartmann and Blome (2010) considering environmental and social performance of suppliers as key parts of supply risk.
Reuter et al. (2010:58) claim that "[t]he earlier firms begin to evaluate their suppliers for CR-related [corporate responsibility] issues, the greater the accumulation of sustainability-related capabilities relative to their competitors." This is why they highlight the importance of companies to start a structured evaluation of the supply base within predetermined sustainability issues as for example water and energy efficiency, carbon footprint or child labour (Reuter et al., 2010). In other words, segmenting suppliers on a sustainability basis.

2.2.3 A shift towards more complex segmentation models

A gap in the research concerning supplier segmentation has been identified by Rezaei and Ortt (2013), who claim that existing methods have used a limited number of segmentation criteria, which has made it difficult for practitioners to choose which of the methods should be used – as well as how to implement these. Dubois and Pedersen (2002) noted that based on two dimensions only, as in the model by Kraljic (1983), strategies or development plans cannot be made. It is also crucial to note that the portfolio model by Kraljic (1983) concentrates on items, not suppliers, and hence evaluating suppliers offering multiple products and/or services is not possible (Gelderman & van Weele, 2005; Segura & Maroto, 2017). Thus, it could be thought that Kraljic’s model does not suit in the retailing context as the suppliers typically provide more than one item.

Furthermore, Rezaei and Ortt (2013) call for closer connection between other supplier-related activities and supplier segmentation. In their study, Rezaei and Ortt (2013) formed a rule-based method using fuzzy logic to segment suppliers of a company based on the dimensions supplier capabilities and supplier willingness. Rezaei and Ortt (2013) refer to their previous study (Rezaei & Ortt, 2012) - where a total of 44 variables under the dimension capability and 21 under the dimension willingness was identified. The complete list of variable is illustrated in table 1 below.
From these variables, Rezaei and Ortt (2013) propose that managers can choose those which suit the present situation best (in principal, all criteria can be selected) and determine how these contribute to the dimensions capabilities and willingness – and thereafter evaluate each supplier on a 1-5 scale for each variable. This process is followed up by a fuzzy rule-based system, from where the suppliers get a subset (e.g. Low and High) for both of the previously mentioned dimensions.
The idea behind this rule-based system is illustrated in figure 5 with the following example by Rezaei and Ortt (2013:513):

```
IF price is Low AND delivery is Quick AND quality is Low AND reserve capacity is High AND geographical location is Close AND financial position is Good THEN supplier’s capabilities is High
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**Figure 5**  
Example of rule-based supplier segmentation method  
Source: Adapted from Rezaei & Ortt (2013:513)

The given subset from the two dimensions then place the suppliers in the matrix below, as illustrated in figure 6 with a set of 43 suppliers for the case company in the study by Rezaei and Ortt (2013).

**Figure 6**  
Example of supplier segmentation with dimensions willingness and capabilities  
Source: Rezaei & Ortt (2013:513)

The main advantages of the method presented by Rezaei & Ortt (2013) is the large number of segmentation criteria and thus the flexibility of the tool, as well as the systematic segmentation process which allows to compare suppliers within a segment. However, the flexibility to use whichever of the proposed criteria (or even criteria out of the list) includes a possible principal agent theory type of risk, as the one doing the segmentation might exclude criteria which do not support a personally desired result. At minimum level, this model requires companies to do guidelines for how the method
should be implemented, e.g. by forcing to choose at least those criteria which connect to company strategy. If choosing the criteria arbitrarily, or if the weights are given subjectively, it may result in not accurate segments – as was found out by Govindan, Rajendran, Sarkis and Murugesan (2015:71) in their research on green supplier selection.

Lastly, even if the method is identified to easily be linked to other activities such as supplier selection, supplier relationship management and supplier development – the authors do not suggest how to do it. In other words, this method is somewhat loosely tied with what really goes on in buying organizations, as Andersen, Ellegaard and Kragh (2016:79) claimed most of the previous studies to be. Gelderman and van Weele (2003) even proved that practitioners mostly rely on additional information, and not solely on what the portfolio model provides. Newell and Ellegaard (2017) found evidence in line with this in their research on emergent and planned supplier segmentation activities.

Later, Rezaei, Wang and Tavasszy (2015) improved the model by linking it with supplier development, and suggest that for every segment identified – a separate supplier development strategy should be determined. By doing this, they show that supplier segmentation can be beneficial for the supplier as well – but it requires that knowledge about what should be developed is shared with the suppliers and within the focal company. Thus the outcome of the segmentation is more than what previously has been argued.

In their study, Segura and Maroto (2017) proposed a new way of ranking products and suppliers to then segment suppliers, by adapting a multiple criteria method. Their contribution lies in the segmenting phase, where the decisions made are based on historical data and expert knowledge in addition with much previously used subjective opinions and judgements. Segura and Maroto (2017) highlight the importance of using databases to support decision-making regarding supplier ranking and segmentation, and stress the ability to follow up supplier's performance which their method allows. The uniqueness of their study is the usage of the methods Preference Ranking Organization Method for Enrichment Evaluation (PROMETHEE) and Multi-Attribute Utility Theory (MAUT), allowing objective data to be analysed to support the decision making.

Segura's and Maroto's (2017) supplier segmentation model results in a 2x2 matrix with critical performance of suppliers on the Y-axis and strategic performance of suppliers on the X-axis. This matrix consists of four segments, which are; Partners (Low Critical, Low Strategic), Long-term (High critical, Low Strategic), Remove (Low critical, High
strategic) and Price (High critical, High Strategic). Each supplier is placed in the matrix according to given scores on both dimensions, with the size of the bubble on the matrix representing the annual purchasing volume. Figure 7 below illustrates this when using MAUT:

![Graph showing supplier segmentation with dimensions critical performance and strategic performance.](image)

**Figure 7**  Example of supplier segmentation with dimensions critical performance and strategic performance

Source: Segura & Maroto (2017:97)

The reviewed literature on supplier segmentation gives an indication that models are getting more and more complicated in terms of number of criteria used and mathematical formulas for calculating the weights. However, they are all keeping the shape of a 2x2 matrix introduced by Kraljic (1983), with only four possible outcomes. And even if Hudnurkar, Rathod and Jakhar (2016) found that these 2x2 models are widely used by companies – the simplicity of these models might explain why scholars have criticized them to be unattached to practice (e.g. Andersen, Ellegaard & Kragh, 2016:79). Therefore, it is important in the exploration to consider if any of the 2x2 models are currently used in the case company – and what would be the most beneficial one.

### 2.3 Knowledge sharing

As discussed in chapter 1, supplier segmentation has not received much attention from the perspective of knowledge sharing – even though many of the scholars (Gelderman & van Weele, 2003; Rezaei & Ortt, 2013; Rezaei, Wang & Tavasszy, 2015; Segura & Maroto,
2017) in one or another way touched upon the importance of sharing knowledge before, during and after segmenting suppliers. Therefore, this section discusses main findings from research on knowledge management and knowledge sharing – to then in chapter 2.4 incorporate this to the conceptual framework of this thesis.

Knowledge sharing is the activity of transferring or absorbing knowledge to or from a person, group or organization (Lee, 2001; Cabrera & Cabrera, 2005). Ipe (2003) talks about making knowledge available for others, while Christensen (2007:37) adds the activity of “identifying existing and accessible knowledge” to his definition. The main point is that knowledge sharing always include an interaction (Cabrera & Cabrera, 2005).

Knowledge sharing is a part of knowledge management, which also includes activities such as capturing and developing knowledge (Navimipour & Charband, 2016). The one sharing knowledge, ideally, is aware of the purpose, needs or gaps of the person receiving – and thus only relevant knowledge should be shared (Riege, 2005). The goal of knowledge sharing is to “solve specific tasks better, faster and cheaper than they would otherwise have been solved” (Christensen, 2007:37). It is even argued that knowledge is the most critical competitive advantage of a company, especially in the long-term (Nonaka & Takeuchi, 1995; Ipe, 2003).

Supplier segmentation has not previously gained attention from the perspective of knowledge sharing, thus the following two sections present more general studies on external knowledge sharing, and then internal knowledge sharing. Even if these two kinds of knowledge sharing can be assumed to share much in common, as Hillebrand and Biemans (2003) found to be the case between internal and external cooperation, they are from here one handled separately in order to not confuse the reader.

### 2.3.1 External knowledge sharing

The positive effects of external knowledge sharing, meaning the exchange of knowledge between buyers and suppliers have been identified by many scholars. For instance, Revilla and Knoppen (2015) found that joint decision-making and joint sense-making is positively associated with innovation, and further that joint decision-making is positively associated with operational efficiency. Moreover, they noted that joint sense-making may increase the effectiveness of knowledge integration as it drives for cooperative analyses of failures and successes (Revilla & Knoppen, 2015).
Thereby, it is not surprising that supplier's knowledge sharing capabilities are crucial when selecting suppliers, as well as when deciding the quantity of the order – as the better knowledge sharing capabilities the supplier have, the less uncertainty is involved and vice versa (Eng, Chew & Lee, 2014). In some cases, knowledge sharing capabilities of the supplier value even more than the cost (Eng, Chew & Lee, 2014).

Furthermore, Attaran and Attaran (2007) affirm that production schedules can be improved by collaborative planning, forecasting and replenishment (CPFR), and that sharing knowledge with suppliers may guide them to smarter ways of working. Likewise, Hung, Kao and Chu (2008) found that sharing knowledge with suppliers notably improves new product development.

Tseng (2014) on the other hand studied the impact of knowledge management capabilities (KMCs) and supplier relationship management (SRM) on corporate performance, and found that both KMCs and SRM have a positive correlation with corporate performance. Tseng (2014), however, indicate that SRM should be seen as a partial intervening variable between KMC and corporate performance. His suggestion for companies is to identify, acquire and classify suppliers – to then establish effective policies and procedures in order to collaborate with suppliers and gather knowledge from suppliers (Tseng, 2014).

Buyers and suppliers can provide mutually beneficial knowledge on markets, technology, products, and processes (Revilla & Knoppen, 2015) - and thus it is essential for companies to develop reliable learning processes for sharing and creating new knowledge with suppliers. Notwithstanding, beneficial knowledge about suppliers and the relationships with them can also be discovered within a company.

2.3.2 Internal knowledge sharing

In his study, Christensen (2007) argue that in order for knowledge sharing on all levels to be successful in an organization, it should be an ongoing process. Tseng (2014) elaborates on this, and suggests that companies should allow and encourage their employees to share and transfer knowledge, in order to spread knowledge from individuals to the organization. If a company consists of multiple department, one way to naturally transfer knowledge between departments could be using cross-functional teams. These are found to improve the quality of products, but also to save both costs and time (Parker, 2003).
In line with the importance of internal knowledge sharing are also Navimipour and Charband (2016), who found that constant knowledge sharing between project members significantly enhance employee productivity and performance, thus also project efficiency. Laitinen and Senoo (2017) further argue that internal knowledge sharing is one of the key components of a company’s innovation capability. More benefits are provided by Huang and Wu (2010) and Wang, Wang and Liang (2014) who argue that internal knowledge sharing can ease working as experiences, best practices and lessons learnt are exchanged.

Christensen (2007) however notes that knowledge sharing is about more than best practices. He suggests companies to thoroughly analyse what is expected to be solved by sharing knowledge internally, which requires to identify organizational interdependencies (Christensen, 2007:46). Consequently, companies should accept costs occurring from this (Christensen, 2007) – as the benefits of internal knowledge sharing are obvious. Possible costs may arise from the technical capability, which according to Hung, Kao and Chu (2008) is one of the key drivers of effective knowledge integration, as is the access to a knowledge channel. Moreover, costs may occur from establishing effective governance to protect the knowledge from leaking – as Tseng (2014) suggested companies to do.

A type of knowledge sharing channel is discussed by Duffy (2001), Alalwan and Weistroffer (2012) and Hullavarad, O’Hare and Roy (2015) – whose studies concerns enterprise content management (ECM) solutions, where the idea is to transparently share content internally in a company (Alalwan & Weistroffer, 2012; Hullavarad, O’Hare & Roy, 2015). ECM solutions are found to be beneficial for firms in sense of effective document access, better process control (e.g. in projects) and less information missed or lost within the focal firm (Haug, 2012).

Despite the identified benefits of internal knowledge sharing, there are tensions between departments within companies (Gelderman & Semeijn, 2006). Moreover, people might prioritize different things also when it comes to internal knowledge sharing. Therefore, it is important to find motivators or drivers for what knowledge should be shared. Partially, Gelderman and Semeijn (2006) found a solution for this, as they argue that purchasing portfolios, such as Kraljic’s (1983) model, can force cross-functional teamwork, allowing other units to get an overview of which products or suppliers are critical, both in terms of prioritizing and criticality. Additional barriers towards knowledge sharing are discussed in the next chapter.
2.3.3 Knowledge sharing barriers

As tacit knowledge from interactions with managers, customers and suppliers are the most crucial knowledge (Grover & Davenport, 2001), it is motivated to discuss possible knowledge sharing barriers – which may restrict the activity of sharing knowledge both internally and externally.

Sharing knowledge on any level takes time and requires suitable facilities or technology. Further, as we constantly face more and more information in various channels, it is sometimes hard to acknowledge the type of knowledge that is relevant to share. From a resource-based view, measuring the effectiveness of knowledge sharing is also difficult (Riege, 2005) and may thus limit the knowledge sharing – or become a knowledge sharing barrier.

There are different ways to categorize knowledge sharing barriers (Riege, 2005; O’Dell & Grayson, 1998). In this section, a simple dividing to three as presented by Riege (2005) is used, namely; individual, organizational and technological knowledge sharing barriers.

Individual knowledge sharing barriers are commonly associated with communication skills, social networks, trust and personalities (Riege, 2005). O’Dell and Grayson (1998) and Wendling, Oliveira and Macada (2013) exemplifies this with not knowing people from different functions, which leads to the mismatch of those needing knowledge do not know who have it as those who have it are not visible. Knowledge hoarding is another type of an individual knowledge sharing barrier, with the idea of not sharing information in order to make oneself more valuable for the company (Riege, 2005).

Also cultural differences should be accounted as individual knowledge sharing barriers. For instance, Michailova and Husted (2003) studied individual barriers in Russian companies, and found that it is more or less rooted in the Russian culture not to share experiences of mistakes. Further, they found that Russians tend to trust much on personal relationships and thus may not be willing to share knowledge for a whole organization (Michailova & Husted, 2003). These findings could, however, apply on many other nationalities as well. Notwithstanding, cultural differences also includes the question of language barriers.

However, in a study by Chiu, Hsu and Wang (2006) about knowledge sharing in virtual communities, language was not found as a significant barrier, as neither was trust. A
possible explanation is that individuals get personal satisfaction from sharing their knowledge, even if the knowledge shared do not benefit others (Chiu, Hsu & Wang, 2006).

As organizational knowledge sharing barriers, Riege (2005) list lack of incentives or motivation, lack of leadership, restricted communication, high hierarchy, too large business units or competitiveness between business units. Not recognizing those who previously shared their knowledge can also be added to the list, as their motivation to share could have dropped because of this (O'Dell & Grayson, 1998). To solve this problem, O'Leary, O'Reilly, Feller, Gleasure, Li and Cristoforo (2017) suggested to take advantage of blockchain technology, as it would enable the visibility of which employee has done what.

Likewise, different office locations, maybe even spread across borders, can be classified as organizational barriers (Wendling, Oliveira & Macada, 2013). Lastly, in a company context, issues of legal aspects might be barriers to sharing – individuals do not necessary know if they are allowed to share something, or not, and thus play safe by deciding not to share.

Even if technology can be a solution for many of the previously mentioned barriers, too much reliance can make technology a barrier itself. Lack of technical support, poor integration of IT systems and limited training are some of the reasons behind this (Riege, 2005). Further, technology will not replace face-to-face contacts (Wendling, Oliveira & Macada, 2013), and thus finding a balance between personal interactions and technology is crucial (Riege, 2005).

As knowledge has been identified as the strategically most vital resource of a company (Tseng, 2009; Eng, Chew & Lee 2014), knowledge sharing as the catalyst for creating new knowledge (Lesser & Storck, 2001) and with studies arguing that knowledge sharing is crucial for companies to survive on an increasingly more competitive market (Christensen, 2007) – it is interesting that supplier segmentation has not previously been studied from the perspective of knowledge sharing. The next chapter addresses this lack in previous studies.
2.4 Constructing the framework for the exploration of the supplier segmentation process

Based on the notion by Pagell, Wu and Wasserman (2010) that companies nowadays focus more on sustainable sourcing, which amends the usability of previous segmentation methods and the critique by Andersen, Ellegaard and Kragh (2016) that current models are loosely tied with what is really going on in purchasing departments – it is necessary to explore what is actually done in practice when segmenting suppliers.

With the assumption that knowledge is the most critical competitive advantage of a company (Nonaka & Takeuchi, 1995; Ipe, 2003), and the multiple benefits of knowledge sharing - it could be expected that many internal knowledge sharing activities can be found within the scope of supplier segmentation. However, Newell and Ellegaard (2017) and Gelderman and van Weele (2003) found that often, buyers rely on their own judgements. Therefore, the conceptual framework, unlike previous, consider what supplier information is used and either shared – or absorbed from knowledge sharing.

To a certain level, this is contradictory to the study by Rezaei and Ortt (2013), where the method for supplier segmentation is built to be able to work with imperfect information – reducing the importance of internal knowledge sharing. However, as Segura and Maroto (2017) lately suggested – expert knowledge and historical data, as well as opinions and judgements need to be included in the segmentation process in order for it to be successful.

Therefore, in order to find possible benefits of internal knowledge sharing related to supplier segmentation, and consequently also the barriers – it is necessary to start by exploring the whole process. By doing this, characteristics of supplier segmentation in the retailing context can be identified. More importantly, possible benefits of internal knowledge sharing can be found – and thus also the typology of supplier segmentation in the retailing industry can be constructed.

Figure 8 below portray the conceptual framework of this thesis, and builds upon the main findings from the literature reviewed. Even though the focus in this study is on the segmentation and the internal knowledge sharing parts, the structure of the framework follows the logic of the SRM framework presented by Park et al. (2010), who argued that understanding the relationships between the components is crucial. Thereof, both the sourcing strategy and the improvement components are included. This allows to connect
the findings with other supplier related activities as Rezaei and Ortt (2013) looked for, and broadens the view of supplier segmentation.

![Conceptual framework for exploring the supplier segmentation process](source: Own elaboration)

Figure 8 Conceptual framework for exploring the supplier segmentation process

The framework consists of five connected sub-processes; sourcing strategy, supplier information, segmentation, outcome of segmentation and improvement – and an additional supporting process of internal knowledge sharing.

First of all, the exploration of the supplier segmentation process starts by understanding the sourcing strategy, and identifying the link with the company strategy. Here, the components that are key to the success of the company are identified, and the link between the sourcing strategy and the criteria for segmenting suppliers should be found – as in the SRM frameworks presented by Croxton et al. (2001), Lambert and Schwieterman (2012) and Park et al. (2010). The understanding of the sourcing strategy is key for understanding how suppliers are selected (Park et al., 2010), but also for how they are segmented – as for instance a company focusing on low prices might use totally different criteria than a company focusing on quality. Moreover, the sourcing strategy should to a certain extent explain what kind of information about the suppliers is collected.

The second sub-process, supplier information, look for what information is currently used by those doing the segmentation, and also from where the information comes. Is the information shared internally, and if – how? Can the supplier information process
be considered as an ongoing process, as Christensen (2007) suggested knowledge sharing to be, given that an effective result is desired? Are employees encouraged to share and transfer knowledge as Tseng (2014) nominates? Is there any kind of knowledge sharing channel (Duffy, 2001; Alalwan & Weistroffer, 2012; and Hullavarad, O'Hare & Roy, 2015) for this purpose? Or does the ones doing the segmentation rely on personal judgements, as Newell and Ellegaard (2017) claim buyers to do. Lastly, is there any kind of reflection towards sustainability, as Krause, Vachon, and Klassen (2009) argue should be seen in a responsible company's sourcing strategy?

In the third sub-process, segmentation, the actual segmentation work is explored. Who is doing the segmentation and with what kind of tool? Is the Kraljic (1983) model still used, as Hudnurkar, Rathod and Jakhar (2016) identified – or has there been a shift towards more complex models as Pagell, Wu and Wasserman (2010) identified earlier. Further, which previous studies has not specifically considered – when is the segmentation done and how often is it repeated? Most importantly, which criteria are used – and why specifically these? Are both supplier capabilities and supplier willingness criteria (Rezaei & Ortt, 2012) considered, and how does this relate to the supplier information sub-process?

The purpose of the outcome of segmentation sub-process is to explore why suppliers are segmented. Is the purpose to make a common strategy for a specific segment of suppliers, as suggested by Rezaei and Ortt (2013), or are strategies made separately with each and every supplier? Are opportunities with the suppliers identified as both Croxton et al. (2001) and Lambert and Schwieterman (2012) highlighted in their framework? Is the intention with the segmentation only to review past performance (Day, Magnan & Moeller, 2010), or an identification of key suppliers (Choi & Krause, 2006)? Are suppliers holding value-adding capabilities identified (Gelderman & van Weele, 2005) and is the segmentation connected to supplier development (Rezaei, Wang & Tavasszy, 2015)? Is there a connection to supply risk (Micheli, Cagno & Giulio, 2009) or supply resilience and robustness (Brown & Badurdeen, 2015; Brown, 2017)? Or is the intention something else? Lastly, how is the outcome of the segmentation communicated internally – and how is this process improved?

The improvement sub-process concern how the outcome of the segmentation is connected with supplier improvement, and additionally how the whole segmentation process is or should be improved, similar to how it is presented in the SRM framework by Park et al. (2010).
2.4.1 The connection of the framework and the aim

The aim of this thesis is to explore the supplier segmentation process and the supplier relationship activities in the retailing business, with the focus on identifying how internal knowledge sharing could improve the supplier segmentation process. The presented framework above should help to understand the current state, from which it is assumed to easier give development suggestions.

 Particularly the second sub-process, supplier information, is closely connected to internal knowledge sharing – as discussed above, and consequently to the internal knowledge sharing barriers as well, and should contribute to answering the research questions

RQ1: How could internal knowledge sharing improve the supplier segmentation process?

RQ2: Which barriers are restricting the internal knowledge sharing related to supplier relationships?

Furthermore, as the purpose is also to develop a typology of supplier segmentation in the retailing context, the framework assists in grasping the whole picture of the segmentation process. Thus, the risk of focusing on domain-specific issues as Park et al. (2010) claimed previous SRM frameworks for, should be minimized. And as the empirical research is done as a case study, the framework is tested close to practice.

In a way, this approach can be seen as a reversed approach compared with previous models (e.g. Kraljic, 1983; Rezaei & Ortt, 2013) – as the information, people and knowledge used is reviewed before the criteria. By utilizing this logic in the exploration of the supplier segmentation process, I expect best practices as well as improvement suggestions to be found – as the focus starts with a broader view than the specific criteria. Further, this kind of approach should support connecting the findings to other supplier relationship related activities, as has been called out in previous literature (Rezaei & Ortt, 2013).
3 METHOD

The aim of this thesis is to explore the supplier segmentation process in the retailing business from a knowledge sharing perspective. Then a typology of supplier segmentation in this context is developed, and thus this study contributes to future research on supplier segmentation and SRM. As this is an initial study concerning supplier segmentation in a retailing context, and from a knowledge sharing point of view, this research is exploratory in nature. With the intention to gather an in-depth understanding of the activities and processes related with supplier segmentation (and supplier relationships), the chosen method for this thesis is qualitative – as suggested by Patton (2002).

This thesis is conducted as a single case study, with Kesko, a Finnish listed retailer, as the case company. This is a particularly appropriate research approach when studying something with the purpose to find new insights (Voss, Tsikriktsis & Frohlich, 2002) and proved to be largely used in studies on buyer-supplier relationship and supply chain management (Wagner, 2006).

The planning of the research started with an extensive review of literature in the field of supplier relationship management (SRM). This topic was given by the case company, who plan to implement a SRM system. As a gap in this field concerning the retailing context was identified, especially concerning supplier segmentation, the focus of the literature review turned towards this topic. At the same time I joined a procurement team in the case company as a trainee, and had the opportunity to observe in practise how supplier relationships were managed. Parallel to this, I started to analyse current segmentation models and assess their suitability for the retailing context.

The retailing context appeared to be much more complex than the focus industries in the reviewed models – and the importance of broad cross-functional internal knowledge sharing seemed to gain in importance. Therefore, I started to search for literature in the field of knowledge sharing as well.

The empirical data for this study was gathered through several semi-structured interviews with experts across the case company, as well as through multiple observations in the procurement department. Additionally, some internal documents and training material were reviewed – many of which were suggested by the interviewees.
Figure 9 below illustrates the data gathering process. The literature review phase did not end when the interviewing began, as some merging topics or ideas required additional literature to be reviewed.

![Data gathering process](image)

**Figure 9**  
Data gathering process  
Source: Own elaboration

### 3.1 Sampling, interviews, observations and reviewing documents

Due to my limited experience in the case company, and only from the building and technical trade – I acknowledged that in the preface of planning with whom interviews should be conducted with, the sample may be undistorted. Therefore, I discussed the sample with a more experienced employee, Leena Takaveräjä, acting as the supervisor of the thesis from the behalf of Kesko, in order to control that people with knowledge on the theme was contacted. This resulted in a list of 12 people from Kesko, of which 10 replied to the request of being interviewed. 30 to 60 minute meetings were scheduled with all of these, however due to illness and busy schedules, 8 interviews were able to be executed. Additionally, 2 interviews were done with people suggested by the interviewees – meaning a total amount of 10 interviews.

As suggested by Lambert and Schwieterman (2012), not only those regularly dealing with suppliers were contacted, but also representatives from other functions. This was particularly expected to benefit the knowledge sharing perspective, but appeared to provide useful insights for how to improve the supplier segmentation process in the future as well.

The way the sampling was done is what Patton (2002) calls criterion sampling, as the chosen information-rich interviewees were picked according to pre-determined features.
However, I left room for snowball sampling as well, meaning that I can incorporate some further respondents, if the interviewees suggests some. Which turned out to be the case. When doing criterion sampling, it is worth to acknowledge that it might affect the objectivity of the study (Patton, 2002). However, for this case it was necessary, as interviewing just randomly people from the case company could have resulted in much less information regarding the topic. And by utilizing snowball sampling only, the data gathering process might have taken much more time as I would have had to wait for the reply of the following respondent.

In order to manage the amount of data gathered, and to be able to dig deeper into it, two out of three business areas of the case company was chosen; the grocery trade and the building and technical trade. These business areas are the ones which share more common suppliers, and thus the knowledge sharing perspective is more relevant in this setup. Additionally, two different countries were selected in order to include the aspect of cultural differences and knowledge sharing across country borders.

The list of interviewees is presented in table 2, which includes the name of the respondents, titles, operating countries, language of the interview, date and duration.

**Table 2 The respondents**

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Title</th>
<th>Country</th>
<th>Trade Division</th>
<th>Duration</th>
<th>Type</th>
<th>Date</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sara Tallberg</td>
<td>IT Business Partner</td>
<td>Finland</td>
<td>Common functions</td>
<td>35min</td>
<td>Face-to-face</td>
<td>9th March 2018</td>
<td>Finnish</td>
</tr>
<tr>
<td>Ari Elonen</td>
<td>Business Controller</td>
<td>Finland</td>
<td>Building and Technical Trade</td>
<td>24min</td>
<td>Face-to-face</td>
<td>9th March 2018</td>
<td>Finnish</td>
</tr>
<tr>
<td>Witold Kępiński</td>
<td>Commercial Director</td>
<td>Poland</td>
<td>Building and Technical Trade</td>
<td>30min</td>
<td>Skype*</td>
<td>9th March 2018</td>
<td>English</td>
</tr>
<tr>
<td>Marta Janecka</td>
<td>Category Director</td>
<td>Poland</td>
<td>Building and Technical Trade</td>
<td>30min</td>
<td>Skype*</td>
<td>9th March 2018</td>
<td>English</td>
</tr>
<tr>
<td>Ville Jaukka</td>
<td>Corporate Counsel</td>
<td>Finland</td>
<td>Common functions</td>
<td>54min</td>
<td>Face-to-face</td>
<td>16th March 2018</td>
<td>Finnish</td>
</tr>
<tr>
<td>Timo Vanhala</td>
<td>Senior Enterprise Architect</td>
<td>Finland</td>
<td>Common functions</td>
<td>50min</td>
<td>Face-to-face</td>
<td>20th March 2018</td>
<td>Finnish</td>
</tr>
<tr>
<td>Geetoo Sun</td>
<td>Sourcing Director</td>
<td>Finland/China</td>
<td>Building and Technical Trade</td>
<td>33min</td>
<td>Face-to-face</td>
<td>21st March 2018</td>
<td>English</td>
</tr>
<tr>
<td>Harri Kanamo</td>
<td>Commercial Director</td>
<td>Finland</td>
<td>Building and Technical Trade</td>
<td>16min</td>
<td>Face-to-face</td>
<td>21st March 2018</td>
<td>Finnish</td>
</tr>
<tr>
<td>Sohil Vîrămîa</td>
<td>Corporate Responsibility Specialist</td>
<td>Finland</td>
<td>Common functions</td>
<td>47min</td>
<td>Face-to-face</td>
<td>27th March 2018</td>
<td>Finnish</td>
</tr>
<tr>
<td>Tuuli Luoma</td>
<td>Sourcing and Export Manager</td>
<td>Finland</td>
<td>Grocery Trade</td>
<td>47min</td>
<td>Face-to-face</td>
<td>29th March 2018</td>
<td>Finnish</td>
</tr>
</tbody>
</table>

*these interviews where done during the same Skype-meeting

This broad sample was expected to give a pervasive sentiment of the current state of supplier segmentation in Kesko. Moreover, it was expected to contribute with insights of how the process could be improved, as current imperfect information and aspirations of the future state was expected to be recognized.

An interview guide (Appendix 1) was also constructed to support my interviews, following the themes from the conceptual framework. All of the questions in it did not fit for all of the respondents, however, in order to keep the logic clear in my mind I decided
it is best to use only one guide and adjust it whenever needed to allow more depth to the answers (Patton, 2002). This also allowed me to adjust the approach in the interviews, as my knowledge on the theme increased (Patton, 2002). I did the interview guide in English only, even though most of the interviews were in Finnish, because the company language is English. This way I also minimized the risk of translation problems.

The interviews were done during my orientation for the new job function – Category Manager. In this task, I operate closely with suppliers and eventually segment them – thus the data gathering for this thesis get a second meaning and also a more deep level than it would have without me working in this function. That is to say, my employment in the case company mean that I have some preunderstanding of the topic – as Gummeson (2000) suggests in explorative studies.

The goal of the interviews were to get answers to the research questions:

RQ1: *How could internal knowledge sharing improve the supplier segmentation process?*

RQ2: *Which barriers are restricting the internal knowledge sharing related to supplier relationships?*

The interviewees were contacted via email, and told that my research is a part of the intended SRM implementation process in Kesko. All of the interviews were audio recorded with the permission of the interviewees. As soon as possible after the interview, these were transcribed which resulted in 60 pages of transcriptions.

The observations were done from March 2018 to April 2018 during my orientation and also while I was dealing with supplier relationship activities. Many observations were also done while talking with colleagues. If it seemed to be important for the thesis, notes were taken. The observations act as supporting evidence for the findings, keeping the interviews as the initial source.

### 3.2 Data analysis

Data analysis is the process of turning raw data into knowledge (Patton, 2002) – and requires to systematically assess, code and categorize the data gathered. The analysis of the data in this thesis follows the structure of the research questions, and include the themes from the conceptual framework (figure 8).
The transcriptions from the interviews act as the main source of empirical data, and this was briefly sorted and coded with colors to help the analysis. Yellow stood for data to be included, green for direct citations and purple for my own comments or questions. The data I considered to be out of scope or giving no further added value, I left unmarked.

Simultaneously, bigger themes were collected in my notebook, where also findings from the observations were written.

In this way, the analysis got a structure and I was able to discuss the findings thematically. Were it was possible, results were *within-method* triangulated, which involves cross-checking for internal consistency (Jick, 1979:603), by comparing findings from the interviews, observations and documents reviewed – or by comparing several results from one of the data gathering methods with each other.

### 3.3 The credibility of the research

In academic research, it is essential to assess the trustworthiness of how results are achieved. The practices must be carefully evaluated against the aim and they must be in line with the data gathering methods (Patton, 2002).

As suggested by Silverman (2011), the discussion of the credibility of this thesis will include two themes; validity and reliability. Validity will further be divided as in Fisher’s and Buglear’s (2010) guidebook into; construct, internal and external validity.

#### 3.3.1 Construct validity

Construct validity refers to if the researcher interpret and comprise the respondents correctly, and whether or not he obtains neutral (Fisher & Buglear, 2010; Gibbert, Ruigrok & Wicki, 2008). Commonly in qualitative research, this is best done by triangulating (Wagner, 2006; Gibbert, Ruigrok & Wicki, 2008). In my thesis, I triangulated findings – however for some of the findings this was not possible. To a certain extent, this should however be acceptable as this is an initial study in this context.

Concerning the ecological aspect of validity, I argue it is on a fair level – as I am in an employment in the case company, and thus the research is done in a highly naturalistic setting. Further, the study does not contain methods that differ significantly from a real-life setting from the respondents’ perspectives, as the interviews were done during office hours.
3.3.2 Internal validity

Internal validity is about the logical reasoning or how the researcher have reasoned that Y affects X (Gibbert, Ruigrok & Wicki, 2008). In this thesis, internal validity is enhanced by structuring the findings according to the themes in the conceptual framework – as well as by triangulating the data gathered showed in figure 9.

3.3.3 External validity

External validity is about the transferability of the findings. The intention of this thesis is to look at the supplier segmentation process in a specific company, and thus this affects the transferability of the findings even to companies operating in the same business. In order to enhance the external validity, as suggested by Cook and Campbell (1979), chapter 1.2.1 contains a description of the case company.

Transferability of the findings is a problem in most case studies (Gibbert, Ruigrok & Wicki, 2008) – however, many of the findings in this thesis is based on either two different business areas or two countries, which should enhance the usability of the findings in other contexts as well. Those findings which I find only applicable on the case company, will be excluded from the typology and discussed within the case company only – due to confidentiality. Concerning the transferability in general, Lincoln and Guba (1985:316) suggest that it is always a concern of the reader.

3.3.4 Reliability

Reliability concerns whether another researcher could come to the same conclusion if replicating the study (Gibbert, Ruigrok & Wicki, 2008). In this thesis, I try to make all the steps I took as traceable as possible and thoroughly describe the findings from the empirical research in order to make replicating as is easy as possible. Publishing the name, title and operating country of the respondents enhances the reliability – as it gives the reader a possibility to verify the primary sources.

However, some of the findings may be time bound (especially the observations), some of the responses hard to get by an outsider (not employed by the case company), or impossible to replicate due to such reasons as employee turnover. Thereby, the replicating of this study is at the most on an acceptable level. According to Jick (1979), replicating qualitative studies which use triangulation is in general troublesome.
4 THE SUPPLIER SEGMENTATION PROCESS

In this chapter, the findings and the analysis of the gathered empirical data is presented and analysed. This chapter starts by describing the current state of supplier segmentation in Kesko, to then in the second chapter discuss the possible future state of supplier segmentation from the knowledge sharing perspective – and barriers towards this (RQ1 & RQ2). The discussion includes the themes of the five elements which constructed the conceptual framework (figure 8) in chapter 2.4. As a summary of this chapter, the typology of supplier segmentation in the retailing business is constructed, where the framework is further processed based on the findings.

4.1 How suppliers are segmented in a retailing company

In order to understand the context in which suppliers are segmented in Kesko, I started by discovering the sourcing strategy, which is a crucial part in many SRM frameworks (eg. Croxton et al. 2001; Park et al., 2010; Lambert & Schwieterman, 2012). The elements of the strategy may explain why certain criteria are used and others possibly left outside. Additionally, as came up in the literature, supplier segmentation is closely related to other supplier relationship management activities (Rezaei & Ortt, 2013), such as supplier selection – and thus it is also important to understand what kind of suppliers are chosen, before segmenting suppliers.

The sourcing strategy in Kesko build upon two elements: quality and customer orientation – as in the company strategy (H.Karumo, interview 21st March 2018) and is highly focusing on social responsibility (G.Sun, interview 21st March 2018 & T.Luoma, interview 29th March 2018). Guotao Sun also highlighted that the sourcing strategy must be closely connected with the corporate strategy, and be clearly communicated internally (G.Sun, interview, 21st March 2018).

Therefore, clearly driven by the strategy, for instance suppliers from high-risk countries which are not audited for their social responsibility cannot be accepted as suppliers for Kesko, before being audited. Thus, if segmenting suppliers with the criteria social responsibility the scale should consist of something else than “yes or no”, as it otherwise would not result in any added value for the segmentation. Furthermore, some suppliers serving the B2B market are chosen by the customers who demand only products from these (A.Elonen, interview 9th March 2018). Therefore, for certain product groups, the nature of the business determines a wide supplier portfolio, which underline the importance of understanding the context even further.
Beside the context of the strategy, it is important to understand the business environment of retailing, which Ari Elonen, Business Controller (interview, 9th March 2018), described to be constantly changing due to acquisitions and new suppliers. “What is true today may not be the same after a year” (A.Elonen, interview 9th March 2018).

Already the first observations, which were done during the first days of my orientation to the job function Category Manager, gave indications that suppliers in Kesko are not segmented according to any pervasive model with specific criteria, as those presented in the literature. This was confirmed by Sara Tallberg, Ari Elonen and Wiktor Kępiński as can be seen in the citations below.

We don’t have a clear segmentation process (S.Tallberg, interview 9th March 2018) [own translation].

I have an Onninen background, and neither there did we have any finished model (A.Elonen, interview 9th March 2018) [own translation].

We use the word segmentation when we have the approach for customers […] on the vendor side, there is no clear segmentation (W. Kępiński, interview 9th March 2018).

However, the need to segment suppliers has been identified in Onninen years ago – as for instance Ari Elonen provided me with an internal document dated 30th October 2008, which instructs how to classify suppliers into routine, bottleneck, volume, relationship and strategic suppliers. This matrix follows the logic of Kraljić’s (1983) 2x2 matrix, where the x-axis has the criteria criticality, importance, volume, profitability and wholesale strategy – whereas the y-axis has the criteria options/alternatives (Kesko internal document, 2008). After all, this was never broadly taken into use in Onninen – however it verifies the notion by Hudnurkar, Rathod and Jakhar (2016) that the Kraljic (1983) is still to be considered.

Nevertheless, a lack of a segmentation model in Kesko does not mean that suppliers are not segmented. In fact, I came across many department specific cases where suppliers are actually segmented. For instance, Guotao Sun, Far East Sourcing Manager in the building and technical trade (interview 21st March 2018) classifies suppliers in an ABCD system illustrated in figure 10 below. This model is more about supplier ranking, which however has been mentioned to be the same as segmentation by some scholars (eg. Lo & Sudjatmika, 2011).
Guotao Sun (interview 21st March 2018) explained that suppliers are ranked every quarter with the ABCD model, and that it is mainly used for giving feedback to suppliers on what they should concentrate on in order to develop themselves. Thereof, he criticized the model as following:

So this kind of classification is not very heavily linked with, for example, who are the strategic suppliers, who has best potential or who is the most critical supplier (G.Sun, interview 21st Mach 2018).

However, for the purpose to develop suppliers, Guotao Sun (interview 21st March 2018) said the model works well, and improvements on the suppliers’ side has been seen. The model is built up to work with easily accessible data, and only the criteria cooperation requires inputs from other sources than the ERP system and the reclamation handling system (G.Sun, interview 21st March 2018). A clear link between the segmentation and the elements of the strategy can also be seen, as almost half of the weight is put on quality – whereas on-time delivery and price level (30 % together) can be connected to customer orientation.

Yet another interesting point in the model is the actions to be taken if the supplier is ranked as an A supplier – namely that these suppliers and their products should be boosted to other Kesko countries as well, and that less resources need to be allocated for example to the pre-shipment inspections (G.Sun, interview 21st March 2018). Thus, the better the supplier perform, the more it gains and the less resources from Kesko side need to be used. This kind of segmentation can thereby also be linked to internal work scheduling – following the same logic as Gelderman and Semeijn (2006) found with purchasing portfolios forcing cross-functional teamwork.

Similar ABC models have also been used in the grocery trade (T.Luoma, interview 29th March 2018). However, the focus has been more on the purchasing volume, which she
said has been identified not to be the only measurement relevant for segmenting suppliers (interview, 29th March 2018). For instance, suppliers of which Kesko is buying 100% of the production should be noted separately, even if the purchasing volume is low, as here Kesko have a huge responsibility towards the supplier in terms of source of income (T. Luoma, interview 29th March 2018). This approach is similar to what Pagell, Wu and Wasserman (2010) found about treating non-critical suppliers as strategic suppliers. Further on, these suppliers are also to be considered valuable assets, as they provide a unique assortment for the K-Groups stores (T. Luoma, interview 29th March 2018).

Tuuli Luoma further elaborated on the point made by Guotao Sun, as she said that it is under development to create specific compensation packages for suppliers who are considered as strategic. The idea is to offer support from sales, marketing and sourcing to the suppliers – which consequently requires close and ongoing internal knowledge sharing – but also external (T. Luoma, interview 29th March 2018).

Nevertheless, not all of the interviewees agreed on that there is a need to segment suppliers. Wiktor Kępiński, Commercial Director for Onninen in Poland (interview, 9th March 2018), explained that the approach towards suppliers is more or less the same, and thus there is no need for segmentation, nor are any done. On the other hand, he pointed out that suppliers are divided based on if their products are stocked in the warehouse or not, plus an additional list of suppliers rarely used (W. Kępiński, interview 9th March 2018).

Dividing suppliers in this way may however be a result of the strategy and customer needs within the B2B market Onninen is serving, where the customers might demand specific supplier’s products (A. Elonen, 9th March 2018). Further, Onninen’s promise is to deliver products from its assortment within 24 hours to the customer’s site – and thus the segmentation is closely connected with supplier selection and the preface of planning which products are taken into assortment, and not that much with supplier segmentation after the choice is made.

An explanation to the lack of a united segmentation process within Kesko, similar to what has been presented in the literature, is the structure of the organization. The commerce departments are organized in a way that one Category Manager is responsible for a limited product assortment – and thus also a limited number of suppliers. Harri Karumo, Commercial Director for building and technical trade in Finland explained that the
configuration is based on having enough suppliers to ensure constant availability, something which is even more important in the grocery trade due to risk with bad harvests (T.Luoma, interview 29th March 2018). This is in line with Brown and Badurdeen (2015) and Brown (2017) who also found links between supplier segmentation and supply resilience and robustness. However, too many suppliers would not either be beneficial, as this could result in less efforts from the suppliers side (H.Karumo, interview, 21st March 2018).

The supplier segmentation in Kesko on the operational side is mostly product driven (T.Vanhala, interview 20th March 2018), and the responsibility to manage the suppliers within this segment is decentralized (H.Karumo, interview 21st March 2018).

As a result of this, a strategic supplier for a certain product segment is not treated according to any common “strategic supplier segment” in a broader company context. Two strategic suppliers offering completely different products might be so dissimilar and require completely different actions, that any common strategy for them would not be beneficial for either parties. On the other hand, a bottleneck and a strategic supplier in the same product category may require more or less the same actions.

Thereof, the definition of strategic suppliers in Kesko is not specified, and I ran on several points of view when asking about what defines a strategic supplier:

So, in my opinion, [...] three criteria: volume - purchasing volume from them, how many (Kesko) countries are buying from them, and what is our profitability. (G.Sun, interview 21st March 2018)

There is no single template for becoming a strategic supplier. It is based more on the added value which they can provide to us. [...] We also talk about category captains, those in a product group that clearly drives the branch forward. (H.Karumo, interview 21st March 2018) [own translation].

A strategic partner can also be a small supplier, if it is strategically important to Kesko. For instance, if we buy 100% of its production. (T.Luoma, interview 29th March 2018) [own translation].

Guotao Sun (interview, 21st March 2018) further suggested that the products which are perceived by the customers as the most important ones, should be considered as criticality products, and thus the suppliers behind them as well.

Additionally to the product category-driven segmentation, many other functions than the commerce department are segmenting suppliers for multiple different purposes. For example Sohvii Vähämaa, Corporate Responsibility Specialist, explained about the need for a responsible company such as Kesko to annually report the amount of suppliers
located in risk countries, by which auditing model the suppliers have been audited and what the results from these were (interview, 27th March 2018). This further verifies the importance of understanding the sourcing strategy of the case company.

Additionally, as came up in a discussion with the logistics department – they are segmenting suppliers based on the logistics model to for instance follow up cross-dock suppliers’ service levels in order to compare these with the agreed levels. Most recently they have increasingly started to search for consolidation opportunities, especially from Far East – something which requires information about orders, ports, and factory locations.

Based on the findings, the easiest way to describe how suppliers are segmented in a retail company is simply: based on their products. However, it appeared that suppliers are segmented for multiple different purposes using different models. Often, the used models are simple – which is contradictory to the trend in the literature (e.g. Rezaei, Wang & Tavasszy; 2015 & Segura & Maroto, 2017). The respondents also mentioned that segmentation models should remain simple and flexible, and that the most important part is to focus on the outcome of the segmentation.

It is also worth to mention that different segments are created, most likely, every day. The interesting part with the segmentation in this context is that the criteria are often considered more useful when treated as describing attributes – which means that their value is shown as is and not calculated with certain weights to show an overall result. For instance, country of origin, logistic model or delivery terms are not bundled together – but inspected separately. And those suppliers which for example are not from a country interesting for that specific purpose are plainly left outside instead of receiving a low score.

The relevance of incorporating sourcing strategy to the conceptual framework for exploring the supplier segmentation process was also verified, as most of the findings could be explained by the strategy. No significant differences were found between the two studied countries – however, the need for segmenting suppliers was stressed out more by the Finnish respondents. As before mentioned – the fact that supplier segmentation was seen less important in the Polish context might be due to the strategy of Onninen, not the cultural differences. Any significant differences between the grocery trade and the building and technical trade were neither found, nor was it the aim of the thesis.
As a conclusion, the following citation makes perfect sense for the case company:

There is no clear segmentation model which would offer a best possible solution for all cases when suppliers are desired to be segmented (T.Vanhala, interview 20th March 2018) [own translation].

4.2 How knowledge sharing can improve the supplier segmentation process, and what restricts it

As the citation below illustrates, there is a need to transfer individual knowledge into organizational knowledge within the case company – meaning a process of knowledge sharing. At the moment, a lot of time and effort goes to searching for supplier related information – which someone holds somewhere.

There are quite many of those who have worked for years and have tacit knowledge which is nowhere, which have for example worked as the frame for pricing (T.Luoma, interview 29th March 2018) [own translation].

The management of supplier relationships within Kesko is much based on the professionalism and experience of the responsible persons (H.Karumo, interview 21st March 2018) – which at least partially can be explained with the long-term employments of many of the employees.

As I have observed with a limited experience in Kesko, some of the desired information is easily not found or even not stored anywhere – and finding the right person holding the information might be tricky, which is a clear individual knowledge sharing barrier. The situation is complicated further by the fact that one supplier may offer products for several Category Managers within the grocery trade and even globally within the building and technical trade – meaning multiple responsible persons for one specific supplier relationship.

In Onninen Poland the situation is remarkably more clear, as they are utilizing a combined SRM and CRM system – which Wiktor Kępiński called a XRM system (interview, 9th March 2018). However, the system is used for domestic affairs only.

The XRM system contains basic information about suppliers, and supplier agreements are stored there together with notes from the meetings (M.Janecka, interview 9th March 2018) no matter if it is a small or a big supplier (W. Kępiński, interview 9th March 2018). This has many similarities to the presented ECM solutions by Duffy (2001), Alalwan and Weistroffer (2012) and Hullavarad, O'Hare and Roy (2015). The system is also used for
surprisingly different things, however it requires both focus and pressure from the management, as otherwise people see it as additional work (W. Kępiński, 9th March 2018) – which can be connected to the organizational internal knowledge sharing barriers Riege (2005) presented.

Most importantly, the XRM system shows who is responsible for a certain supplier (M. Janecka, interview 9th March 2018) – something Guotao Sun (interview, 21st March 2018) and Solvi Vähämaa (interview, 27th March 2018) mentioned not to be absolutely clear in the current organization of Kesko. Here, a partial explanation may be the recent acquisitions, and again, it is an individual knowledge sharing barrier of not knowing who knows. Supporting this notion, I have not managed to find all of my counterparts from the other countries where Kesko operates through any internal platform.

Not knowing the responsible persons within an organization is a clear knowledge sharing barrier, which can result in peculiar situations for the suppliers as well. For instance, Sara Tallberg (interview, 9th March 2018) mentioned that in cases where there are common suppliers, there is a possibility that one business area end up in a conflict with a supplier, of which the other business area does not know anything about. Guotao Sun added on to this, as he had jumped on a situation where a supplier in Far East has been approached by two representatives from Kesko, which has confused the supplier with “who is the real Kesko” (interview, 21st March 2018). Moreover, a supplier might, justly, assume that sharing information to one person from Kesko is sufficient.

A lack of common format on documents challenges the search for information further, which Guotao Sun mentioned to be an issue they are working on within the Far East sourcing department (interview, 21st March 2018). Many documents are created without standard templates, and manners to inform about supplier related issues from the acquired companies have still been used. Here, the notion by Riege (2005) that knowledge sharing requires knowing what the receiving part needs could be elaborated to divide sharing documents into two types; information sharing which might be in any format versus knowledge sharing which happens in an agreed common format.

As I approached the interviewees saying that my research is closely related to the intended SRM system, that drove the focus in most of the interviews towards this system – and how different supplier segments could be developed for the multiple different needs easily within one system. The discussion in many of the interviews resulted in SRM system requirements and possibilities from both the perspective of supplier
segmentation and knowledge sharing. This system is referred to as the *knowledge sharing platform*.

For instance, Sara Tallberg, IT Business Partner, stressed the need for a knowledge sharing platform as she explained that currently valuable supplier information is outspread – and that the only harmonized and centralized data is the supplier’s name and the supplier’s number (interview, 9th March 2018). The rest of the information is stored in different ERP systems, platforms, electronical folders, e-mails or even in paper format. Additionally to this, supplier’s company structures are not mapped (A.Elonen, 9th March 2018) – and thus it is difficult to combine the total purchases from one concern globally and across business areas.

Also Ville Juola, Corporate Counsel, mentioned that there would be a need for a knowledge sharing platform which could allow to segment suppliers based on if they have contract with Kesko, which country’s law is applied and which parts of the contract template is amended (interview, 16th March 2018). Currently doing this is manual work which takes a lot of time and is sensitive to human error – as there is no centralized system to where contracts are uploaded, and as the amount of contracts is tremendous (V.Juola, interview 16th March 2018).

Likewise, the ability to segment suppliers based on the content of the contracts should be of interest for sourcing managers – as they could create a segment of suppliers whose contracts include split-level bonuses or discounts – and thus should be under regular control. Related to this, Ari Elonen (interview, 9th March 2018) proposed that calculations of the viability of the suppliers should be included. If the numbers would indicate, this could result in yet another segment of suppliers with whom either remarkable changes should be made – or the relationships should be ended.

Further on, Sohvi Vähämää (interview, 27th March 2018) pointed out that a lack of a system containing all basic supplier information in a standardized way leads her to ask multiple people within the company about the information, in order for her to create the supplier segments. This does not only mean a time consuming process, but it makes it hard to determine when actually everything is gathered. Did I miss a supplier can bother many, and be hard to verify. Meaning the contrary to the enhanced productivity and performance found by Navimipour and Charband (2016) as a result of knowledge sharing.
Moreover, a knowledge sharing platform could benefit sales personnel as well. Already within the first days in my job function as a Category Manager, I was contacted by sales personnel asking for substitute suppliers to a specific product which had run out of stock. This question could have been answered, probably faster from the sales personnel’s point of view, if there would have been a system allowing to segment suppliers based on their product range. Something which probably happens frequently, as Timo Vanhala (interview, 20th March 2018) mentioned that there are quite many products that have several suppliers.

Additionally to segmenting existing suppliers, a filtering opportunity would assist segmenting possible suppliers as well – or supplier selection in a sense. In most of the cases, suppliers for new products are sourced from the existing supplier portfolio (T.Luoma, interview 29th March 2018), and often the suppliers are filtered out with some simple criteria as “is the supplier a manufacturer, is it able to provide private label, what are the customer references and are they audited for their social responsibility” (G.Sun, interview 21st March 2018). Currently, the one sourcing for the potential suppliers might rely on his personal supplier network – whereas a system would most likely offer a wider range of suppliers.

If the knowledge sharing platform would include all relevant supplier related information, it could further on easily be used for mapping the best performing supplier – something which was done manually years ago in Onninén (A.Elonen, interview, 9th March 2018). This was an appreciated recognition among suppliers, who seldom get information if everything is working well. Most often, they are contacted if something went wrong (A.Elonen, interview 9th March 2018).

Tuuli Luoma (interview, 29th March 2018) further suggested that the basic information in the platform could be provided by the supplier. This could minimize the workload needed from the behalf of Kesko, but on the other hand also provide additional interesting information. For instance, the supplier might provide product categories of which Kesko is not aware of. Simultaneously, information about how the supplier perceives Kesko as a customer could be collected (G.Sun, interview 21st March 2018). It is not only about that we perceive them as strategic suppliers, but that they also consider us as strategic customers (G.Sun, interview 21st March 2018).

Moreover, if it was open for all possible suppliers, it would broaden the list of potential suppliers to be considered in the future.
To answer RQ1 “How could internal knowledge sharing improve the supplier segmentation process?” three main points can be drawn.

First of all, an internal knowledge sharing platform, allowing to segment suppliers, would enable every employee to see an overview of the suppliers from multiple perspectives. Many guesses or “something like” answers would thus be replaced by fact, internal resources could be allocated better and experiences, best practices and lessons learnt as Huang and Wu (2010) and Wang, Wang and Liang (2014) mentioned would ease working and allow better decisions to be made. Most likely this would enhance corporate performance – as Tseng (2014) found in a previous study.

Secondly, as all functions within the company would get up to date information, the work done would be more up to date. Thereby, this could lead to better supplier development as there would be more relevant information to take up during negotiations or meetings. Many ad hoc situations could thereby be avoided, and the supplier relationship management could become more proactive. Thus, internal knowledge sharing supports external knowledge sharing.

For instance, suppliers which deliveries would start to be less accurate could be treated as a segment, requiring the same actions to be taken. Thereby, the segmentation would be more tied to the daily work and could adapt to the constantly changing environment in retailing.

Lastly, if considering knowledge sharing without any barriers, it would speed up the process regardless of who is segmenting and for what purpose. If the person previously had to ask, email, call or search for the information needed – a knowledge sharing platform would most likely make this faster – as found in the study on ECM solutions by Haug (2012). Consequently, this would allow employees to concentrate on their work instead of replying to multiple requests – for instance from new employees in their orientation phase. Moreover, the one making inputs to the platform would not necessarily need to know for what the information may be used and when – which is the case if sharing knowledge face-to-face (Riege, 2005).

However, there are currently barriers restricting internal knowledge sharing – which consequently affects the external knowledge sharing as well.

As an answer to RQ2 “Which barriers are restricting the internal knowledge sharing related to supplier relationships?” three points can be made. First and foremost
technological barriers as those mentioned by Riege (2005). There is a lack of a common system where all the supplier related information could be stored. Currently, as came up in the interviews and as I have observed, there are multiple places where information is stored – to which not all have access or do not know about their existence. Furthermore, many of the documents are actually excel-files, which are possible to edit by only one person at a time. Therefore, a lot of knowledge is not shared.

Secondly, there are multiple individual knowledge sharing barriers – of which the most obvious one is the unclear responsible persons, or not knowing who knows what as O’Dell and Grayson (1998) and Wendling, Oliveira and Macada (2013) highlighted. Unfortunately, also knowledge hoarding (Riege, 2005) has to be mentioned, which however is more a cause of lack of technology for sharing and a lack of knowing who would benefit of the knowledge, than the actual withholding of knowledge.

Thirdly, cultural aspects are also barriers – in two different ways. First of all, when asking about knowledge sharing between countries – it was not received as beneficial for the Polish operations, whereas it was received beneficial in the Finnish context. This might be similar to what Michailova and Husted (2003) found in the Russian context, however such conclusions should not be made based on two respondents only, and need further verification. Secondly, the business culture between the different business areas and also within these seemed to differ – which can partially be explained by the history of working as separate units.

Based on the findings from the empirical research and the notion by Hung, Kao and Chu (2008) that the technological capability is a key driver for knowledge integration, I suggest that a knowledge sharing platform allowing to segment suppliers should be implemented. This is closely related to the implementation of a SRM system, however – the findings indicate more requirements towards the system. It should be a flexible tool which serves multiple needs and makes information processing easy – or in a way allows to convert information into knowledge. This is further elaborated in the next section.

4.3 Implications for the conceptual framework

Exploring the supplier segmentation process with the presented conceptual framework (figure 8) gave insights for how the supplier segmentation process could be improved by internal knowledge sharing. The framework below (figure 11) continues on the previously presented framework, and suggests an internal knowledge sharing platform to be implemented as the root for the whole process.
The framework illustrates how an internal knowledge sharing platform would be in the centre of the supplier segmentation process – and interlinked to all other related activities, and not considered as a separate sub-process of supplier information. The difference between the platform in figure 11, and the supplier information sub-process in figure 8, is that the latter always need a request from a person (e.g. asking for supplier contact details) – if knowledge is intended to be shared. The platform would not need any request, and would thus speed up the process.

As came up in the empirical research, supported by the literature (Rezaei & Ortt, 2013; Rezaei, Wang & Tavasszy, 2015), supplier selection and supplier development are highly related to segmentation – and are thus incorporated to the framework. This follows on the notion by Park et al. (2010) that understanding the whole picture is crucial, which the empirical research also supports. Thereof, the sourcing strategy is also remaining – which clearly is shaping the decisions made. Considering sourcing strategy within a framework for supplier segmentation is unique in this field, though common in studies on supplier relationship management (e.g. Croxton et al., 2001; Park et al., 2010 & Lambert & Schwieterman, 2012). Furthermore, to make it more clear – and as this framework focuses on supplier segmentation, the sub-process of segmentation actions (named as outcome of segmentation in figure 8) is kept separate. This is to illustrate that the segmentation per say does not drive any changes, but requires actions to be determined and taken – as Rezaei, Wang and Tavasszy (2015) indicated.
Lastly, the sub-process of improvement from figure 8 is renamed to continuous improvement, as the findings indicated, supported by the literature (e.g. Sorescu et al., 2011) that the retailing environment is constantly changing and thus the processes should constantly be examined.

4.4 The typology of supplier segmentation in the retailing context

Previously, the literature has identified that as the amount of suppliers increase, simultaneously the importance of segmenting them increases. This may apply in some cases where the buying organizations are rather simple and the intention of the segmentation is to construct certain strategies for certain supplier segments only.

However, based on the findings, there is another dimension when it comes to supplier segmentation. This dimension is actually the same as the identified knowledge sharing barriers. As the amount of people involved in the supplier relationships increases, the more important it becomes to internally share knowledge related to suppliers in a common and structured way – which allows the employees to do segments based on different needs. In retailing, this appears to be specifically true if there are private label products, as these involve more people from different departments working with different supplier relationship activities.

Another identified barrier acting as a driving factor is multiple offices as well as multiple operating countries. Furthermore, several business areas drives for a common structured platform for knowledge sharing – if there is a desire to take advantage from joint relationships with supplier, or bundled purchasing volumes from suppliers.

Thereby, figure 12 below is constructed to illustrate the driving forces for supplier segmentation and internal knowledge sharing regarding suppliers. Each segment contain simple actions to be taken by managers from these companies.
Figure 12  Driving forces for supplier segmentation and internal knowledge sharing

Source: Own elaboration

The two bottom boxes are directly based on Rezaei and Ortt (2013), saying that the more suppliers there are, the greater the need of segmenting them becomes, and consequently vice versa. The left upper box builds upon this logic, and could be a situation where a company deals with only a handful of suppliers who are providing private label products. Thus there are purchasers, product specialists, marketers, sales personnel, social responsibility managers, packaging designers, e-commerce specialists, product information specialists, business controllers, lawyers, directors and so forth involved in the supplier relationship process from the buying organization. The platform in this case might be as simple as a shared folder for all supplier related information.

In figure 12, Kesko would be located in the upper right corner, as there are hundreds of people in multiple offices in eight countries involved in the relationships with thousands of suppliers. Further, these are divided into three business areas – which according to company strategy are aimed to become more united. Companies with similar knowledge sharing barriers as Kesko, and with multiple suppliers, could also position themselves in the upper right corner.

4.4.1 The knowledge sharing platform

The different internal stakeholders appeared to have different needs for supplier information, often in some kind of segments – and thus there is a need for a knowledge sharing platform allowing to segment suppliers with different kind of filters.
Thereby, instead of constructing a complicated segmentation model for the retailing business, based on the findings I suggest a simple and flexible system allowing to do multiple segments for each and every supplier segmentation need. This is in line with the definition by Kotler, Wong, Saunders and Armstrong (2005) and Day, Magnan and Moeller (2010) as it allows to divide the suppliers into segments with different needs or according to different characteristics requiring different actions. Further, this makes it easier for the buying organization to handle the supplier relationships as assets – as Tseng (2014) argued them to be.

Figure 13 below illustrates a possible view of a knowledge sharing platform. I renamed the criteria to filters, as it describes better how they are used in this model. This example is fictive, and the chosen filters does not represent all of the possible ones.
<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
<th>Business division</th>
<th>Product line/brand</th>
<th>Product(s)</th>
<th>Ease of doing business</th>
<th>Supplier Current year Trend</th>
<th>Profitability</th>
<th>Delivery</th>
<th>Sustainability</th>
<th>Logistics model</th>
<th>Private label</th>
<th>WMS</th>
<th>Work shop location</th>
<th>Search results:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier A</td>
<td>China</td>
<td>1</td>
<td>Internal use</td>
<td>Scissors</td>
<td>Recommanded: 5</td>
<td>€ 0</td>
<td>Positive</td>
<td>30 days</td>
<td>Yes</td>
<td>Direct delivery</td>
<td>No</td>
<td>300 searches</td>
<td></td>
<td>30 searches</td>
</tr>
<tr>
<td>Supplier B</td>
<td>China</td>
<td>2</td>
<td>Office equipment</td>
<td>Scissors</td>
<td>Recommanded: 6</td>
<td>€ 150,000</td>
<td>Positive</td>
<td>60 days</td>
<td>Yes</td>
<td>Delivery to warehouse</td>
<td>No</td>
<td>300 searches</td>
<td></td>
<td>300 searches</td>
</tr>
<tr>
<td>Supplier C</td>
<td>Finland</td>
<td>2, 3</td>
<td>Home &amp; garden</td>
<td>Scissors</td>
<td>Recommanded: 3</td>
<td>€ 2,000,000</td>
<td>Positive</td>
<td>30 days</td>
<td>No</td>
<td>Delivery to warehouse</td>
<td>No</td>
<td>300 searches</td>
<td></td>
<td>300 searches</td>
</tr>
<tr>
<td>Supplier D</td>
<td>Sweden</td>
<td>2</td>
<td>Office equipment</td>
<td>Scissors</td>
<td>Recommanded: 4</td>
<td>€ 400,000</td>
<td>Positive</td>
<td>30 days</td>
<td>No</td>
<td>Delivery to warehouse</td>
<td>No</td>
<td>300 searches</td>
<td></td>
<td>300 searches</td>
</tr>
<tr>
<td>Supplier E</td>
<td>Germany</td>
<td>3</td>
<td>Internal use</td>
<td>Scissors</td>
<td>Recommanded: 5</td>
<td>€ 0</td>
<td>Positive</td>
<td>30 days</td>
<td>No</td>
<td>Direct delivery</td>
<td>No</td>
<td>300 searches</td>
<td></td>
<td>300 searches</td>
</tr>
</tbody>
</table>

| Potential supplier A | China | All | Scissors | Delivery to warehouse | Yes |
| Potential supplier B | Vietnam | All | Scissors | Delivery to warehouse | Yes |
| Potential supplier C | Austria | All | Scissors | Delivery to warehouse | No | 100 searches |
| Potential supplier D | Poland | All | Scissors | Cross dock | No | 400 searches |
| Potential supplier E | Russia | All | Scissors | Delivery to warehouse | Yes |
| Potential supplier F | China | All | Scissors | Delivery to warehouse | Yes |

Source: Own elaboration

Figure 13: The internal knowledge-sharing platform for supplier segmentation
The internal knowledge sharing platform allowing to segment suppliers could have multiple end users, and the more people using it – the better it would become and the better it could serve external knowledge sharing as well. And as the knowledge sharing platform itself would not limit the usage of multiple filters, it responds to the claim by Rezaei and Ortt (2013) that previous models used a limited number of criteria. Additionally, given that the information is up to date, it would be possible to create supplier segments whenever needed – and thus the notion by Ari Elonen (interview, 9th March) that supplier segments in the retailing business should be amended within short time intervals could be faced.

Implementing a platform as the suggested one would be a time-consuming process requiring a lot of resources, and thus it would be wise to allow suppliers to share their information to the platform regarding all the basic information as Tuuli Luoma (interview, 29th March 2018) nominated. It would also be sensible to start the implementation by identifying who is holding information about suppliers, and who needs the information – as Wilson and Barger (2015) proposed.

### 4.4.2 The benefits of the framework and the typology

The constructed typology in this chapter, and the revised conceptual framework in the previous chapter, provide several benefits for both scholars and practitioners studying or working in the retailing business. First of all, the framework presented in figure 11 allows to see the overall picture of supplier segmentation, and how it is interlinked with other supplier relationship management processes. This approach is unique for frameworks in the field of supplier segmentation, however verified by the findings.

Moreover, the identified driving forces for an internal knowledge sharing platform and supplier segmentation (figure 12) helps retailers to decide whether or not such processes or systems should be implemented in the company. These should also be of interest for researchers, as the idea of an internal knowledge sharing platform within the scope of supplier segmentation is new.

Lastly, the suggested platform (figure 13) shows clear benefits to be taken in terms of a faster (Parker, 2003), more innovative (Laitinen & Senoo, 2017) and more productive (Navimipour & Charband, 2016) supplier segmentation process allowing better process control and minimizing the risk of information lost (Haug, 2012). Moreover, it allows
sharing experiences, best practices and lessons learnt (Huang & Wu, 2010 & Wang, Wang & Liang, 2014) – which previously have been troublesome due to internal knowledge sharing barriers (Riege, 2005; O’Dell & Grayson, 1998 & Wendling, Oliveira & Macada, 2013).
5 CONCLUSIONS AND IMPLICATIONS

This study contributes to the supplier relationship management literature by addressing supplier segmentation from a new perspective. Firstly, this study identified how suppliers are segmented in a retail company, and secondly, this study identified how knowledge sharing can improve the supplier segmentation process. Lastly, this study identified barriers restricting knowledge sharing related to supplier relationship activities, and suggested how these can be tackled.

Many different supplier segmentation activities were found in the case company, all of which served different needs. Even if there were some similarities to previous literature, for instance models based on Kraljic (1983), none of the models appeared to serve all different supplier segmentation needs there are. A common factor for all of the segmentation activities was the simplicity and flexibility of the models, as well as the visibility of the single values. Therefore, the findings from this study is in contradict to the trend in the literature towards more complicated models (e.g. Rezaei, Wang & Tavasszy, 2015 & Segura & Maroto, 2017). In a retailing context, based on this study, it can be said that there is no pervasive model for supplier segmentation. Instead, due to the various different needs – there is a need for a segmentation platform which allows to segment suppliers based on various criteria, or with various filters.

The different needs, which requires a lot of information, drive the need for internal knowledge sharing, which could speed up the segmentation process and make it more accurate, supporting external knowledge sharing as well. The link between internal and external cooperation has also been identified by other scholars, as for example Hillebrand and Biemans (2003), though in different contexts.

Furthermore, due to the different internal knowledge sharing barriers identified, a platform for internal knowledge sharing was discussed as a possible solution for this. In the typology, discussed in chapter 4.4, the driving forces for such a platform are presented together with the driving force for supplier segmentation. This is illustrated in a 2x2 matrix in figure 12.

The revised framework, presented in figure 11, suggests that an internal knowledge sharing platform allowing to segment suppliers could work as the root of the supplier segmentation process – interlinking all of the other supplier relationship activities. Thus, this study supports the link between supplier segmentation and supplier development as Rezaei, Wang and Tavasszy (2015) presented, however taking it a step closer to practice.
Further, a connection between supplier segmentation and supplier selection, as Rezaei and Ortt (2013) found, was also identified in this thesis. As the sub-processes in the framework are not specifically tied to retailing, this framework can be useful in other contexts as well.

Likewise, this thesis can support literature on ECM solutions as presented by Haug (2012), as the platform in figure 13 would allow effective document access, better process control and less information missed or lost internally – which are benefits of ECM solutions as well. Furthermore, this thesis found some requirements and present some suggestions for a possible platform, and discusses practical benefits of it in the last chapter concerning implications for managers.

In a way, the suggested knowledge sharing platform is turning the supplier segmentation process around. Previously, supplier segmentation has driven actions (e.g. Kraljic, 1983; Rezaei & Ortt, 2013 and Segura & Maroto 2017), whereas the findings in this thesis indicate that in most cases actions drive supplier segmentation. In the same way, this thesis found that previously – internal knowledge sharing has been driven by requests, while a knowledge sharing platform would not need any requests. The knowledge would be stored there for anyone to use it internally, without having to email, call or ask. Thus, the most obvious benefit of internal knowledge sharing, in this context, is the faster process, allowing employees to focus on their work – meaning better productivity, and thus increased corporate performance (Tseng, 2014).

This thesis also suggests that all suppliers should be incorporated into the system – not only the strategic or most critical ones, in order for it to become as beneficial as possible. For instance, if there is a need to know which suppliers in China providing Private Label that must be audited within the next few months – the system is used for discovering these. In doing so, the findings and the models from the literature could assist – for instance Rezaei’s and Ortt’s (2013) rule-based system in figure 5, as illustrated below:

\[
\text{IF} \text{ the supplier is providing private label, AND located in China AND the audit is expiring within the next few months THEN list them}
\]

The exploration of the supplier segmentation activities in the case company connected this thesis closer towards what is actually going on in purchasing organizations, which previous research is criticized not to be (Andersen, Ellegaard & Kragh, 2016). Additionally, this thesis looked more into how the concentration on sustainable sourcing
requires to amend previously used supplier segmentation methods – as Pagell, Wu and Wasserman (2010) argued.

A societal impact of this thesis can also be drawn, as it identified that those suppliers which are highly dependent on the buying organization should be identified and treated as a separate segment. The argument behind this is that the supply chain risk can be considered as asymmetric and the responsibility of the buyer in terms of income as extremely high. In exchange, these relationships provide a uniqueness to the product assortment.

Moreover, this thesis supports the notion by Day, Magnan and Moeller (2010) that supplier segmentation can be used for multiple purposes, and supports the broader perspective on SRM as presented by Park et al. (2010). Particularly, the analysis support the connection between supplier segmentation and supply resilience and robustness suggested by Brown and Badurdeen (2015) and Brown (2017) – though the connection with sourcing strategy, sustainable sourcing, supplier selection and supplier development was also found. Lastly, supplier segmentation was found to be, as simple as it sounds, about categorizing suppliers according to their similarities (Rezaei & Ortt, 2013).

5.1 Limitations

In order to increase the generalizability of this study and to get a broader understanding of the supplier segmentation practices, interviews with representatives from other retailing companies would be needed. For instance, the size and the business areas of the case company Kesko might limit the findings to be applicable on Kesko only. Further on, the aspect of social responsibility might appear in different formats in other companies. However, I intentionally decided to leave this for future studies, to be able to focus deeper on Kesko. Notwithstanding my employment in Kesko could have affected both the quality of data gathered from other companies, as the objectivity of analyzing it.

This study focused on the grocery trade and the building and technical trade, however with the limited number of respondents no major peculiarities for these business areas were found. Additionally, the differences between the two studied countries, Finland and Poland, cannot solely be explained by the difference in operating country. It would be more beneficial to study differences between completely Polish retailers and Finnish retailers, to find more evidence about their possible differences.
5.2 Future research

As a suggestion for further research on supplier segmentation, it is worth looking at from various perspectives. This was an initial study from the perspective of knowledge sharing, however supplier segmentation has not broadly been studied from resilience or robustness management perspectives either. Sustainability is yet another perspective which still requires further studies in various industries.

Moreover, as this study indicates, it is important to always attach it to a specific context. As the case has been in many of the previous literature, they have not addressed any specific industry for where their models would be useful. The retailing industry appeared to be a gap in the research – however this could be divided into smaller pieces as well. For instance supplier segmentation in the fashion retailing could provide interesting views. It would also be interesting in future studies to deeper look at the differences between companies focusing on B2C or B2B customer segments only, as it would be to look for more detailed cultural differences.

In spite of, studying knowledge sharing from a supplier’s perspective would allow to identify what information, from whom and when the suppliers would like to have – which could improve the suggested knowledge sharing platform further.

Therefore, more studies are needed to verify the usability of the suggested knowledge sharing platform, as well as the requirements towards it. A study identifying all possible users and all who sit on relevant knowledge for this platform would be a good starting point. Comparing companies and their performances based on their knowledge sharing capabilities and technologies would further support the findings from this study.

In doing so, the approach in this study could serve as a basis, and the conceptual framework (figure 11) could help to grasp the overall picture.

5.3 Implications for managers

Despite the limitations, this study contains several implications for managers to be taken. First of all, implementing a knowledge sharing platform regarding suppliers could assist the top management in creating department specific goals, and also allow the Category Manager himself to compare his suppliers with other suppliers within the company, in order to set up targets. Following on this notion, the internal knowledge
sharing platform would assist in allocating resources on those departments where it is mostly needed – as an overview of the whole supplier base allows to benchmark and compare supplier segments, and thus also departments with each other. Thereby, this platform should also be of interest for the company’s HR department, which additionally would get a new tool helping to orientate new employees. Much of the information I have struggled to find during my orientation would be easily accessible, and further it would give a pervasive overview of the operating field and quickly show all of the internal stakeholders and the counterparts from other countries. If it was used as the main place for storing information, and as the main place for knowledge search – it would minimize the risk of “knowledge hoarding” as well.

Secondly, the platform could also assist work planning – by, for example, allowing the corporate responsibility department to schedule upcoming audits, if they would filter the suppliers from high-risk countries based on audit expiry date, and sort them in chronological order starting from those expiring first. Adding a filter of the status of the suppliers would make prioritizing easier, as the auditing naturally would start with the active suppliers.

In this way, the platform would also assist the corporate responsibility department to get the information needed for annual reporting. And with more filters added, for instance carbon footprint as presented by Reuter et al. (2010) – a segment of suppliers performing poorly regarding this could be made, and common actions be taken. Similarly, the logistics department could filter suppliers based on the country of origin or shipping port – to then consider where consolidation could be possible.

Thirdly, an internal knowledge sharing platform for supplier information would also benefit suppliers, as they could get more accurate and up-to-date information from various departments. For instance, the Category Manager could communicate towards the supplier instantly as there would be any sign of possible problems. Or, it would assist him to prepare for upcoming negotiations with the supplier. The link between supplier segmentation and supplier development, as presented by Rezaei, Wang and Tavasszy (2015), is thus taken closer to practice, and could for instance follow the logic of the model (figure 10) and the actions presented by Guotao Sun (interview, 21st March 2018). Thus, internal knowledge sharing supports external knowledge sharing. And as previous literature has proved (e.g. Tseng, 2014), the better the knowledge sharing between the company and its suppliers, the better the overall performance.
Fourthly, an internal knowledge sharing platform can also be useful for risk management, as the risk of losing valuable knowledge as mentioned by Haug (2012) would be minimized. This could for instance be the case if personnel turnover would dramatically increase. From a supply resilience and robustness perspective, as suggested by Brown and Badurdeen (2015) and Brown (2017), the platform could be used for identifying which products are currently single sourced – possibly leading to a consideration if these bottleneck products should be sourced from multiple suppliers, or if the suppliers of these products are in a too determinative position towards the company. Considering the management of currency risks or exchange rate opportunities, a platform would allow to detect all the supplier relationships where this could have an effect. In cases of a decreasing currency, the platform could help identifying all of those suppliers from which high returns could be expected – as Choi and Krause (2006) suggested supplier segmentation to be used for.

Fifthly, uploading all new suppliers to the knowledge sharing platform would assist in detecting overlapping supplier contracts, substitute suppliers or possibilities to combine purchasing volumes. For instance, the segment of suppliers which is filtered with the criteria “scissors” in figure 13, could trigger a purchaser to evaluate if it was beneficial to combine the purchasing volume of supplier A & B. Something which previously could have been unnoticed if these suppliers had served different business areas and different needs – possibly as a result of acquisitions. Most importantly in this case, valuable information from the acquired company would be stored and accessible in the future – which would open up more potential suppliers if there was a need to source, for example, a new scissor supplier. And if the person doing this did not have knowledge about Far East sourcing, he could easily benchmark with similar suppliers – to see what values they have received in the past.

Lastly, as the goal of knowledge sharing is to “solve specific tasks better, faster and cheaper than they would otherwise have been solved” (Christensen, 2007:37) – the platform would allow this concerning not only supplier segmentation but multiple supplier relationship related activities. For instance by allowing the corporate responsibility department to search for the basic information about the suppliers – if they for example are planning a trip to a high-risk country and would need to quickly filter all suppliers in that specific country or area.

Despite the benefits, implementing this platform would not be possible without efforts. It requires the support and the pressure from the management (W. Kępiński, interview
9th March 2018) and an identification of all of the internal stakeholders holding supplier related knowledge (Wilson & Barger, 2015) – as well as identifying all of those who eventually could be the users of the system. Moreover, the organizational interdependencies should be identified (Christensen, 2007:46), as should the purpose of gathering and sharing knowledge internally clearly be stated.
SVENSK SAMMANFATTNING

1. INLEDNING


1.1 Problemformulering

Dessutom förändras detaljhandeln i snabb följd, vilket leder till att hanteringen av leverantörsrelationerna blir alltmer komplicerad. Eftersom återförsäljare idag gör mer än enbart prisförhandlar (Sorescu, Frambach, Singh, Rangaswamy, & Bridges, 2011:S5), betyder det att alltfler människor är inblandade i relationen mellan återförsäljaren och leverantören. Följaktligen innebär detta att mer information, kunskap, erfarenheter och åsikter om leverantörerna skapas internt.

Förutom bristen i tidigare studier gällande detaljhandeln, har inte heller någon studie från ett kunskapsdelningsperspektiv påträffats – fastän forskare har identifierat att leverantörssegmentering vanligen involverar flertalet personer (Andersen, Ellegaard & Kragh, 2016). Därutöver är leverantörssegmentering nära relaterad till leverantörsutveckling (Rezaei, Wang & Tavasszy, 2015), vilket kan antas innebära mycket kunskapsdelning gällande flera olika aspekter.

1.2 Syfte

Den här avhandlingen fokuserar på gapet i tidigare forskning genom att undersöka leverantörssegmenteringsprocessen hos en återförsäljare. Syftet är att ta reda på hur intern kunskapsdelning kunde förbättra leverantörssegmenteringsprocessen, samt vad som hindrar intern kunskapsdelning inom detta område.

För att utforska processen skapas ett konceptuellt ramverk baserat på litteratur, där aspekter från SRM-litteraturen beaktas. Detta ramverk vidareutvecklas baserat på resultaten från den empiriska undersökningen, och diskuteras i slutet av avhandlingen i samband med att en typologi av leverantörssegmentering inom detaljhandeln skapas.

Forskningsfrågorna är följande:

1. Hur kunde kunskapsdelning inom företaget förbättra leverantörssegmenteringsprocessen?
2. Vilka interna hinder för kunskapsdelning gällande leverantörsrelationer finns det?

1.2.1 Fallföretaget

Med tanke på fokus i denna studie, är det motiverat att ha ett rätt så komplicerat fallföretag. Därför har Kesko Oyj, min nuvarande arbetsgivare, valts som fallföretag.
K-gruppen, vilken består av Kesko och K-köpmännen, har totalt 2 200 affärer i Finland, Sverige, Norge, Estland, Lettland, Litauen, Vitryssland och Polen (Kesko, 2018a). Kesko är den tredje största återförsäljaren i Nordeuropa (Kesko, 2018a), och har nominerats till världens mest hållbara återförsäljare (Corporate Knights, 2017).


1.3 Avgränsningar

Eftersom jag insamlade data genom kvalitativa intervjuer, observationer och genom granskning av interna dokument från ett fallföretag, borde resultaten granskas i en större utsträckning innan generaliserbarheten av resultaten kan fastställas. Vidare begränsas resultaten till två affärsområden och två länder – Finland och Polen. Därtöver ska det beaktas att mitt arbetsförhållande i fallföretaget kan ha en effekt på objektiviteten av studien, vilket dock diskuteras mer i kapitel 3.

1.4 Definitioner

**SRM** – (sv. system för hantering av leverantörsförhållande) handlar om utvecklandet och upprätthållandet av relationen mellan företaget och leverantören (Lambert & Schwieterman, 2012), med målet att uppnå tillagt värde.


2. SUPPLIER RELATIONSHIP MANAGEMENT

Detta kapitel börjar med en introduktion till SRM, eftersom leverantörssegmentering anses vara en viktig del av detta koncept och eftersom segmenteringen är nära kopplad till andra aktiviteter inom SRM. Därefter presenteras studier inom leverantörssegmentering, vilket följes av studier inom kunskapsdelning. Slutligen kombineras dessa till ett ramverk, som utgör strukturen för den empiriska undersökningen.

2.1 Komponenterna inom SRM


2.2 Leverantörssegmentering

I all sin enkelhet handlar leverantörssegmentering om att kategorisera leverantörer enligt likheter (Rezaei & Ortt, 2013). Ändamålet med leverantörssegmenteringen är 1) ett begränsat antal segment för vilka skilda strategier görs (Rezaei & Ortt, 2013), 2) en identifiering av de relationer som förväntas generera högst avkastning (Choi & Krause, 2006), 3) en översyn av tidigare relationer (Day, Magnan & Moeller, 2010) eller 4) en identifiering av de leverantörer som innehar värde tilläggs kapacitet (Gelderman & van


Gemensamt för de flesta av de tidigare modellerna är att de resulterar i en 2x2 matris – vilket möjligen är orsaken till att de även kritiserats (ex. Andersen, Ellegaard & Kragh,

2.3 Kunskapsdelning


2.3.1 Extern kunskapsdelning


2.3.2 Intern kunskapsdelning


Följaktligen borde företag acceptera kostnader från detta (Christensen, 2007), vilka kan uppstå av tekniska lösningar som underlättar intern kunskapsdelning (Hung, Kao och Chu, 2008). Tekniska lösningar för kunskapsdelning har bevisats vara nyttiga för företag, eftersom de förbättrar tillgängligheten till dokument och därmed ger även
bättre kontroll – men också eftersom de minimerar risken för att viktig information skulle gå förlorad (Haug, 2012).


### 2.3.3 Kunskapsdelningshinder


Tekniska kunskapsdelningshinder handlar främst om bristfältligt tekniskt stöd, dålig integration av system och bristfällig utbildning (Riege, 2005). Wendling, Oliveira och Macada (2013) påpekar även att tekniska lösningar inte kan ersätta fysisk kontakt, och därmed ska inte alltför stor tillit sättas gentemot dessa system.

### 2.4 Konstruerandet av det konceptuella ramverket

Företag koncentrerar sig nuftörtiden mer på hållbart inköp, vilket minskar användbarheten av tidigare leverantörssegmenteringsmodeller (Pagell, Wu &
Wasserman, 2010), och därutöver är tidigare modeller löst kopplade till vad som egentligen pågår i inköpsfunktioner (Andersen, Ellegaard & Kragh, 2016). Därför är det viktigt att utforska hur leverantörer egentligen segmenteras i inköpsfunktioner.

För utforskandet av leverantörssegmenteringsprocessen skapades ett ramverk som tar upp aspekter ur både SRM och kunskapsdelningslitteraturen. Ramverket (figur 1) består av fem sammanlänkade delprocesser; inköpsstrategi, leverantörsinformation, segmentering, utgång av segmenteringen och förbättring.

![Figur 1 Ramverk för utforskning av leverantörssegmenteringsprocessen](Källa: Egen konstruktion)

Detta ramverk, likt ramverket av Park et al. (2010), tar en bredare synpunkt och underlättar därmed förståelsen av kopplingen mellan leverantörssegmentering och andra leverantörsrelaterade processer, vilket Rezaei och Ortt (2013) klanderde tidigare modeller vara bristfälliga för. Slutligen inkluderas ett internt kunskapsdelningsperspektiv i ramverket, och gör det därmed unikt inom detta ämne.

3. METODDISKUSSION

3.1 Datainsamling


3.2 Dataanalys

Analys av data handlar om att bearbeta rå data till kunskap (Patton, 2002). I denna studie handlade det främst om att bearbeta transkriberingarna av intervjuerna, vilket först gjordes med hjälp av färgkoder, för att sedan lättare placera och jämföra resultaten enligt delprocesserna i det konceptuella ramverket.

3.3 Kvalitetsbedömning


Reliabiliteten i denna studie, det vill säga frågan om ifall en annan forskare kunde komma fram till samma resultat är svårare att bedöma, vilket främst beror på användningen av triangulering (Jick, 1979). Därför rapporterar jag alla steg jag tog i detalj, så att framtida forskare lättare kan följa resonemangen i min studie.
4. LEVERANTÖRSSEGMENTERINGSPROCESSEN I DETALJHANDELN


Vidare framkom det att flera stödfunktioner segmenterar leverantörer. Exempelvis Sohvi Vähämaa, hållbarhetsexpert, berättade att hon skapar segment av leverantörer på basis av vilka länder de är stationerade i, vilken auditering som utförts samt vad resultaten från auditeringen varit (intervju, 27.3 2018). Också logistikavdelningen är intresserad av varifrån produkterna kommer, och framförde att konsolidering av frakt kräver att segment av leverantörer skapas på basis av från vilken hamn deras gods transporteras.

Bristen på en gemensamt använd segmenteringsmodell kan förklaras dels med fakturnet att inköpsorganisationen är produktfokuserad (T.Vanhala, 20.3 2018), vilket betyder att en person är ansvarig för ett begränsat antal leverantörer som levererar liknande produkter. Dels kan det förklaras med att utgången av de olika segmenteringsbehoven är variierande, och ingen i litteraturen framkommen modell kan uppfylla alla dessa önskemål.

**Hur kunde kunskapsdelning inom företaget förbättra leverantörssegmenteringsprocessen, och vad hindrar det?**

Samtidigt som jag kontaktade informanterna för att be om intervjuer, nämnade jag att denna avhandling är nära relaterad till implementeringen av ett möjligt SRM-system i
Kesko. Därav diskuteras systemkrav och -förväntningar, vilka kopplades till intern kunskapsdelning och leverantörssegmentering.

Alla finska informanter var eniga om att en intern kunskapsdelningsplattform, där all leverantörsrelaterad information skulle sparas i, vore nyttig. I nuläget finns det alltför mycket tyst information som inte är sparad någonstans, enligt Tuuli Luoma (intervju, 29.3 2018). Speciellt nyttig vore en plattform, ifall den möjliggjorde olika typer av segmentering. Sohvi Väähämaa exemplifierade med hur mycket tid hon måste sätta ut årligen på att samla in information av flera personer internt, för att sedan skapa rätt så enkla leverantörssegment för den årliga hållbarhetsrapporten.


I situationer som den ovan hjälper ingen segmenteringsmodell, ifall resultatet av den inte kommuniceras internt. Därför föreslår jag, på basis av resultaten från den empiriska undersökningen, att en intern kunskapsdelningsplattform borde skapas.

4.1 Implikationer för ramverket och en typologi av leverantörssegmentering i detaljhandeln

Utforskningen av leverantörssegmenteringsprocessen inom detaljhandeln med hjälp av det konstruerade konceptuella ramverket (figur 1) antydde att en kunskapsdelningsplattform kunde lösa de flesta problemen som framkom.


![Diagram](image)

**Figur 2 Processen kring en intern kunskapsdelningsplattform med förmåga att segmentera leverantörer**

Källa: Egen konstruktion

Som tidigare studier (Rezaei & Ortt, 2013) funnit, ökar behovet av leverantörssegmentering ju mer leverantörer ett företag har att handskas med. Ju fler interna kunskapsdelningshinder, desto viktigare blir det därtöver att implementera en intern kunskapsdelningsplattform. I denna studie identifierades mängden av arbetare involverade i leverantörsrelationen, mängden av kontor, mängden av operativa länder samt mängden av affärsområden som drivande faktorer för en intern kunskapsdelningsplattform.


5. SLUTSATSER
Den här studien bidrar till litteraturen om leverantörssegmentering och SRM genom att ta sig an ett nytt perspektiv, nämligen intern kunskapsdelning. Därutöver adresserades ett gap i litteraturen angående detaljhandeln.

Övergripande ansågs vara att ingen specifik leverantörssegmenteringsmodell kan tillfredsställa alla de segmenteringsbehov som finns inom detaljhandeln. Däremot efterfrågades enkla och flexibla modeller. Vidare framkom det, till skillnad från tidigare presenterade modeller (e.g. Rezaei & Ortt, 2013 & Segura & Maroto, 2017), att leverantörssegmenteringsmodellerna är mest användbara då värdena för varje använt kriterium presenteras som det är och inte genom att ge det ett viktat värde. Detta eftersom åtgärder lättare vidtas när problemen framstår som synliga.


En intern kunskapsdelningsplattform påvisades ha flera fördelar inom ett företag, och desto bättre det utreds vem som producerar, behandlar eller behöver information angående leverantörsrelationer (Wilson & Barger, 2015) och vilka organisatoriska ömsesidiga beroenden (Christensen, 2007) gällande kunskapsdelning det finns, desto fler fördelar torde hittas för denna plattform.
Därför föreslår jag att framtida forskning borde undersöka vilka de interna intressenterna för denna kunskapsdelningsplattform är, samt vilka behov de har. Likväl borde detta forskas ifrån leverantörernas perspektiv, så att deras förväntningar på och möjliga bidrag till denna plattform skulle utredas.

Som ett avslutande råd för fortsatt forskning inom leverantörssegmentering, indikerar denna studie att det är viktigt att diskutera i vilken kontext forskningen är gjord – eftersom denna studie klart kom fram till att detaljhandeln avviker från de områden som tidigare har studerats.
REFERENCES


APPENDIX 1  INTERVIEW GUIDE

Length of interview :_____(minutes)

Title:
Business area and country:

1. **Sourcing strategy**
   1.1 What is our sourcing strategy?

2. **Supplier information**
   2.1 What information do you use for segmenting suppliers?
   2.2 From where, whom and how do you get the information?
   2.3 What information/knowledge regarding suppliers do you share? With whom do you share? How often?
   2.4 What additional information should be included in order to improve the process?

3. **Segmentation**
   3.1 With what kind of tool/method/model do you segment suppliers?
   3.2 How do you define strategic suppliers?
   3.3 When and how often is the segmentation done? How often should it be done?
   3.4 Does the segmentation concern items, services or suppliers?
   3.5 Which criteria do you use? Why are these important?

4. **Outcome of segmentation**
   4.1 What is the intention of the segmentation?
      For instance:
      A) To make specific strategies for segments
      B) To review past performance
      C) To categorize suppliers according to similarities
      D) To identify key suppliers
      E) To identify those suppliers who hold value-adding capabilities?
F) To connect it with supply risk strategies?
G) To make a supply resilience and robustness strategy?
H) Something else, what?

4.2 How is this communicated within the company?

5. Improvement

5.1 How are the outcomes of the process followed (from Q4.1). What are possible actions?
5.2 How would you say this affects the company sourcing strategy?
5.3 How should the supplier segmentation process in your opinion be improved?
5.4 What would be the most critical/ most important area to develop first and foremost?

6. Anything else you would like to share?