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IMPLEMENTING CATEGORY MANAGEMENT IN PROCUREMENT:
A CHANGE MANAGEMENT APPROACH

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ABSTRACT

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Implementing category management in procurement seems to be a complex change management challenge for companies striving to bring their procurement strategy development in a more detailed level. However, there seems to be only little guidance how that should be actually done. Therefore, this study aims at examining category management implementation and related change management in the context of construction industry in order to provide clarity on how the change of successfully implementing category management could be facilitated. The study is conducted as a holistic single-case study that includes also features of action research. The data is collected by conducting 37 semi-structured theme interviews with 41 interviewees in a case company operating in construction industry and by using observations to support the interview data. The results indicate the successful implementation of category management could be facilitated by following a structured process that includes securing the enablers, ensuring smooth execution of category management process steps and gathering the benefits of successful implementation. Furthermore, the process should be supported by change management tools such as the three-step process and force field analysis that help to evaluate the forces either driving or restraining the implementation and to define practices for strengthening or reducing them.

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Kategoriajohtamisen implementointi hankintatoimessa näyttää olevan merkittävä muutoksen hallintaan liittyvä haaste yrityksille, jotka pyrkivät viemään hankintastrategian luomista entistä yksityiskohtaisemmalle tasolle. Kuitenkin konkreettisia neuvoja siihen, kuinka onnistunut implementointi saavutetaan, näyttää olevan vähän. Siksi tämä tutkimus pyrkii tarkastelemaan kategoriajohtamisen implementointia ja siihen liittyvää muutoksen hallintaa rakennusalan näkökulmasta. Tarkoituksena on selvittää, kuinka onnistuneeseen kategoriajohtamisen implementointiin liittyvää muutosta voitaisiin helpottaa. Tutkimus on toteutettu holistisena tapaus-tutkimuksena, joka sisältää myös toimintatutkimuksen piirteitä. Data on kerätty toteuttamalla 37 puolistrukturoitua teemahaastattelua 41 haastateltavan kanssa rakennusalalla toimivassa case-yrityksessä, ja haastatteludataa on täydennetty havaintojen avulla. Tulokset osoittavat, että kategoriajohtamisen onnistunutta implementointia voidaan parhaiten helpottaa seuraamalla strukturoitua prosessia, joka koostuu mahdollistajien takaamisesta, kategoriajohtamisen prosessin sujuvan läpiviennin varmistamisesta sekä hyötyjen keräämisestä. Lisäksi prosessia tulisi tukea muutoksen hallinnan työkalujen kuten kolmivaiheisen muutosprosessin ja voimakenttäanalyysin avulla. Ne helpottavat analysoimaan tekijöitä, jotka tukevat tai vastustavat muutosta sekä auttavat löytämään keinoja voimien lisäämiseen ja heikentämiseen.

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1 INTRODUCTION

During the recent decades, the strategic role of purchasing has been acknowledged increasingly and the concept of strategic purchasing has emerged and gathered wider attention (Carr & Smeltzer, 1999). The increasing importance of purchasing and its strategic role have been accelerated for example by rapid environmental and organisational changes such as increased outsourcing, globalisation and e-business (Spina et al., 2013) that have accounted for the increased share of purchasing from the firm's turnover (Schiele, 2007). Typically, purchasing can be considered as strategic when it has a formally written long-term plan that is continuously aligned with the company's strategic plans and includes the kinds of products and services purchased (Carr & Smeltzer, 1997). Hence, a clear link between strategic purchasing and company strategy is crucial (Ellram & Carr, 1994; Carr & Smeltzer, 1997; Virolainen, 1998; Carr & Smeltzer, 1999; Nollet et al., 2005; Paulraj et al., 2006; González-Benito, 2007; Hespings & Schiele, 2015) as it is needed to realise the effects that purchasing can have on the company performance (Carter & Narasimhan, 1996; Narasimhan & Das, 2001). Therefore, at its best, strategic purchasing can have a significant contribution to the competitive advantage of a firm (Monczka et al., 2009).

However, given the importance of linking overall business strategy and purchasing strategy development in functional level, Hespings and Schiele (2015) see a need to address the purchasing strategy development more comprehensively by taking more levels of analysis into account, and defining and executing the strategies also in category and supplier level so that different contextual factors in each supply market can be considered. On the other hand, category management is an approach that serves the purpose and provides an efficient process for category-level strategy development and execution in procurement context (O'Brien, 2015). Category management has been already applied widely in practice among industrial firms (Heikkilä & Kaipia, 2009), but despite the wide interest and application among the practitioners, category management in procurement context has been so far mainly lacking the academic interest, which makes it a potential area for the future research (Heikkilä & Kaipia, 2009; Hespings & Schiele, 2015). On the contrary, in marketing context category management

has a longer history, but still the approach significantly differs from the one that has been adopted in the purchasing context (O'Brien, 2015). Hence, category management, let alone its implementation, are clearly contemporary topics in purchasing context and should be addressed increasingly also in academic research.

Another concept that has gathered wide attention in organizational context is change, or change management more precisely. Change can be considered as an ever-present phenomenon in organisations, but it is also evident that the pace of change is nowadays higher than ever before, which has made change management a must-have skill in every organisation (Moran & Brightman, 2000; By, 2005). Change management has a long research tradition including both quantitative and qualitative studies with extensive coverage already starting from the 1950s when the planned approach started to emerge as a result of Kurt Lewin's influential work that dominated that the change management field before the more recent alternative emergent approach became another major stream (Bamford & Forrester, 2003). Despite the strong academic interest in change management generally, the theme has been mainly lacking academic contributions in procurement context as there are only few publications (e.g. McIvor & McHugh, 2000; Day & Atkinson, 2004; Johnson & Leenders, 2004; Lintukangas et al., 2009; Andreasen & Gammelgaard, 2018) focusing on the different aspect of the change in procurement setting. Nevertheless, change management in procurement context clearly calls for further research as also procurement needs more change management competencies in the future in order to survive in the increasingly uncertain and dynamic environment (Schneider & Wallenburg, 2013).

Not only category management and change management in procurement context as separate themes are important and calling for further research, but they are also highly interrelated as according to O'Brien (2015) managing change is one of the foundations of category management and unquestionably needed when implementing category management. Hence, it is important to bring the two separate topics together and discuss them in relation to each other. This research aims at filling the gap and discusses the successful implementation of category management from the change management perspective. Thus, the purpose of the

study is to create clear guidance for the successful implementation of category management and show the value and role of change management in the implementation.

1.1 Background of the study

The research is conducted as a commission for a case company operating in the construction industry. Inside the construction field, the company focuses on both project and service business. In general, purchasing and supply management issues have gained increasingly attention in the construction industry since there is a clear link to performance improvements (Ellegaard et al., 2010). The same applies for the case company since procurement and logistics have been identified in the strategy work as one of the main areas where performance improvements can be achieved. Due to this significant impact, procurement and logistics have been named as one of the strategic focus areas in which special strategic actions are taken as part of the strategy execution. Hence, a clear link between the company strategy and procurement strategy exists.

As a part of the strategy execution, the company is undergoing a significant change in procurement that builds around implementing category management in a global level across the divisions around the Europe. So far, the procurement departments of the divisions have been operating autonomously and co-operation between them has been occasional and unstructured. However, the new approach requires a significant amount of cross-divisional co-operation in order to succeed. The success of this co-operation, in turn, is mainly depended on the change that is required in attitudes and ways of working. On the contrary, changing those kinds of established habits is often easier said than done, and the change process is likely to face several challenges. Thus, finding tools, practices and ways to facilitate the change process would be crucial to guarantee the success of category management and the overall strategy implementation.

Therefore, from theoretical perspective, the research problem focuses on category management, its implementation and the change management related to implementing this

kind of procurement initiative. Both category management and change management have not yet received the full attention in procurement literature (see e.g. Heikkilä & Kaipia, 2009; Hesping & Schiele, 2015; Schneider & Wallenburg, 2013) even though especially change management in procurement causes severe challenges for many companies in practice. Thus, in addition to its managerial contribution for the case company in the form of implementation and change management guidance, the research can increase the academic understanding related to category management, its implementation and the required change in procurement context. However, as the research is conducted as a single case study from a perspective of one company, the results are not meant to be generalizable straight to other contexts. Still, the results may provide examples and best practices that can be validated and developed in further research.

1.2 Research objectives

Based on the background information above, the research problem is narrowed down to a change management challenge related to the implementation of category management in the case organisation. Thus, the two main focus areas are category management and change management which are also reflected in the research questions. In order to tackle the research problem, it will be approached through following research questions that are divided into one main research question and four supporting sub-questions:

How to facilitate the change of implementing category management successfully?

- a) What are the enablers of category management process?
- b) What are the driving and restraining forces that either enable or decelerate the implementation of category management?
- c) Which practices can be used to strengthen the driving forces and reduce the restraining forces?
- d) What are the benefits of the successful implementation of category management?

The purpose of the sub-questions is to facilitate finding the solution for the main question that aims to provide guidance for the organisation in the category management implementation process. The first sub-question focuses on the enablers of category management process and aims at identifying the preconditions that are required to succeed in the implementation. Thereafter, the second and third questions focus on the change that is needed to achieve the desired future state of successful implementation. These two questions approach the change through the force field analysis introduced by Lewin (1947), and hence, the focus is on discussing the driving and restraining forces of the change. The last sub-question contributes to the desired target state by identifying the benefits that the successful implementation may bring. Assessing the target state is crucial because without a clear goal the change has no direction. In the end, by combining the output from the sub-questions, an answer for the main research question can be proposed.

Therefore, the research aims at creating clear guidance with relevant change management interventions to support the successful implementation of category management. The guidance provides a structured way of facilitating the significant strategic change under investigation. The goal is to offer concrete steps, practices and supporting actions that the case company can utilize during implementing the category management process. In addition to the practical relevance for the case company, the study also aims at filling the gap in the existing academic literature related to category management and change management in procurement context. Furthermore, by discussing them together, the research also provides new avenues on the interrelated nature of the two concepts. Figure 1 below provides an outline of the theoretical framework of the study, illustrates the interrelated nature of the main themes and simultaneously shows the research gap the thesis aims to contribute.

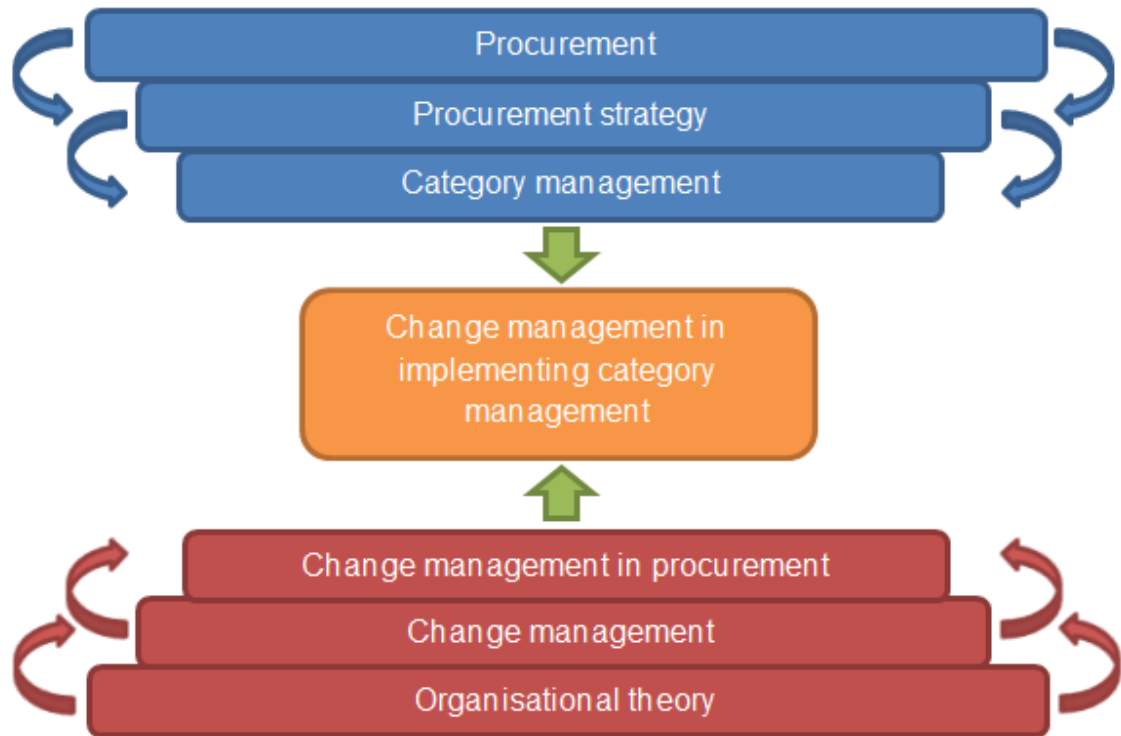


Figure 1. Theoretical framework of the research

When it comes to the limitations of the study, instead of developing the category management process itself, the focus is targeted to describing the category management process, its implementation and relating the change management aspects into it. The agreed current category management process in the case company will be used as a baseline for the implementation actions and change management needs. However, as the case company is currently focusing only on pilot subcategories, some process development suggestions can be given if they are seen relevant from the change management perspective. Furthermore, the selection of a single-case study methodology limits the perspective of the study to cover only the company in question. Thus, it must be acknowledged that company- and industry-specific factors may affect the results, which makes the generalisability of the results challenging and not even meaningful. Therefore, the results should be interpreted carefully and the context should be acknowledged and taken into account.

1.3 Research methodology

The research is conducted as a qualitative research by utilising two qualitative research approaches, namely case study and action research. Qualitative methods typically allow considering the complexity of concerned phenomena in their context (Eriksson & Kovalainen, 2008). Hence, it is also a relevant approach for this research because implementation and change can be considered as complex and context-specific phenomena since they are strongly impacted by contextual factors such as organisational culture and values.

Furthermore, selecting case study approach, or more precisely a holistic single-case design, as an approach is also supported by the required in-depth understanding about the phenomenon as that is commonly seen as the main strength of case studies (Ellram, 1996; Kähkönen, 2011). As stated before, both category management and change management are relatively novel topics in procurement context, and according to Ellram (1996) case study is suitable choice for such emerging topics that require exploratory approach. On the other hand, as action research is characterized by active collaboration and involvement with the business when solving the research problem (Eriksson & Kovalainen, 2008), this study also contains features of action research because the researcher is involved in the category management implementation process in the case company.

When it comes to the data collection, the majority of primary data for the empirical study is collected by conducting 37 semi-structured theme interviewees with 41 interviewees from the case company. The interviewees cover all seven divisions of the company across the Europe. In addition, employees from both procurement and business operations are interviewed so that the variety of perspectives in terms of data triangulation can be ensured. Most of the interviews, precisely 27, were conducted face-to-face, and remaining ten interviews were conducted via audio conference system due to wide geographic coverage of the interviewees. As the study includes also features of action research, it is natural that observations are used as a second main data collection method. For analysis purposes, the interview data was coded along the main themes derived from the research questions and further categorised based on different appropriate frames.

1.4 Key concepts of the study

Purchasing can be considered as a functional group in the organisational chart but also as a functional activity that considers buying goods and services. The term can be used interchangeably with procurement. (Monczka et al. 2009) However, some authors make a clear distinction between purchasing and procurement. For example van Weele (2014) relates purchasing to managing company's external resources so that the supply of goods, services, capabilities and knowledge enables running, maintaining and managing company's primary and secondary activities, whereas procurement encompasses all the activities needed to deliver the product from supplier to its final destination. In this research, terms purchasing and procurement are used interchangeably, and they consider both the functional group (e.g. purchasing function) and the functional activity of buying-related tasks.

Category management can be defined differently depending on the context. In marketing context, category management can be defined for example as "a process that involves managing product categories as business units and customising them on a store-by-store basis to satisfy customer needs" (Nielsen 1992, 9). On the other hand, in procurement context, category management can be understood as "the practice of segmenting the main areas of organisational spend on bought-in goods and services into discrete groups of products and services according to the function of those goods or services and, most importantly, to mirror how individual marketplaces are organised" (O'Brien 2015, 6). The key difference between marketing and purchasing perspectives relates to the issues under segmentation since in marketing perspective finished goods are segmented, whereas in procurement perspective the goal is to segment the third-party spend of a company (O'Brien, 2015). In this research, the purchasing perspective of category management is adopted.

Category, in the purchasing context, is a part of third-party spend that serves the same function and mirrors the organisation of the marketplace (O'Brien, 2015). Typically products or services that substitute each other are bundled under the same category (Nielsen, 1992). In procurement, categories are typically grouped into direct and indirect categories from which

the former are directly incorporated into the final product or service, and the latter are non-product related or only enable the functioning of the company (O'Brien, 2015).

Category team can be considered a building block of category management that is formed to run the category management process for an assigned category (O'Brien, 2015). In practice, the teams are involved in developing and implementing category strategies in a company-wide level (Englyst et al., 2008). O'Brien (2015) uses the name category team, but also alternative names exist as for example Englyst et al. (2008) and Glock and Hochrein (2001) use the concept of commodity team instead. Whether called as category team or commodity team, this type of team can be categorised under a larger umbrella concept of sourcing team (Englyst et al., 2008; Glock & Hochrein, 2011). As category in this context encompasses all segments of a third-party spend and not only standardized commodities (Heikkilä & Kaipia, 2009), also here the name category team is adopted in order to avoid the misinterpretation regarding the scope of a category.

Change management in organisational context can be defines as “the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers”. Even though the name suggests that change management is about managing the change itself, it is actually more about managing those people who face the change. (Moran & Brightman 2000, 66) On the other hand, when presented figuratively, change management can be considered as handling the complexities of travel (McCalman et al., 2015). Therefore, change management involves a process perspective, but instead of the process itself, in the context of organisations, people are in the core of the concept.

1.5 Outline of the study

The research begins by discussing the relevant theoretical foundations. The theoretical part is divided into two parts according to the two main literature disciplines: the first one focusing on procurement, category management and its background, and the second theoretical chapter

focusing on organisational change management and its practices and models that facilitate the change. As both category management and change management in procurement context are only emerging topics, the literature cannot be limited to construction industry. In terms of category management, there is also need to widen the scope to those procurement topics that create the background for category management. Furthermore, also in the change management chapter, there is a need to utilise the general change management literature and apply its most relevant parts to the procurement and category management context.

After discussing the theoretical background, the methodology of the study is presented more in detail. The research design is introduced regarding the selected research approaches, data collection methods and data analysis techniques. In addition, the reliability and validity of the study are evaluated. Next, the focus is targeted to the empirical research. The empirical part includes the analysis of the empirical data and presents the main outcomes derived from the collected data. Finally, in the sixth chapter the answers for the reaserch questions are presented and discussed in relation to previous findings in the existing literature. Furthermore, the theoretical and managerial implications are collected together. Finally, limitations and suggestion for the further research complete the study.

2 CATEGORY MANAGEMENT AND ITS BACKGROUND

So far, the concept of category management has been mainly under consideration in the context of retail industry in which it has gathered relatively large interest. Dussart (1998) has even classified category management as a buzzword among the retailing companies. In the big picture, category management has usually been approached as a part of efficient consumer response (ECR) that has emerged in the early 1990s in the fast moving consumer goods (FMCG) industry especially among food retailers (Aastrup et al., 2007). In this context, category management can be defined for example as “a process that involves managing product categories as business units and customising them on a store-by-store basis to satisfy customer needs” (Nielsen 1992, 9). However, despite the interest among the retail industry, according to Dussart (1998), there is still no clear consensus about what category management actually is in the retail business.

However, when adopting a wider perspective outside the retail industry, the picture of category management becomes even more diverse. As noted already, the academic literature of category management focuses often on the so-called marketing perspective of category management that is popular among retail industry, whereas the purchasing perspective on category management significantly differs from the marketing perspective. The kernel idea about the categories of products remains the same, but instead of finished goods, the purchasing perspective aims at segmenting the third-party spend based on the function of the products or services and the separate marketplaces they originate from. This is significantly different approach than in the marketing perspective where the consumer’s usage of the product drives the segmentation. (O’Brien, 2015) Many organisations rely on purchasing category management since they see it as a potential tool to respond the current globalising business environment and to benefit from bundled volumes (Heikkilä & Kaipia, 2009). However, as the concept of category management has been in the first place developed for practical application, the academic contributions have been rare so far (Hesping & Schiele, 2015). Thus, Hesping and Schiele (2015) propose that future research could build on existing concepts such as category management.

On the other hand, closely related to category management, the organisation of purchasing function has received increasing attention, and the way of organising the function according to commodity groups can be seen as one alternative (Glock & Hochrein, 2011). This means that procurement would be organised based on product groups that are led by respective category managers (Iloranta & Pajunen-Muhonen, 2008). In practice this means that a centrally-coordinated team develops and implements company-wide strategies for each product group or commodity (Englyst et al., 2008). The organisation based on product groups can be further extended by the lead buyer model in which cross-corporate commodity teams are led by lead buyers that represent the business unit with most significant spend in the given product group (Iloranta & Pajunen-Muhonen, 2008). However, Glock and Hochrein (2011) find out that even though the lead buyer model has gained significant attention in practice, there are not much academic contributions related to it, and therefore, researchers should start analysing it. Overall, where the category management in purchasing adopts more of a process approach (O'Brien, 2015), the purchasing organisation literature clearly lacks the process point of view even though some similar elements exist.

All in all, the idea of category management in purchasing is not completely new since similar activity has been practiced before in direct materials and labelled as commodity management. However, category management takes even broader perspective and aims at categorising the whole spend of a company including many new activities in addition to the standardised commodities that are usually considered. (Heikkilä & Kaipia, 2009) Thus, as an overall conclusion, it can be stated that some basis for category management in the procurement context exists, but as the current literature is mainly limited to practitioner-focused books (e.g. O'Brien, 2015) and couple of academic publications (e.g. Monczka & Markham, 2007; Heikkilä & Kaipia, 2009; Trautmann, Bals & Hartmann, 2009), there is a clear need for further research in this area. Therefore, in order to clarify the theoretical background of category management, this chapter links category management to procurement strategy and the organisation of procurement function, discusses category management process and clarifies challenges, drivers and benefits related to the implementation of category management.

2.1 Procurement strategy

The understanding of the strategic importance of procurement has been growing constantly and increasingly acknowledged (Paulraj et al., 2006). It is no longer a question whether procurement has a significant role in creating value for the company (Nollet et al., 2005). Especially, the increase of purchasing volume expressed as a percentage of a firm's total turnover has remarkably accelerated the increasing strategic interest (Schiele, 2007). Furthermore, the increasing global competition has also accelerated the need to recognise the strategic importance of procurement to fully utilise the benefits that supply markets are able to provide (Iloranta & Pajunen-Muhonen, 2008). However, in order to realise the strategic potential from the supply markets, procurement must develop a solid procurement strategy that contributes to the overall firm strategy and its goals (Nollet et al., 2005).

According to Hesping & Schiele (2015) procurement strategy development can be structured through five different hierarchical levels (Figure 2). As it is commonly acknowledged, the strategic alignment between procurement strategy and the high-level firm strategy is an essential success factor of a good procurement strategy (Ellram & Carr, 1994; Virolainen, 1998; Nollet et al., 2005; Paulraj et al., 2006; González-Benito, 2007; Hesping & Schiele, 2015). When there is a clear link between overall company strategy and procurement strategy, procurement can be considered also as a strategic function and procurement strategy is no longer only an independent program driven by the procurement function (Ellram & Carr, 1994). However, nowadays there has been an increasing understanding that strategies should be defined further and differentiated for example for separate purchasing categories and suppliers (Hesping & Schiele, 2015). When going behind the single procurement strategy, building forward-looking category strategies for each product group is seen as one of the key success factors for procurement (Monczka & Markham, 2007). Furthermore, Hesping and Schiele (2015) suggest that each category should be addressed from the perspective of tactical sourcing levers and finally, each supplier should have separate strategies.

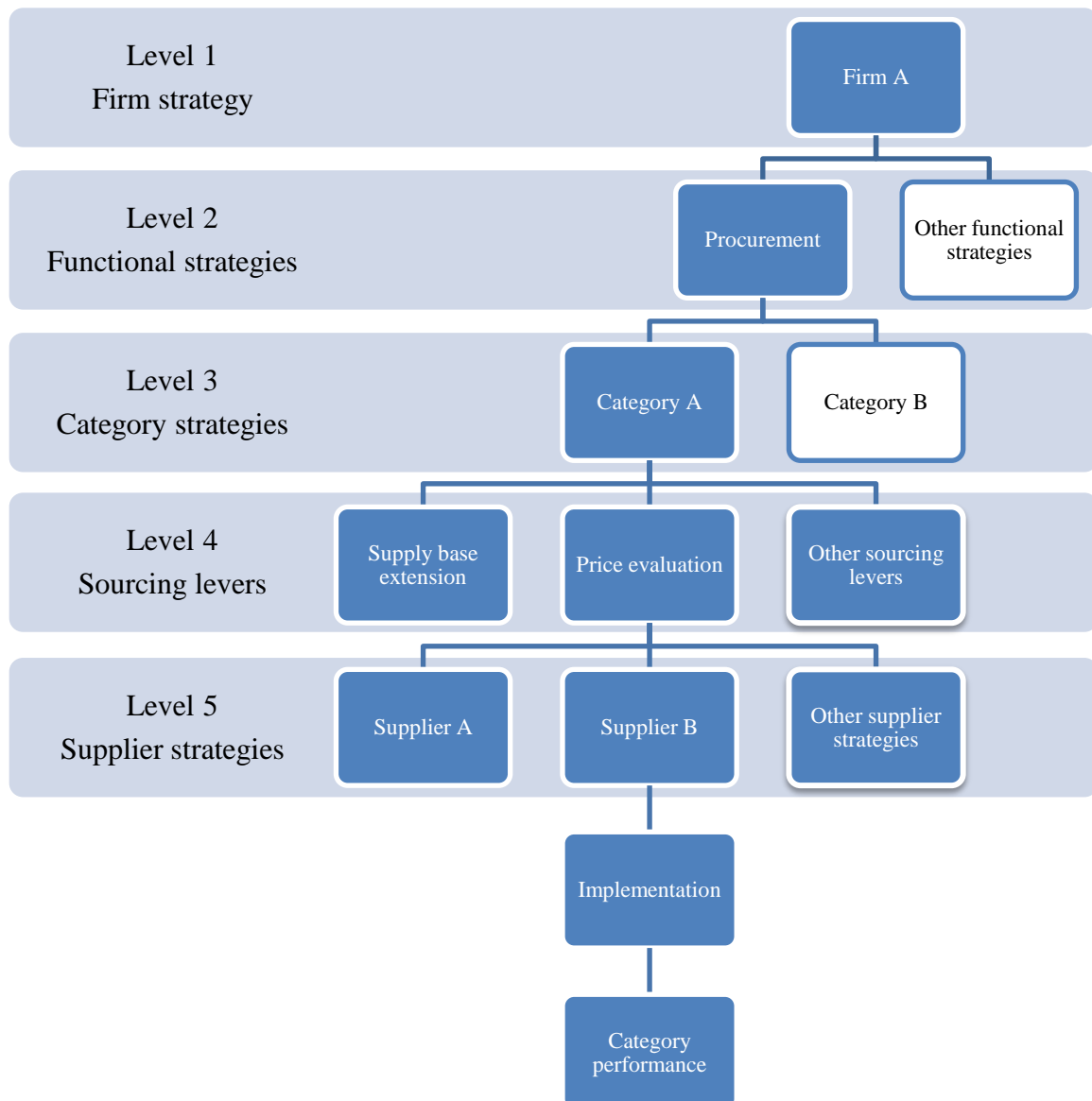


Figure 2. Levels of procurement strategy development (modified from Hesping & Schiele, 2015)

As the alignment between company strategy and procurement strategy is widely understood and acknowledged, it is important to further understand procurement strategy as a functional strategy. The main target of functional strategies, such as procurement strategy, is to determine the optimal strategic scope of firms function based on the goals set in the firm's overall strategy (Hesping & Schiele, 2015). Such functional strategies are typically considered as

medium-term plans (Nollet et al., 2005). When it comes to procurement strategy, its target is to define overall procurement policies and capabilities that guide and enable the entire company in all procurement-related activities (Hesping & Schiele, 2015). To give some examples of the content of procurement strategy, Nollet et al. (2005) state that procurement strategy should encompass strategic concerns and scope (e.g. sourcing decisions/strategies, supplier selection strategies and outsourcing decisions), tactical concern and scope (e.g. supplier base management, risk management and contract management), and operational concern and scope (e.g. quality, volume and cost).

As a conclusion, procurement strategy typically consists of series of diverse plans that are consolidated in a master plan that ensures coherence and integrity across them and shows the contribution to firm's overall strategy (Nollet et al., 2005). As discussed before, Hesping and Schiele (2015) divide the subordinate plans into three hierarchical levels that are category strategies, tactical levers and supplier strategies. As the level of category strategies is the most relevant for this reaserch, it will be discussed more in detail next.

2.2 Procurement strategy in category level

As it is considered relatively difficult to define a single overall strategy for the whole procurement function, there is a clear need to define different strategies and tactics for a diverse set of purchases and suppliers (Hesping & Schiele, 2015). Actually, developing strategies for separate categories is one approach for fulfilling the strategic role of procurement (Rendon, 2005). Therefore, category strategies can be seen as a tool and subordinate plan to execute the main procurement strategy.

In order to define category strategy and its purpose more in detail, there must be a solid understanding what is meant by a category. In procurement context, category is a part of third-party spend that serves the same function and mirrors the organisation of the marketplace (O'Brien, 2015). Thus, category represents a group of supplies or services (Rendon, 2005). Categories are not to be considered exactly the same as simple products or homogenous raw

materials since instead they represent families of goods or services sourced from an overlapping number of suppliers (Hesping & Schiele, 2015). Category strategies, on the other hand, aim at providing both the details and the actions that are to be followed when managing the category under consideration (Monczka et al., 2009). Hence, category strategy represents the category level of strategy development (Hesping & Schiele, 2015). When it comes to the motivation behind category strategies, their main aim is to use external resources and capabilities so that the maximal value for the company can be created (Monczka & Markham, 2007). The advantage is also that differentiating the strategy for each category allows taking the different contextual factors of separate supply markets into account (Hesping & Schiele, 2015).

The category level of strategy development that encompasses developing and implementing company-wide strategies for different groups of products and services can be labelled from one perspective as commodity management (Englyst et al., 2008). However, Hesping and Schiele (2015) suggest that instead of the word “commodity”, the word “sourcing category” should be used in order to avoid misconception that only traditional raw materials are considered. Similarly, Heikkilä and Kaipia (2009) prefer to label the approach as category management since the term commodity management is often associated only with direct materials, whereas category management encompasses categorising the whole purchasing spend of the company. To conclude, category management can be seen as an essential tool to execute the strategy development in category level because according to O’Brien (2015) the specific strategies for a separate part of spend are shaped, defined and realized through category management.

2.2.1 Forming procurement categories

As the strategy development calls for developing different strategies for different areas of a company’s third-party spend, the next relevant question is related to how those categories should be formed. However, there are only very few academic contributions considering how the procurement categories should be formed in practice (Heikkilä & Kaipia, 2009). Hence,

the evidence for that is not very strong and practices may vary largely as Heikkilä and Kaipia (2009) conclude.

According to O'Brien (2015) determining the categories may seem initially quite straightforward, but in reality it requires several considerations. When starting to segment the third-party spend, the steps provided in Figure 3 act as a guiding principle.

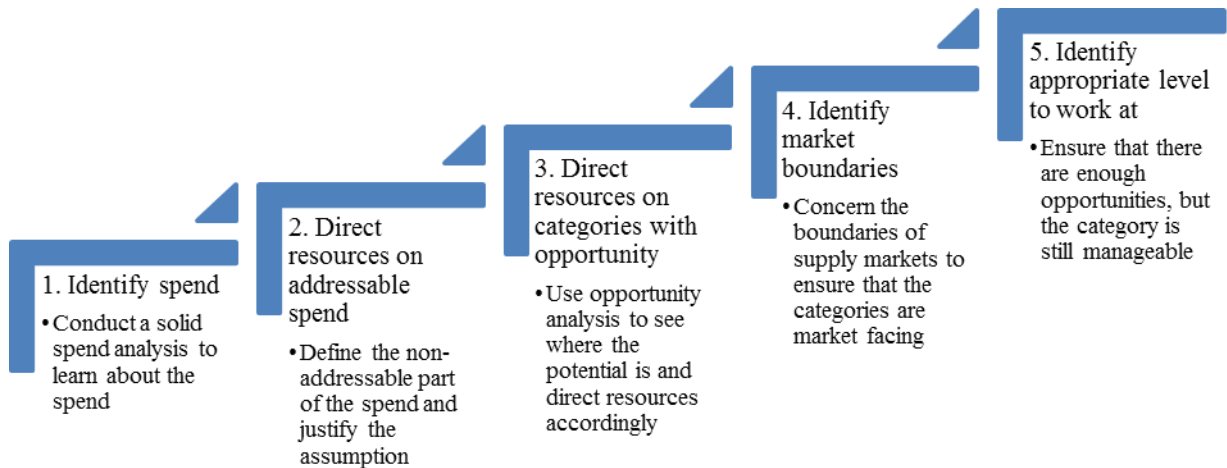


Figure 3. Steps for segmenting the third-party spend (based on O'Brien, 2015)

Spend analysis that aims at answering the questions of who, what, when, where, why, and how regarding the expenditures of an organisation (Partida, 2012), creates clearly the basis for forming the procurement categories for category management and category-level strategy development. A well-prepared spend analysis provides a full visibility to spending, enables efficient sourcing decisions and supports organisation in identifying the cost saving opportunities (Limberakis, 2012), and hence, can be seen as a prerequisite for successful category management (Monczka & Markham, 2007; Partida, 2012). However, companies have often significant difficulties in conducting a profound spend analysis since usually the data is not directly available in the company's reporting systems (O'Brien, 2015; Monczka et al., 2009). In addition, the lack of in-house data analysis skills may provide a significant barrier for initiating the spend analysis internally (Limberakis, 2012). To overcome the obstacle companies need either to develop an alternative solution such as reviewing purchase

orders from a selected time period (O'Brien, 2015) or to invest in innovation and strive to automate the spend analysis integration (Limberakis, 2012).

As O'Brien (2015) proposes, another crucial aspect is to define the appropriate level to work at. Usually, the number of categories can increase quickly, which leads to a need to organise the spend into a small number of main categories that include several different subcategories (Heikkilä & Kaipia, 2009). As an example, the main category of information technology may include smaller subcategories such as desktops, laptops, keyboards, servers and other relevant items (Monczka et al., 2009). However, the organisation of this hierarchical structure of the procurement categories seems to vary significantly among different companies since Heikkilä and Kaipia (2009) conclude that the amount of main categories can vary from three to sixty and the amount of subcategories can be something between zero and two hundred. When organising between the main categories and the subcategories, O'Brien (2015) suggests taking into account how the market is organised so that the optimum division between the market-facing subcategories and the overarching larger entities can be found.

2.2.2 Portfolio analysis as tool for categorising

Purchasing portfolio analysis has been a common method for undertaking category management and developing sourcing strategies already during couple of decades (Cox, 2015). The most well-known and popular portfolio model in the procurement context is presented by Kraljic (1983) who strives to position the purchased goods into four different quadrants based on their importance and the complexity of the supply market. Thus, today this approach is often called as "the Kraljic's matrix" (Hesping & Schiele, 2015). The Kraljic matrix has inspired several authors and portfolio models have been discussed widely in the procurement context by today (see e.g. Olsen & Ellram, 1997; Gelderman & van Weele, 2003; Gelderman & van Weele, 2005; Trautmann et al., 2009; Cox, 2015).

The key idea of the Kraljic's matrix is to categorise the purchased goods based on two dimensions (Kraljic, 1983). Gelderman and van Weele (2003) have named those dimensions

the profit impact and the supply risk, but Kraljic (1983) originally referred them as the importance of purchase and the complexity of supply market. However, in the end, the classification results in a 2x2 matrix with four different categories of goods, namely leverage, strategic, bottleneck and non-critical items (Gelderman & van Weele, 2003). The dimensions and categories of the Kraljic's matrix that form the basis for the categorisation are illustrated in Figure 4.

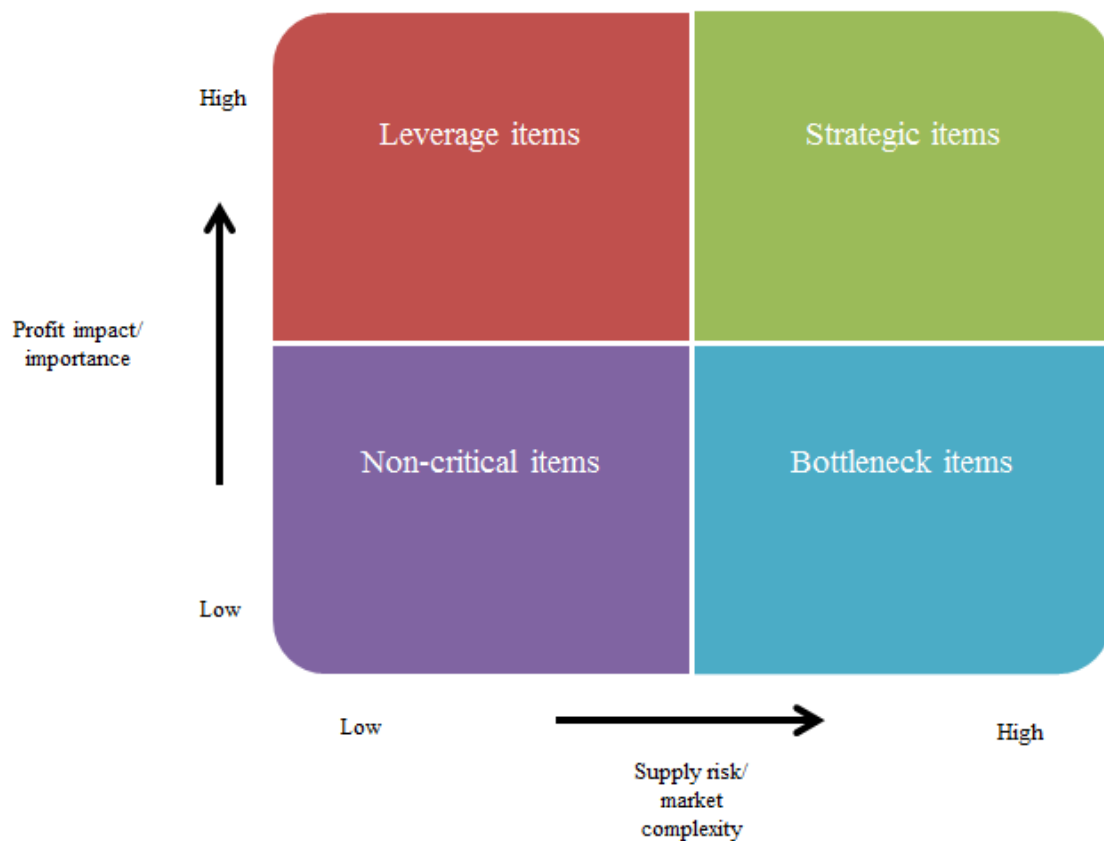


Figure 4. Dimensions and categories of the Kraljic's matrix (modified from Kraljic, 1983 and Gelderman & van Weele, 2003)

However, the Kraljic's matrix does not only help to categorise the purchased goods, but it also includes a core idea that each of the four categories require a distinctive approach how to handle them (Kraljic, 1983). Therefore the matrix serves as a valuable tool for developing differentiated strategies for the distinct categories of products (Gelderman & van Weele, 2005). The strategic items that have both high profit impact but also a high level of supply risk require substantial attention even from the top management level for example regarding the

make-or-buy decisions, risk analysis, market research and contingency planning (Kraljic, 1983). The high level of supply risk indicates that number of potential supplier is very limited, which means that traditional tendering-based approaches are not applicable and companies must invest in developing co-operative long-term relationship with the supplier (Iloranta & Pajunen-Muhonen, 2008). Bottleneck items are typically problematic for the company since despite the low profit impact the level of supply risk is high, which requires companies to use volume insurances, supplier control, safety stocks and backup plans, and also to look for alternative suppliers to secure the supply of these complex items (Gelderman & van Weele, 2005). Leverage items, in turn, provide companies a lot of opportunities (Iloranta & Pajunen-Muhonen, 2008) since in this category company can leverage its full purchasing power, tendering and target pricing strategies, and substitute the products (Kraljic, 1983). Finally, regarding the non-critical items, company should strive to minimise the transaction costs for example through e-procurement solutions (Gelderman & van Weele, 2005).

Thus, it is clear that the value of purchasing portfolio models such as the Kraljic's matrix is in developing differentiated strategies for the different groups of products and services (Gelderman & van Weele, 2005). Moreover, Olsen and Ellram (1997) state that the portfolio models can help the procurement function to allocate their scarce resources. Despite the clear benefits that the portfolio models can provide, they have encountered some criticism due to certain problems and open questions. According to Dubois and Pedersen (2002) the portfolio models focus only on 'given' products in the context of dyadic relationships, which neglects both the fact that actually the products might be based on the joint development of the parties and the network perspective of other relationships affecting the buyer-supplier relationship in question. There are also problems related to measurement issues since for example Nellore and Söderquist (2000) state that the dimensions used in the models are only estimates of the parameters that are supposed to be measured. Furthermore, the portfolio models often focus on single items without considering the interdependencies between the items, and they also typically provide several strategy options without any guidance on choosing between the resulting strategies (Olsen & Ellram, 1997). Finally, Gelderman and van Weele (2003) see that the Kraljic's matrix lacks guidance regarding the movements within the matrix.

To fill in the gap regarding the movements within the Kraljic's matrix, Gelderman and van Weele (2003) have completed and extended the matrix to cover also the strategic directions for each category as the Figure 5 represents. In each category the strategic directions can be divided into two options that are either holding the current positions or moving to another position, in other words, towards another more favourable category.

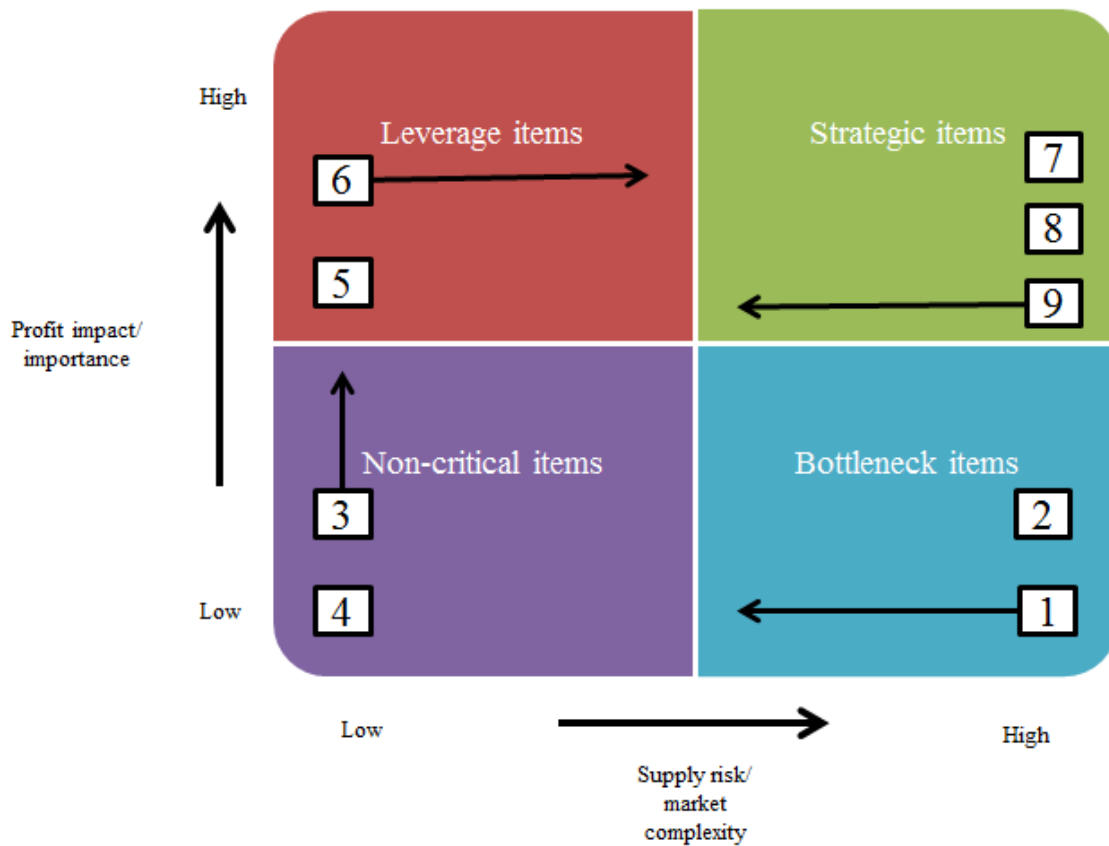


Figure 5. Strategic directions of the Kraljic's matrix (modified from Gelderman & van Weele, 2003)

The directions Gelderman and van Weele (2003) are proposing in the Figure 5 above can be summarised as follows:

Bottleneck items:

1. Changing the position: In order to move towards the category of non-critical items, company can standardise and simplify the product and also look for alternative suppliers, which both reduce dependency and risk.

2. Holding the position: When the other options are impossible to implement, the dependency must be accepted, and the company should focus on assuring the supply and minimising the negative effects, for example through contingency planning, long-term contracting and safety stocks.

Non-critical items:

3. Changing the position: To change the non-critical items into the leverage items, companies should strive to pool their requirements and aim at ordering larger quantities, for example by utilising framework agreements or e-procurement solutions.
4. Holding the position: If there is no opportunities for pooling, individual ordering needs to be accepted, but instead, the goal is to minimise the indirect administrative costs.

Leverage items:

5. Holding the position: The leverage position is often preferred due to its buyer-dominant nature. Therefore, holding this position by exploiting the purchasing power of a company is a commonly used strategy that includes typically aggressive tendering and short-term contracting.
6. Changing the position: Sometimes, even though relatively seldom, there is a need to change the type of relationship towards more collaborative nature and develop a strategic partnership. This option can be typically considered with technically advanced suppliers that can significantly contribute to the competitive advantage of the buying company.

Strategic items:

7. Holding the position: The first obvious option is to maintain the strategic partnership that is a long-term relationship based on mutual trust, commitment and open information exchange.
8. Holding the position: However, the position in strategic quadrant is not always chosen due to unfavourable conditions for example related to a monopoly position or high switching costs, which results in a “locked-in” partnership that needs to be accepted.
9. Changing the position: The strategic partnerships do not always work as desired and sometimes, terminating the partnership and looking for a new supplier might be a preferred option if the current strategic partner is performing poorly.

Even though the Kraljic's matrix and its applications seem to have a dominant position in the purchasing field, also other portfolio models have been developed as a response to the shortcomings of the Kraljic's matrix. Schuh et al. (2009) see power dependencies as a significant factor affecting buyer-supplier relationships and propose to use the concepts of supply power and demand power when categorising supply relationships. This approach results in a portfolio model called Purchasing Chessboard that responds to the need to develop new supply strategies in supplier dominant power situations that has been increasing recently and creating a so-called sellers' market (Schuh & Pérez, 2008). The Purchasing Chessboard consists of three structuring levels starting from four basic strategies that translate into sixteen levers which in turn, can be specified further into sixty four methods that provide a real operating tool for procurement (Schuh et al., 2009). However, according to Cox (2015) both the Kraljic's matrix and the Purchasing Chessboard still lack enough rigorous and robust analysis that would be required when making the sourcing decisions. Therefore, he proposes an alternative approach called the Sourcing Portfolio Analysis (SPA) that combines criticality and power analyses into one matrix that results in sixteen potential sourcing scenarios (Cox, 2015). Cox (2015) also states that this type of strategy development requires a sequential process including five phases that are scoping analysis, dynamic leverage analysis, static leverage analysis and sourcing strategy selection, tactical levers analysis and go to market.

To conclude, even though portfolio models clearly have their drawbacks, it seems that practitioners have found ways to overcome the challenges (Gelderman & van Weele, 2003) and these models can be seen as valuable tools in developing differentiated category strategies (Gelderman & van Weele, 2005). However, procurement category management clearly tends to take even wider perspective since according to O'Brien (2015) it sees category management as a circular process and portfolio models only as a single tool among others when developing the sourcing strategy for a category. Cox (2015) already adopts the processual view for the portfolio model strategy development as described above. Still, his approach considers the portfolio model as a single dominant method for the strategy development, whereas O'Brien (2015) acknowledges the role of portfolio models, but takes also other sources of input into account in the category-level strategy development.

2.3 Organisation of procurement

Procurement strategy development and its execution in category level must be also discussed related to the structure of how procurement is organised in a company. Different business units inside a corporation can either develop the category strategies on their own, or alternatively Rozemeijer (2000) sees coordinated strategies among business units as one form of creating purchasing synergy that can lead to significant benefits. However, creating purchasing synergies often requires more central coordination efforts (Faes et al., 2000), which again emphasises the discussion about the purchasing organisation's degree of centralisation that will be reflected next in this chapter. In addition, cross-functional category teams will be presented as a possible option when balancing between the pros and cons of centralisation in the category-level strategy development.

2.3.1 The continuum of centralisation: centralised vs. decentralised

One of the most common discussions regarding the organisation of procurement function relates to the degree of centralisation (Glock & Hochrein, 2011). Typically, the discussion considers the trade-off between centralised and decentralised structure, which refers to balancing between the purchasing synergy benefits from central coordination and the local responsiveness of the decentralised approach (Englyst et al., 2008). Clearly, the current highly competitive business environment with its demands for significant cost and cycle time reductions, quality and delivery improvements as well as increased responsiveness for the customer demands would call for utilising the purchasing synergies through a global-level coordination for purchasing activities (Trent & Monczka, 2003a; Trent & Monczka, 2003b). However, despite the evident scale-related benefits, companies must weigh between those benefits and the flexibility that more decentralised structure would provide (Glock & Hochrein, 2011) as the decentralisation significantly improves the close co-operation with local businesses and suppliers and reduces the need for bureaucracy and coordination (Iloranta & Pajunen-Muhonen, 2008).

Hence, in order to gain the maximum benefits, it is crucial to evaluate the context and determine the appropriate level of centralisation. As a rule of thumb, centralised structure is more suitable when separate geographical units of an organisation buy similar product or service categories, whereas decentralised structure serves better the situation where the needs or markets of the units differ significantly (Trautmann et al, 2009). Overall, when deciding between centralised and decentralised structure, van Weele (2014) suggests considering the commonality of purchasing requirements between the divisions or business units, geographic locations, supply market structure, the potential for savings, the expertise required, the sensitivity for price fluctuations and customer demands. Table 1 provides a closer look on how the differences in the above-mentioned factors concretely affect the selection between centralised and decentralised structure of procurement. In addition, Johnson et al. (2014) indicate that the financial performance of a company affects the changes in procurement organisation structure since well-performing companies typically move towards more decentralised structures, whereas those with financial difficulties seem to favour centralisation efforts.

Table 1. Factors influencing the degree of centralisation (based on van Weele, 2014 and Iloranta & Pajunen-Muhonen, 2008)

Centralised structure	Factor	Decentralised structure
Business units or divisions have several common requirements in purchased products and services	Commonality of requirements	The requirements of business units or divisions differ significantly
Units or divisions are located close to each other and connected with good transportation infrastructure	Geographic locations	Units or divisions are located in different continents
Limited number of large suppliers drive the buyer to pool its negotiation power	Supply market structure	The negotiation power of suppliers is moderate or the divisions/units are relative large and have a significant negotiation power as single units
In some product categories volumes and scale of economies lead to immediate cost savings	Savings potential	The effect from volumes or scale of economies is not significant

Procurement requires a significant amount of specific expertise	Expertise required	Procurement tasks are simple
Prices are sensitive to economic or political conditions, which creates high price fluctuations	Price fluctuation	Price fluctuations and price sensitivity are relative stable
Customer demands do not affect significantly procurement	Customer demands	Customer has a significant impact on the purchasing decisions

A third alternative, hybrid structure that can be considered as a combination of centralised and decentralised structures (van Weele, 2014) is typically used to capture the benefits of both organisation structures and compromise between them (Monczka et al., 2009; Lintukangas et al., 2009). The hybrid structure has been identified various times as a most common purchasing organisation structure (Johnson et al., 1998; Johnson & Leenders, 2006; Johnson et al., 2006; Johnson et al., 2014), and seems that several companies move from fully centralised or decentralised structures towards hybrid approaches (Johnson et al., 2014). However, it is worth noticing that in practice the hybrid structure involves significant variations of structures such as lead division buying, regional buying groups, global buying committees, corporate purchasing councils or corporate steering committees (Monczka et al., 2009), and also the pooling efforts can be seen in many forms such as voluntary coordination, lead buyer role or lead design concept (van Weele, 2014). Trautmann et al. (2009) also remind that the key in hybrid structures is to differentiate between the categories as some have more potential for common coordination than others. Hence, the hybrid structure involves several opportunities for the companies to balance between centralisation and decentralisation and gain the maximum benefits also in the category level.

2.3.2 Category teams – hybrid structure for category-level strategy development

As one solution regarding the balance between centralised and decentralised way of organising procurement and still ensuring the benefits of purchasing synergies, companies can adopt centrally-led category teams that are responsible for the company-wide development and implementation of category-level strategies (Englyst et al., 2008) including also finding,

selecting and managing the suppliers of the respective category (Driedonks et al., 2010). The teams are usually utilised to ensure that the requirements across worldwide business units are integrated, and common purchases, processes, technologies and suppliers identified and coordinated (Bozarth et al., 1998). Thus, category teams provide an effective hybrid structure to secure the benefits of both centralised integration and decentralised responsiveness (Lintukangas et al., 2009).

The cross-functional category teams typically consist of employees from different business units, but also with different functional backgrounds (Driedonks et al., 2010), which makes them usually both cross-organisational and cross-functional (Trent, 2004). Typically the teams are at least partially virtual in their nature due to the multiple worldwide locations of the members (van Weele, 2014), and also the participation is typically only part-time as the members conduct the team assignment next to their regular duties in local business units (Englyst et al., 2008). O'Brien (2015) highlights especially the cross-functional nature of the teams as the implementation of category strategies typically requires a significant change, which makes the cross-business participation crucial for the success. When it comes to the applicability of the category teams and so-called centre-led purchasing in general, the business units or divisions of a company should share a high level of homogeneity regarding the purchased goods and services, but simultaneously also have highly matured decentralised purchasing organisations in place in the business units in order to guarantee the success of the teams (Rozemeijer, 2000).

In addition, effectiveness and performance of category teams has been also considered in the current academic literature (e.g. Englyst et al., 2008; Driedonks et al., 2010; Driedonks et al. 2014). Even though the purpose of the teams is to ensure and enforce synergies across the business units (Bozarth et al., 1998), it still seems that the motivation to perform as a team does not have an effect on the team performance (Englyst et al., 2008). However, instead Driedonks et al. (2014) state that autonomy and transformational leadership positively contribute to all dimensions of team effectiveness, which implies a need for authority to act in terms of developing and executing the category strategies. On the other hand, also formalisation has an important role as it enforces two effectiveness dimensions, namely

general sourcing team effectiveness and external co-operation effectiveness (Driedonks et al., 2014). Hence, the situation is twofold since there is a clear need to initiate structures and have well-defined processes (Driedonks et al., 2010), but still the teams need to have a so-called licence to act (Driedonks et al., 2014). When it comes to rewarding, team-based rewards does not seem to have an effect on the effectiveness of the teams (Driedonks et al., 2014), whereas individual rewards can have an influence on the effectiveness when designed correctly (Englyst et al, 2008; Driedonks et al., 2014). Finally, regarding the functional diversity of the teams, the findings are contradictory as cross-functional composition seems to enhance supply base management effectiveness, but have a negative effect on external co-operation effectiveness (Driedonks et al., 2014).

2.4 O'Brien's category management process

As discussed before, category management is applied in various contexts and also understood differently depending on the field of application. This also results in many different process descriptions. To give some examples, Timonen (2001) describes category management process through six steps that are defining the category, defining the role of category, evaluation and analyses of the category, setting the targets and strategy for the category, establishing the category tactics and creating guidelines and instructions. However, it is worth noticing that Timonen (2001) focuses on retail industry context when discussing the process. Rendon (2005) divides category management process into seven steps that are spend analysis, industry analysis, cost and performance analysis, supplier role analysis, business process reintegration, savings quantification and implementation. On the other hand, O'Brien (2015) provides an alternative view and illustrates the category management process through five I's representing the five stages of the process: Initiation, Insight, Innovation, Implementation and Improvement (Figure 6). This research will discuss the process proposed by O'Brien (2015) more in detail since his process is has been approved valid in the procurement context in various companies (O'Brien, 2015), whereas for example the process Timonen (2001) proposes is specific for certain industry context.

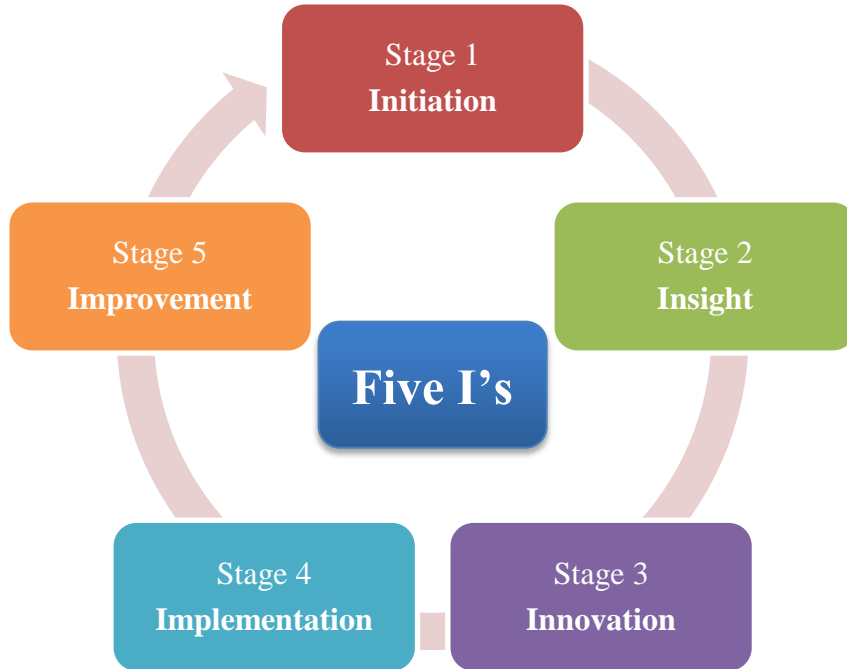


Figure 6. Category management process: Five I's (modified from O'Brien 2015)

As Figure 6 presents, O'Brien (2015) highlights the cyclic nature of category management process since even though the process has a clear starting and ending point, it is often difficult to achieve a state where everything is done, which means there is always a need to re-start the process when the previous improvement potential is realised. Hence, it is important to continuously monitor the progress and ensure that the strategy remains effective and responsive in relation to the changes in internal and external environment (Rendon, 2005). Especially, the surrounding world consisting of markets and organisations changes nowadays so fast that category management work has to be iterative (O'Brien, 2015). Regarding these constant changes, Rendon (2005) suggest paying special attention to new technologies and the strategic demands of the future. Therefore, category management is clearly not a one-time project and requires companies to change their behaviour and ways of working permanently.

However, going through the process requires some groundwork to be done before starting. As described before, developing strategies in the category level requires categorising the products and services. This can be also called category segmentation in which the overall spend is divided into smaller market-facing categories (O'Brien, 2015). However, due to scarce

resources companies cannot typically run category management process in each category simultaneously. To overcome this problem, O'Brien (2015) suggests conducting an opportunity analysis and identifying the scale of opportunity so that the priorities can be determined and matched together with the resources in a category programme plan. Opportunity analysis incorporates evaluating the potential benefits and the ease of implementation (considering organisational difficulty and market difficulty), whereas evaluating the scale of opportunity takes into account the maturity and price flexibility of the category (O'Brien, 2015). After the preparations, the category management process itself can be started and its stages and their content will be reviewed next one by one.

2.4.1 Initiation

The initiation phase is mainly about getting the category management project started and preparing the early project planning (O'Brien, 2015). Table 2 provides an overview of the main steps of this stage and the tools and enablers related to each step of the stage. The illustration also indicates the criticality of the tool or enabler. The information is crucial since due to differences in characteristics of each category, all steps are not needed for each category.

Table 2. Content of initiation stage (based on O'Brien, 2015)

Phase	Step	Description	Importance
Project kick-off	Scope category project – enabler	Involves defining the category and its geographical, temporal and organisational boundaries.	Essential
	Opportunity analysis – tool	Carried out to verify the potential of the selected category by considering the market and organisational difficulty, but also the potential benefits in subcategory level.	Optional
	Secure executive sponsor – enabler	Includes selecting the right executive sponsor, on-boarding the sponsor and defining his/her role to ensure the project success.	Optional
	Recruit team members – enabler	Means composing the cross-functional team with the right people, right commitment, right availability and right executive support.	Optional
Planning	STP – tool	Situation, target, proposal (STP) is a tool that aims at brainstorming those three words as a group discussion. Gather all information about the current situation, define a SMART target for	Essential

		the future state and steps that needed to take to achieve it.	
	Team formation and character – tool	The team character requires having a discussion about how the team works and what are the responsibilities and roles of each team member.	Optional
	Stakeholder mapping – tool	Involves identifying the stakeholders, determining the level of their support and defining the actions to win or increase their support. RACI model can be used to differentiate between different stakeholders: responsible, accountable, consult and inform.	Essential
	Communications plan – tool	The goal is to enhance successful change management by ensuring that both narrowcast and broadcast communication activities are executed properly.	Optional
	Project time plan – tool	Involves developing a simple plan ahead which indicated what will happen and what the roles are. Creates a basis for wider communication.	Optional
	Quick wins – tool	Means looking into the specific actions within the selected category that might bring immediate benefits.	Optional
First insights	Category “first insights” through day one analysis – tool	Conduct a day one analysis by placing the subcategories into a matrix according to number of suppliers against the number of buyers to see the possible factors that hinder sourcing freely.	Essential
	Value levers – tool	A checklist of all potential sources of value that must be used continuously in the process.	Essential
	Business requirements – tool	Use the RAQSCI model to define the business requirements. They consist of regulatory requirements, assurance of supply, quality requirements, service aspects, cost and commercial issues and innovation requirements.	Essential

As Table 2 indicates, the initiation stage contains six essential steps that provide critical information for the most of the categories, and hence, those steps should not be bypassed. The first essential step is related to the project kick-off and it involves defining the scope of category project. On the other hand, in the planning phase, the category team should use the STP-tool and define the details of the current situation, the targets for the future state and the steps needed to achieve the targets. Secondly, the planning phase should also include stakeholder mapping that encompasses identifying the stakeholders and defining the required involvement. Finally, the phase of first insights includes three critical tools that should be part of every category project: day one analysis, defining value levers and clarifying business requirements. The three tools here are used to develop a basis for the rest of the category management process and its content. (O’Brien, 2015)

2.4.2 Insight

The second stage insight is one of the most important ones in the category management process and it includes gathering detailed organisational, supplier and market data, and analysing the data by using various analytical tools and techniques (O'Brien, 2015). Table 3 provides a summary of the main steps of this stage and identifies the tools and enablers related to each step. It also indicates the criticality of each step since all categories are different and all tools and enablers are not needed every time for each category.

Table 3. Content of insight stage (based on O'Brien, 2015)

Phase	Step	Description	Importance
Data gathering	Supplier conditioning – enabler	Signalling to the supplier that certain outcome is sought. Either offensive or defensive tactic can be used.	Optional
	Internal data gathering – enabler	Concerns both the category and how the organisation uses the category now, but also in the future.	Essential
	Supplier data gathering – enabler	Analysing both previous and current suppliers and identifying potential new ones. Request for Information (RFI) can be used to collect supplier information.	Essential
	Market data gathering – enabler	Concerns the current marketplace, but also looking for alternative marketplaces that can provide breakthrough opportunities.	Essential
Price/cost analysis	Analysis of pricing approaches being used – tool	Involves identifying how the price is formed. Possible pricing approaches: greed, value, budget, cost-plus, market or target pricing.	Optional
	Cost and price breakdown – tool	Using purchase price cost analysis (PPCA) to determine all the costs related to making the product or providing the service.	Optional
External environment	Supply and value chain network analysis – tool	Involves understanding what the SVCN looks like and what are the current and potential future opportunities and threats relevant to the category concerned.	Optional
	Technology mapping – tool	Involves developing a technology road map that combines multiple product life cycles for past, current and future technologies into one view, which allows identifying the current and desired future position.	Optional
	PESTLE analysis – tool	Analysing political, economic, sociological, technological, legal and environmental forces and drivers relevant to the category.	Optional
	Market competitiveness – tool	Determine the competitive forces by using Porter's five forces adapted to purchasing.	Optional
Strategic direction	Determine strategic direction – tool	Use the Kraljic's portfolio model to classify the categories, assess the strength within the	Essential

		marketplace and finally to determine the appropriate strategic response.	
	Determine supplier's view of the relationship/account – tool	Use a tool called supplier preferencing to classify the suppliers based on the attractiveness of account and the relative value of account.	Essential

When it comes to the essential steps of the insight stage, the focus is targeted to data gathering and defining the strategic direction. Data gathering includes three essential steps, namely internal, supplier and market data gathering each of them referring to data collection from the concerned perspective. Moreover, the strategic direction phase includes two essential steps from which the first determines the direction and the second focuses on analysing the suppliers' view of the relationship. When determining the strategic direction the Kraljic's matrix provides a suitable tool to classify the categories and to determine adequate strategic responses. On the other hand, when focusing on the suppliers' perspective supplier preferencing can be used as a tool to classify the suppliers based on the attractiveness and relative value of the buyer's account. (O'Brien, 2015)

2.4.3 Innovation

The third stage called innovation focuses on selecting and developing a single category strategy based on the suggestions generated from the outputs of the previous insight stage. The category strategy defines how the category in question will be sourced in the future. (O'Brien, 2015) Table 4 specifies the main steps of this phase and the tools, enablers and activities related to each step. In addition, the criticality of each step is evaluated as categories vary and each step is not needed in each category project.

Table 4. Content of innovation stage (based on O'Brien, 2015)

Phase	Step	Description	Importance
Strategy creation	Summarise insights – tool	Combining the outputs of the different analytical tools used before and considering their implications.	Essential
	Strategic option generation – tool	Develop several potential sourcing strategies from which to choose from. Option	Optional

		generation process includes creating the evaluation criteria, free-flow idea generation, identifying key themes, grouping ideas to the themes compiling multi-layered themed ideas into strategic options and evaluating the options.	
	Strategic option evaluation and selection – tool	Use the previously defined evaluation criteria to find out the most suitable strategic option.	Optional
	Build chosen option – activity	Involves defining the chosen option, its features and benefits, short-term and long-term activities and immediate next steps.	Essential
Strategy finalisation	Risk and contingency planning – tool	Analysing what can go wrong and defining the actions to respond such situations.	Essential
	High-level implementation planning – activity	Developing a high-level time-based plan for communicating what is involved in the strategy implementation.	Essential
	Cost-benefit analysis – tool	Involves identifying costs and benefits and comparing them.	Optional
	Category plan development – tool	Category plan summarises in a detailed level the work done so far, the key findings of the analysis, the recommendation for the future strategy and its justifications.	Essential
	Category plan sign-off – enabler	Concerns the business to decide whether the recommended category plan should be implemented.	Essential

The first essential step of innovation stage is related to the strategy creation phase and involves summarising the insights from the previous stages by collecting them together. Another important part in strategy creation is building the chosen strategy option which means defining it, its features, benefits and steps to be executed. When it comes to finalising the strategy, it is essential that the category team conducts risk and contingency planning, initial implementation planning, develop category strategy documentation and get the approval for the strategy from the business. (O'Brien, 2015)

2.4.4 Implementation

The fourth stage is called implementation and it involves planning the implementation, executing the developed category strategy, and preparing and signing the contract (O'Brien, 2015). Table 5 provides clarity of the main steps of this stage and the tools, enablers and activities related to each step. The table also indicates the criticality of the step as all steps are not needed for each category due to their different characteristics.

Table 5. Content of implementation stage (based on O'Brien, 2015)

Phase	Step	Description	Importance
Implementation planning	Detailed implementation planning – activity	Developing a detailed plan and defining its project management to prevent the project from stalling or stopping.	Optional
	Project management – activity	A key element for the category management to succeed. Falls under planning and managing people and performance.	Essential
	Managing change – enabler	Good change management aims at minimising that pain caused by the change in a proactive way. E.g. Kübler-Ross's change curve can be used to define the stage of change people are going through and defining the appropriate response for it.	Essential
Implementation execution	RFP/RFQ/tender process – tool	Involves defining the requirements, solicitation, analysing the responses and supplier selection.	Optional
	E-auctions – tool	Internet-based platform solution in which suppliers can make bids for the price they can offer for a defined product or service.	Optional
	Supplier selection – activity	Based on the tender process, selecting one or more suppliers with whom to work with in the future. A funnel which is used to eliminate incapable suppliers.	Optional
	Negotiation – activity	Involves planning the negotiation and executing it.	Optional
Contracting	Contract planning – activity	Planning what type of contract is used and what it includes.	Essential
	Contract exit planning – activity	Determining beforehand the circumstances and means by which a contract may be terminated.	Essential

	Contract execution and management – activity	Involves signing the contract and communicating the achievement, but also ensuring that the supplier is working according to what is agreed.	Essential
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When it comes to the implementation stage, the essential steps are related to implementation planning and contracting. In terms of implementation planning the two critical steps are project management and change management that encompass planning, managing people, performance and the change. Even the most sophisticated category strategies require robust project and change management in order to get the benefits realised. Furthermore, contracting includes several essential steps that are contract planning, planning the exit, and executing and managing the contract. Hence, the type, content and termination of the contract must be planned, executed, and finally, managed appropriately. (O’Brien, 2015)

2.4.5 Improvement

The final stage called improvement shifts the focus on supplier relationships and managing them. The stage also involves following up the effectiveness of the current category strategy and determining the appropriate time for revising the category when the benefits of the current strategy are realised. (O’Brien, 2015) Table 6 specifies the main phases and steps of this stage, and also the tools and activities related to each step. In addition, the table indicates the importance of each step as it may vary between different category projects.

Table 6. Content of improvement stage (based on O’Brien, 2015)

Phase	Step	Description	Importance
Lessons learnt review	Lessons learnt review – activity	Simple review for summarising the learnings conducted by the team. The knowledge should be also shared further.	Optional
Supplier relationship management	Determine what SRM intervention is required – activity/tool	Segmenting suppliers to determine the appropriate level of SRM - usually more important when the number of suppliers is fewer.	Essential – depending on category
	Implement appropriate SRM approach – activity/tool	Depending on the supplier segment, SRM may focus on supplier management, supplier	Essential – depending on category

		performance management, supply chain management, supplier improvement and development or strategic collaborative relationship management.	
Continuous improvement	Attracting value, innovation and breakthrough ongoing – activity	Review the category, find new opportunities through attracting innovation, finding breakthroughs and new sources of value and act up on those.	Optional
	Ongoing alignment with business requirements – activity	Follow business requirements carefully and change them as needed. A significant change may be a trigger for starting the process again.	Optional
	Ongoing market analysis – activity	Relates to following prices, but also to spotting trends and indicators of risks and opportunities, and acting accordingly.	Optional
Restart triggers	New project/ repeat process triggers – activity	Following the indicators of the last three steps and based on them, either starting the process again or updating the strategy.	Optional

The improvement stage is rather flexible as it includes mainly optional steps that can be used based on the assessment of what is needed for the concerned category. Still, it is a crucial step so that the maximal value and innovation from the markets can be gathered and the changing business needs met. However, there are only two steps related to supplier relationship management (SRM) that are suggested to be essential, but again depending on the category. The first essential step is to determine which type of SRM interventions are needed in the concerned category. Typically, identifying the adequate level of SRM requires segmenting the suppliers. Usually, the role of SRM is highlighted when the number of suppliers is small and the relationships important. When the suppliers are segmented, the appropriate SRM approach must be implemented. Depending on the supplier segment the SMR approach might be related to supplier management, supplier performance management, supply chain management, supplier improvement and development, or strategic collaborative relationship management. (O'Brien, 2015)

2.5 Implementation of category management

Overall, the implementation of category management has received relatively little attention especially in the purchasing context since according to Heikkilä and Kaipia (2009) the implementation of purchasing synergy initiatives such as category management at corporate level is mainly lacking empirical research. On the other hand, the retail industry context provides some guidance for the implementation as couple of publications exist (e.g. Gruen & Shah, 2000; Dupre & Gruen, 2004). Despite the limited guidance about the implementation in terms of both disciplines, there still seems to be a common understanding that implementation is the key to success as unimplemented strategies do not provide the benefits such as the sustainable competitive advantage (Dupre & Gruen, 2004; O'Brien, 2015).

When it comes to an overall picture about category management implementation, Dupre and Gruen (2004) provide high-level guidance and divide the implementation into three main elements (Figure 7). Their model has its roots in retail industry, but the core ideas of it can be seen also applicable in other contexts. As a first element, the successful implementation starts from creating the right conditions and filling the requirements for category management to succeed (Dupre & Gruen, 2004; O'Brien, 2015). The right conditions relate to the foundations of category management, namely sourcing strategically, managing markets and driving the change, but also to the supporting pillars on top of them that include breakthrough thinking, customer focus, cross-functional teams, and facts and data that all together drive the success of category management (O'Brien, 2015). After securing the basic requirements and creating the conditions, the focus can be directed to the actual category strategy implementation (Dupre & Gruen, 2004) which according to O'Brien (2015) focuses on implementation planning, execution and contracting as discussed before. Finally, as a result of successful implementation of the category strategies, companies should be able to gain sustainable competitive advantage (Dupre & Gruen, 2004) that can be seen as one of the possible benefits category management can provide (O'Brien, 2015). An overview of the implementation model described is provided in Figure 7.

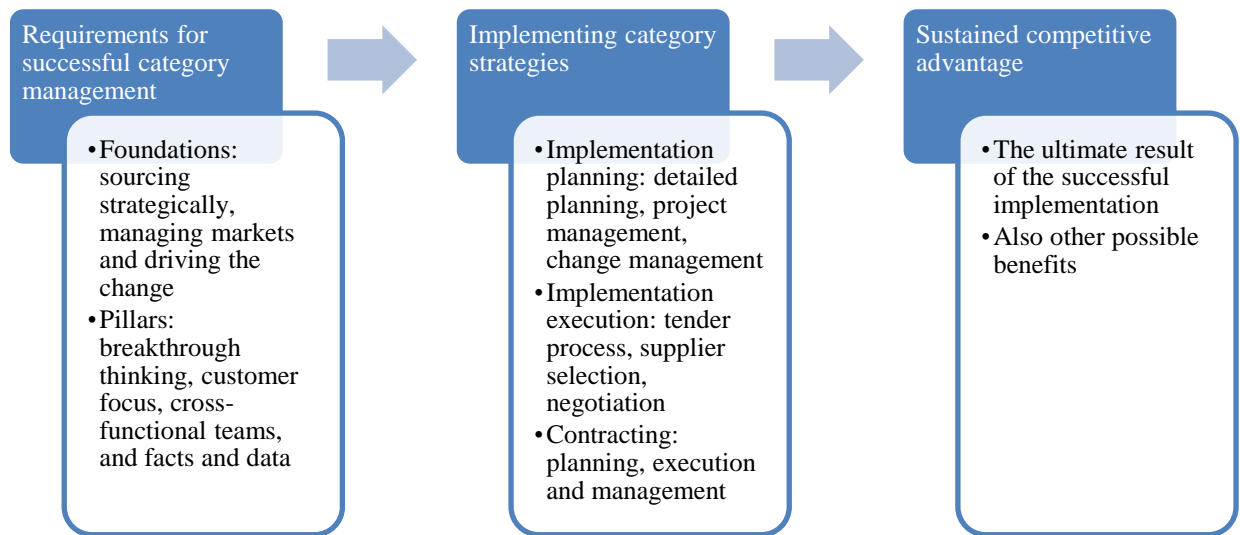


Figure 7. Implementation model of category management (modified from Dupre & Gruen, 2004 and O’Brien, 2015)

Furthermore, O’Brien (2015) suggests enforcing the implementation of category management by having a clear governance model called the 5P governance in place. In this context the five P’s refer to people, programme, payoff, proficiency and promote as Figure 8 illustrates. The first P standing for people is the most central and involves creating the right structure and organisational design including the cross-functional teams, steering group and finally, the executive team supporting and validating the implementation. The second P – proficiency aims at ensuring the right capabilities, common language and ways of working in which the educational activities as well as common process and toolkit play a significant role. Furthermore, promote is an important element that ensures the adequate internal and external communication and aims at engaging the business and the stakeholders. The fourth P called payoff relates to project reporting and measuring, monitoring, and publishing the achieved benefits. Finally, the last P – programme is about defining a detailed program plan involving all category management projects, and also including the relevant governance activities such as steering group reviews. If well implemented, the governance structure can significantly support the successful implementation. However, also the governance requires significant commitment at all levels of the organisation. (O’Brien, 2015)

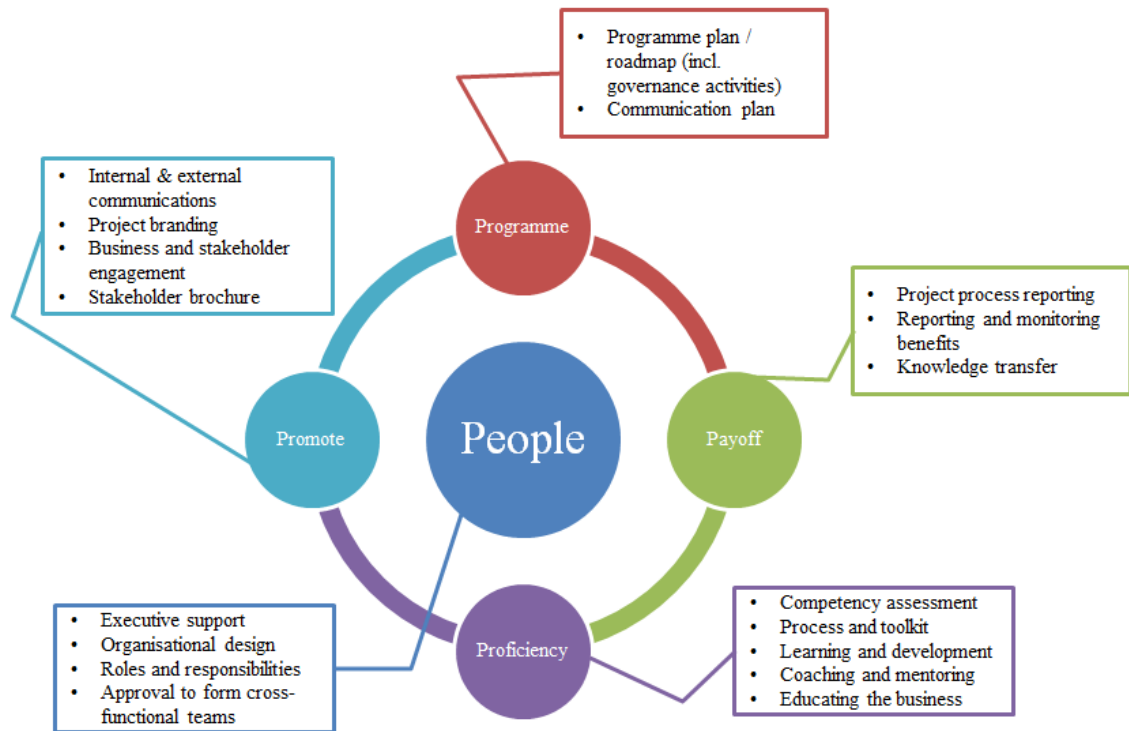


Figure 8. The 5 P governance model (modified from O’Brien, 2015)

To conclude, some overall guidance for implementing category management clearly exists. However, it is also important to drive deeper and define the factors driving and supporting the implementation of category management; but on the other hand, one should not forget that several barriers may exist as according to Dupre and Gruen (2004) all the stages of category implementation typically include some barriers that the organisation needs to overcome. Hence, the drivers and barriers of category management implementation will be discussed next more in detail. Finally, also the possible benefits of successful implementation will be elaborated.

2.5.1 Drivers of category management implementation

There are several drivers and success factors that support the implementation of category management. As these factors and drivers are the key to make the category management

happen in an organisation (O'Brien, 2015), it is important to pay attention to enforcing them and ensuring that they are in place. Together the drivers and success factors create the right conditions for the successful implementation. Table 7 provides an overview and explanation of the most common drivers and success factors that support the implementation.

Table 7. Drivers and success factors of category management implementation

Driver / success factor	Description	Reference to literature
Executive support	Top management to give guidance, approval and resources. Top-down message that category management is “the way we buy”.	Rozemeijer, 2000; Monczka & Markham, 2007; Lintukangas et al. 2009; O'Brien, 2015
Organisation enabling effective cross-functional teams and active participation	Business structure must enable cross-functional working and managers at all levels must assign the appropriate resources to the teams.	Rozemeijer, 2000; Monczka & Markham, 2007; O'Brien, 2015
End-customer focus	Sourcing must be connected to satisfying the needs of end-customers, and the strategy must be aligned accordingly.	O'Brien, 2015
Robust governance and reporting	A clear governance structure and formal reporting to monitor and communicate the savings and benefits achieved.	Rozemeijer et al., 2003; O'Brien, 2015
Sufficient resources	Sufficient resourcing for the teams either through new recruitments with right capabilities or re-allocating existing resources after waiving some old tasks.	Rozemeijer, 2000; O'Brien, 2015
High profile and “felt need”	Involving whole business in a high profile so that common need for the change develops.	O'Brien, 2015
Common process, toolkit and ways of working	Ensuring that e.g. common process, toolkit and IT systems are in place and adhered by all.	Rozemeijer, 2000; O'Brien, 2015
Open and game-changing mind-set	A shared mind-set for seeking and ensuring the breakthrough opportunities.	O'Brien, 2015
Communicating the success	Success stories and achieved benefits and savings must be shared widely to secure	Rozemeijer et al., 2003; Lintukangas et al. 2009; O'Brien, 2015

	the credibility of the initiative.	
Right capabilities	The participant must have the right capabilities, not only related to procurement, but also regarding project and change management.	O'Brien, 2015
Data-driven approach through spend analysis, TCO analysis, benchmarking and supply market understanding	Data-driven approach helps to reduce risks related to the decisions, ensure the involvement of the business and seize the possible opportunities.	Monczka & Markham, 2007; O'Brien, 2015
Alignment with corporate and business line strategies	Ensure the alignment with corporate level strategies, but also with business objectives so that the support exists.	Rozemeijer et al., 2003; O'Brien, 2015
Early involvement of business and local procurement management	When executed at corporate level the local business and procurement managers should be involved as early as possible.	Rozemeijer et al., 2003

When looking at the drivers and success factors of category management implementation, there seems to be a quite clear understanding that a robust executive support as well as an organisational set-up enabling cross-functional working are needed (Monczka & Markham, 2007; O'Brien, 2015; Rozemeijer, 2000). In addition, couple of authors also emphasise the need for governance structure and reporting, as well as the importance of communicating the success and ensuring the strategic alignment (O'Brien, 2015; Rozemeijer et al., 2003). Furthermore, sufficient resourcing, common process, tools and ways of working are seen as important factors concerning the successful implementation (O'Brien, 2015; Rozemeijer, 2000). Critical driver is also the data-driven approach that helps to reduce risks, secure the business involvement and reveal the most significant opportunities (Monczka & Markham, 2007; O'Brien, 2015). O'Brien (2015) also emphasises the end-customer focus, shared idea of the need for change, game-changing mind-set and the right capabilities that all contribute to a successful result. Finally, Rozemeijer et al. (2003) also remind that especially when category management is implemented at corporate level, it is important to involve the business and local procurement managers at early stage to secure their commitment.

2.5.2 Barriers of category management implementation

Despite the several driving and supporting factors, implementing category management is not an easy task and there are several barriers that may hinder the implementation unless handled correctly. As the key motivation for implementing category management is related to bundling volumes across the company and gaining negotiation power (Heikkilä & Kaipia, 2009), maverick buying can be considered as one of the main barriers for the implementation in hybrid purchasing organisations since it significantly reduces the benefits of pooling the volumes across the company (Rothkopf & Pibernik, 2016). Maverick buying is a phenomenon in which the employees of a company, from both purchasing department and outside purchasing department, are uncompliant for the existing agreements and procurement procedures by buying the products or services outside them (Karjalainen et al., 2009). Therefore, if the agreements signed as a result of category management are not used, the benefits of category management work are likely to diminish and the successful implementation is hindered.

According to Karjalainen et al. (2009) there are five forms of maverick buying namely unintentional maverick buying, forced maverick buying, casual maverick buying, well-intentioned maverick buying and ill-intentioned maverick buying that each of them have different underlying reason behind them. Figure 9 presents the main forms of maverick buying and defines the reasons behind them. Unintentional maverick buying is usually due to the lacking awareness of the contract or the process, forced maverick buying stems from the inability to use the existing contracts or process, casual maverick buying is guided by the self-interests, well-intentioned maverick buying is caused by the perceived superiority of an alternative offer or of own buying skills, and the lastly, the ill-intentioned maverick buying originates from opportunistic behaviour or resistance to change (Karjalainen et al., 2009). However, in general, maverick buying can be also examined through agency theory and considered as a principal-agent problem (Kauppi & van Raaij, 2015; Rothkopf & Pibernik, 2016). Hence, under the principal-agent framework maverick buying can be seen as a form of hidden action as the principal (the company) delegates operational purchasing tasks to the agent (local decision-makers) but at the same time, the principal cannot observe the frame

contract compliancy of the agent without costly measures, which creates the agent an incentive to bypass the official procurement process and buy outside the framework contracts by causing the principal to lose the full benefits of volume consolidation (Rothkopf & Pibernik, 2016). According to Kauppi and van Raaij (2015), maverick buying is especially related to two conditions of agency problems that are goal incongruence and information asymmetry.

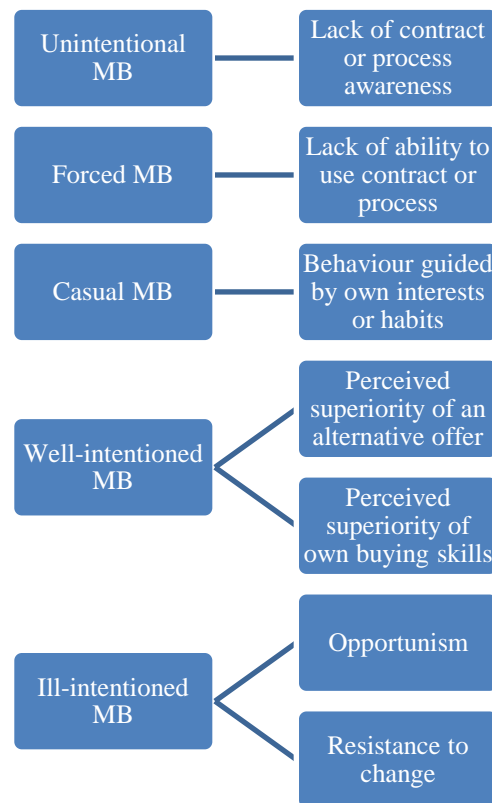


Figure 9. Forms of maverick buying and their underlying reasons (modified from Karjalainen et al., 2009)

Typically, there are two different ways that can be used to tackle agency problems: monitoring and incentives from which the former aims at reducing the information asymmetry between the principal and the agent, whereas the latter at aligning the interests of those two (Rutherford et al., 2007). However, studies conducted in the context of maverick buying differ from this common view since for example Rothkopf and Pibernik (2016) conclude that usually monitoring fails to reduce maverick buying. In addition, the results from Karjalainen and van Raaij (2011) also support the inefficiency of the traditional mechanisms since their study

shows that incentives in a form of reward and sanction system do not reduce any forms of maverick buying. Still, Karjalainen and van Raaij (2011) remind that the study is conducted in the context of public procurement and its limited reward systems, whereas the situation may differ in private companies in which the range of incentives and penalties is typically more comprehensive. Hence, there needs to be other means to reduce maverick buying. Rothkopf and Pibernik (2016) suggest that in case of successful maverick buyers, the principal should try to participate in the rents that agents achieve through buying outside the contracts by using participation menus that allow the agent to report the supplier choices truthfully in the discussions between the agent and the principal. On the other hand, Karjalainen and van Raaij (2011) emphasise the reduction of autonomy in purchasing tasks and suggest investing in systems that minimise the possibility of deviations in the purchasing process. Furthermore, Kauppi and van Raaij (2015) introduce the concept of honest incompetence as a strongly explaining factor of maverick buying and suggest complementing the traditional governance mechanisms by training and guidance to avoid the agency problem caused by honest incompetence.

Even though maverick buying is a significant barrier in realising the benefits of category management, there are also other fundamental challenges that the implementation of category management needs to overcome. According to O'Brien (2015), a strategic approach to sourcing, strong market management and robust change management are the foundations of category management that are needed to capitalise the full potential of the category management process. On the other hand, each of them also comes with significant barriers that the organisations need to overcome. The barriers of each foundation are defined in Figure 10. When it comes to sourcing strategically, the most significant barriers can be related to vertical silos and incentives, the difficulty of predicting the future, goal conflicts between different functions, fixed ideas about purchasing's role as an ordering function, lack of creativity and the difficulty of implementing the sourcing strategies (O'Brien, 2015). Furthermore, O'Brien (2015) states that managing markets can be difficult due to the rapid and continuous changes in the markets, the difficulties of identifying opportunities outside current the markets and the existing power structures. Finally, driving changes may be hindered because of resistance to

change, lack of involvement or executive support, lack of consensus regarding the need for the change and due to limited resources (O'Brien, 2015).

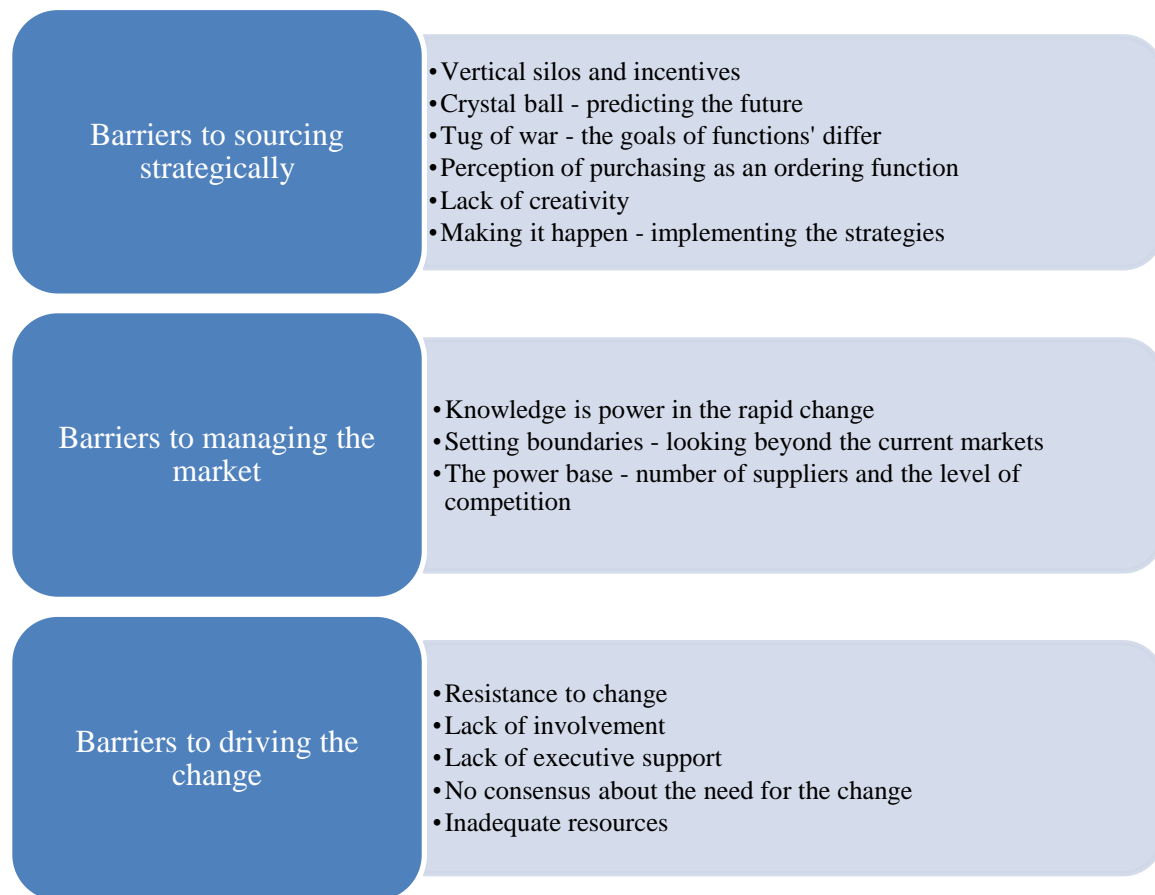


Figure 10. Main barriers for the foundations category management (based on O'Brien, 2015)

When it comes to overcoming the barriers, O'Brien (2015) states that category management approach itself is inherently designed to mitigate them, but only if the process is strictly followed. Therefore, following the category management process can already have a significant contribution to overcoming the barriers and finally realising the whole potential of category management. In addition, O'Brien (2015) emphasises especially the role of driving the change and even states that successful strategic sourcing is more about change management than anything else. As the robust change management is also in the core of this

study, the means to tackle the change management challenge are discussed more in a detail in the third chapter of the thesis.

2.5.3 Benefits of successful category management implementation

The successful implementation of category management comes with several benefits. According to Heikkilä and Kaipia (2009) companies usually strive for benefiting from the volume consolidation opportunities through which being able to enhance their negotiation power. Hence, cost reductions become an obvious benefit that can be achieved by the successful implementation of category management approach (Heikkilä & Kaipia, 2009; O'Brien, 2015). According to O'Brien (2015) the average reduction in the purchase price is typically between 10-20 percent, whereas Trent and Monczka (2003b) state the average reduction to be about 15 percent, the maximum reduction being even over 30 percent. However, the benefits of category management are not limited only to the reductions of purchase price since there are also other concrete tangible benefits such as improved effectiveness, reduced supply risk and in the end, increased competitive advantage (O'Brien, 2015). Furthermore, O'Brien (2015) highlights the possible soft benefits that are for example related to knowledge sharing, standardised ways of working and cross-functional collaboration.

Another dimension into the benefits will be added when category management is executed in the group level as a co-operative effort among the affiliates. When coordinated at this level, it provides even more benefits from the purchasing synergies' perspective. When it comes to the additional benefits that can be achieved through purchasing synergies, Faes et al. (2000) categorise the sources of benefits into three categories, namely economics of scale, process, and information and learning. Economies of scale refer to bundling the volumes (Trautmann et al., 2009), but also negotiation power from the separate units of the company to achieve eventually cost reductions and quality improvements (Rozemeijer, 2000). Economies of process, on the other hand, provide common ways of working and benchmarking opportunities, whereas economies of information and learning focus on sharing information

regarding suppliers, markets, technologies and internal users (Faes et al., 2000). Combining the general benefits of category management with the purchasing synergy related benefits enables gathering an overview of the benefits of category management executed at the group level. Those benefits are summarised in Table 8 below.

Table 8. Benefits of group-level category management

Type of benefit	Benefit	References to literature
Economic	Cost reductions	Rozemeijer, 2000; Englyst et al., 2008; Heikkilä & Kaipia, 2009; O'Brien, 2015
	Negotiation power	Bozarth et al., 1998; Faes et al., 2000; Rozemeijer, 2000; Heikkilä & Kaipia, 2009
	Competitive advantage	Bozarth et al., 1998; Heikkilä & Kaipia, 2009; O'Brien, 2015
Operational	Innovation and technology	Bozarth et al., 1998; Faes et al., 2000; Heikkilä & Kaipia, 2009; O'Brien, 2015
	Process efficiency	Faes et al., 2000; Englyst et al., 2008; Heikkilä & Kaipia, 2009; O'Brien, 2015
	Reduced supply risk	O'Brien, 2015
	Total spend management	O'Brien, 2015
Co-operation	Knowledge sharing	Faes et al., 2000; Rozemeijer, 2000; Englyst et al., 2008; Heikkilä & Kaipia, 2009; O'Brien, 2015
	Common language and ways of working	Faes et al., 2000; O'Brien, 2015
	Cross-functional working	O'Brien, 2015
	Strategic sourcing	O'Brien, 2015

As the Table 8 presents, the benefits of category management coordinated at the corporate level can be divided into three main categories that are economic, operational and co-operation benefits. The economic benefits are typically the most obvious such as cost reductions (Rozemeijer, 2000; Englyst et al., 2008; Heikkilä & Kaipia, 2009; O'Brien, 2015) and increased negotiation power (Bozarth et al., 1998; Faes et al., 2000; Rozemeijer, 2000; Heikkilä & Kaipia, 2009) that typically enhance the third economic benefit, the competitive advantage of a company (Bozarth et al., 1998; Heikkilä & Kaipia, 2009; O'Brien, 2015). From

operational perspective, category management may enhance the access to innovation and technology (Bozarth et al., 1998; Faes et al., 2000; Heikkilä & Kaipia, 2009; O'Brien, 2015), increase process efficiency (Faes et al., 2000; Englyst et al., 2008; Heikkilä & Kaipia, 2009; O'Brien, 2015), reduce supply risk and help to manage the whole spend in corporate level (O'Brien, 2015). Finally, the co-operation-related benefits play also a significant role. Those encompass open information sharing (Faes et al., 2000; Rozemeijer, 2000; Englyst et al., 2008; Heikkilä & Kaipia, 2009; O'Brien, 2015), establishing common language and ways of working (Faes et al., 2000; O'Brien, 2015), but also enhanced cross-functional working environment and increased understanding about the strategic contribution of procurement (O'Brien, 2015).

Moreover, achieving a preferred customer status in the eyes of suppliers can be considered as a significant benefit that category management may enable. The core idea behind the concept of preferred customer is that buyers aim at becoming more attractive for their suppliers and thus, obtain the best resources from them (Schiele et al., 2012). Hence, the preferred customer status is about achieving a preferential resource allocation from the supplier, and can be seen for example through receiving the supplier's best resources in development projects, through product customisations, available innovations, or as an exclusivity agreement between the supplier and the customer (Steinle & Schiele, 2008). Finally, the preferred customer status also closely relates to the competitive advantage of a company since firms with a preferred customer status can be expected to achieve greater competitive advantage compared to their competitors as they enjoy the preferential resource allocation from the shared suppliers (Pulles et al., 2016a; Pulles et al., 2016b). Thus, the benefits gained by the preferred customer status are obvious.

However, it is still important to clarify the reasoning and to understand how category management affects achieving the preferred customer status. According to Hüttinger et al. (2012) customer attractiveness and supplier satisfaction play a significant role in becoming a preferred customer. More closely, Pulles et al. (2016a) conclude supplier satisfaction to be a significant mediator in the relationship between customer attractiveness and preferred resource allocation, which indicates that attractive customers need also to meet the expectations in

reality in order to benefit from the preferred resource allocation. Therefore, the preferred supplier status and preferential resource allocation can be achieved if the customer is seen as attractive, but also the satisfaction of the supplier must be higher than with comparative customers (Schiele et al., 2012). Typical drivers for customer attractiveness are for example the customer's ability for open information sharing and creating a win-win situation, the size of the customer, customer's presence in the growing markets and the reputation of the customer, whereas the customer satisfaction stems from a large share in the supplier's turnover, the emphasised role of trust in the relationship, secured income flows, the customer's ability to manage realistic expectations and the top management commitment from the customer side (Pulles et al., 2016a). On the other hand, as category management aims at bundling volumes (Heikkilä & Kaipia, 2009) and is typically characterised with a high profile and top management commitment (Monczka & Markham, 2007; O'Brien, 2015), it can clearly help to increase customer attractiveness and achieve supplier satisfaction, and hence, provide the preferential resource allocation and the preferred customer status with its benefits.

As discussed above, the benefits of category management itself and especially, when coordinated at the group level, are clear and extensive. However, the realisation of them is not to be taken for granted as for example the barriers of implementation indicate. Category management with its centrally-coordinated cross-functional teams is clearly a centre-led organisation approach for organising the procurement function (Englyst et al., 2008) that according to Rozemeijer et al. (2003) requires high corporate coherence and purchasing maturity to succeed. Therefore, in order to provide the expected benefits, the right conditions for the category management organised at corporate level must exist. From corporate coherence perspective, the right conditions would equal to common management style, culture, strategy, vision and structure, whereas the high purchasing maturity is indicated by the significant role and organisational status of the purchasing function, sophisticated purchasing information systems, the high quality of purchasing personnel and supplier relationships (Rozemeijer et al., 2003). However, as O'Brien (2015) as well as Monczka and Markham (2007) highlight, change management has a significant role in implementing category management, and hence, significant changes also in the prevailing conditions might be needed to fully realise the benefits of category management.

3 CHANGE MANAGEMENT

In current growing global business environment, constant change has become a prerequisite for companies to survive and succeed (Al-Haddad & Kotnour, 2015). However, often managing to persuade people to accept the change can be challenging, and the adoption of new ways of working can be time-consuming (Edmonds, 2011). The failure rate of change initiatives is typically around 70 percent, which also implies that managing change in large organisations is extremely difficult (Worley & Mohrman, 2014). At the same time, the pace of change seems to be higher than ever before, which has made change management an increasingly crucial skill for all organisations today (Moran & Brightman, 2000; By, 2005). Moreover, change management is also an inevitable part of category management implementation as driving change can be considered as one foundation of the approach since there is no category strategy that would bring the benefits without careful implementation (O'Brien, 2015). Hence, change management is not only a topic that concerns businesses in general, but also a theme that is crucial for procurement and especially relevant in the category management context.

3.1 Change management in procurement

In the procurement context change management has been mainly lacking academic interest even though it is often considered as a significant challenge from the practical perspective. Despite the narrow academic interest, some researchers have addressed the topic from different viewpoints (e.g. McIvor & McHugh, 2000; Day & Atkinson, 2004; Johnson & Leenders, 2004; Lintukangas et al., 2009; Andreasen & Gammelgaard, 2018). In order to create an understanding about the current state of change management contributions in procurement context, the identified publications will be shortly reviewed.

Day and Atkinson (2004) focus on describing a large procurement-related change in the aerospace industry through the traditional eight-step process introduced by Kotter (1996). However, Day and Atkinson (2004) conclude that in the end, the eight-step model is not that

useful for planning the change since it was constantly “retro-fitted”, which makes it more useful to reflect the past events. Instead of describing the change through the eight-step model, Lintukangas et al. (2009) conduct a case study in which the case company applies the eight-step model in implementing supply management integration. However, the study shows that the implementation phases should have been planned even more in detail than the eight-step process (Lintukangas et al., 2009). Thus, both studies discuss the change process in procurement and also bring up some problems that the Kotter’s eight-step process might encounter in procurement context.

As another angle towards the change process in procurement organisations, Andreasen and Gammelgaard (2018) discuss the role of purchasing maturity models in describing the change and propose an alternative approach for describing the change in purchasing context. The traditional role of maturity models has been the illustration of the stages that purchasing organisations experience when seeking for greater sophistication (Schiele, 2007). However, Andreasen and Gammelgaard (2018) state that maturity models are often insufficient as they approach the change as a predetermined trajectory, and therefore, they propose an alternative framework including four change dimensions namely, movement transitions, scalability, acceptability and substantive element that enable a more detailed analysis of change in procurement context. Hence, compared to maturity models, the proposed approach includes also the political dimension of the change through assessing the acceptability, but also enables identifying other units of analysis than only the purchasing organisation that is in the core of the purchasing maturity models (Andreasen & Gammelgaard, 2018).

On the other hand, some researchers have focused more on other viewpoints such as organisational culture and structure. McIvor & McHugh (2000) address the organizational change in the context forming collaborative relationships with suppliers. They find that existing organizational culture can cause a significant barrier for the change. However, they also propose several actions that help to facilitate the change: establishing a holistic approach to managing the entire process, shifting the mind set of organization members, creating a corporate culture that supports the change, involving the organization in the strategy formation process, assessing the impact on those most affected by the change and developing an

organizational program for acquiring and developing skills, behaviours and attitudes. Whereas McIvor and Hugh (2000) take the current organizational setting as given and address the required changes in organisational culture, Johnson and Leenders (2004) observe a change setting where the organisational structure of purchasing organisation is changed towards decentralised direction. Johnson and Leenders (2004) state that there are several issues such as the future role of former central procurement organisation, the future of the chief purchasing officer (CPO), top management involvement, changes in the purchasing staff roles, and the involvement of consultants that companies need to address regarding a change towards decentralised procurement structure.

All in all, research related to change inside the procurement function and its consequences for other functions is relatively rare (Day & Atkinson, 2004). Thus, there is still much to be done in terms of change management research in procurement context since the topic provides a suitable area for further research (Johnson & Leenders, 2004; Glock & Hochrein, 2011). According to Day and Atkinson (2004) especially category management that can be considered as a planned change affecting both internal process and external supplier relationships could provide a suitable area for further contributions. In addition, further research could benefit from the findings of traditional change management literature and transfer them to the procurement context (Glock & Hochrein, 2011). Therefore, in order to gain the required insight, some adequate traditional change management approaches and models highlighted in the general change management literature will be reviewed next.

3.2 Approaches to change

Change is typically a diverse and complex phenomenon that can be approached from various perspectives. Though managing the change successfully would benefit from having a clear framework, such an overview is currently mainly lacking (By, 2005). However, one approach to structure the change and current theories and approaches around it is to use the three categories of change that Senior (2002) has presented. According to Senior (2002) change can be approached and structured along its three characteristics that are change characterised by

the rate of occurrence, by how it comes about, and by scale. Figure 11 presents the three approaches and the main classifications inside each of the three ways of structuring that will be discussed more in detail below.

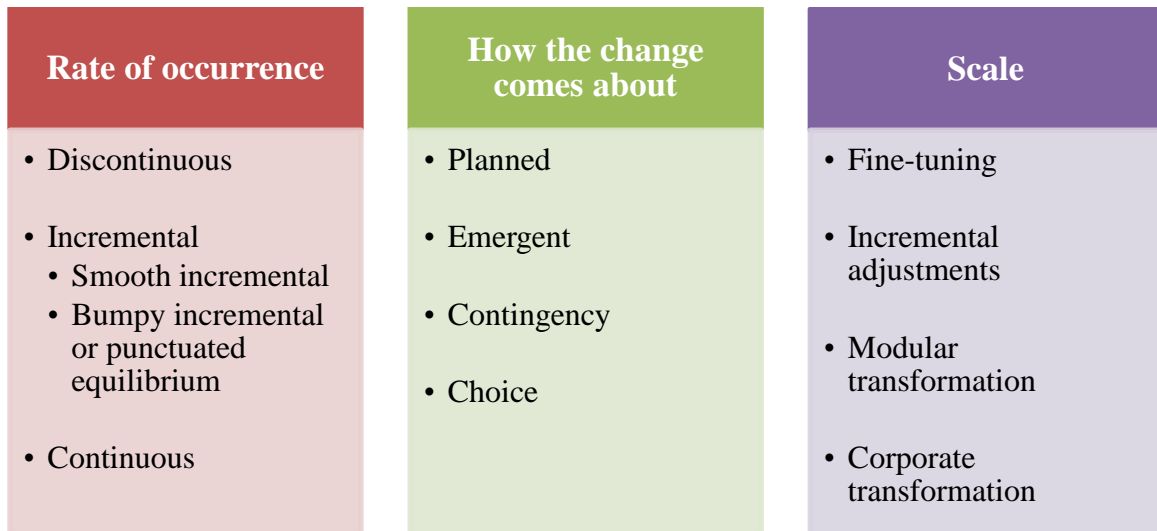


Figure 11. Approaching and structuring change (elaborated based on Senior, 2002 and By, 2005)

When approaching the main types of change categorised by the rate of occurrence, By (2005) summarises that the types of change are typically divided into discontinuous and incremental change, but the terminology among authors vary. In addition to separating between discontinuous and incremental change, some authors further categorise incremental change into smooth and bumpy incremental change from which the latter can be also called punctuated equilibrium, and finally, some researchers also make a distinction between incremental and continuous change (By, 2005). Discontinuous change can be considered as a “change which is marked by rapid shifts in either strategy, structure or culture, or in all three” (Grundy, 1993), whereas incremental change refers to “step-by-step movement or variations in degree along an established conceptual continuum or system framework”, which usually in practice means doing more or less the same issues, but better than before (Kindler, 1979). Furthermore, Van de Ven and Poole (1995) refer to the modes of change, namely prescribed mode and constructive mode from which the former relates to development in a prescribed direction and involves incremental adaption in a predictable and stable way, whereas the latter

involving unpredictable and discontinuous developments. Hence, those can be also seen reflecting the features of incremental and discontinuous change.

When characterising the change by how it comes about, By (2005) concludes that several different types such as planned change, emergent change, contingency approach and choice approach exist. However, it seems that the planned and emergent types of change are the ones currently dominating the literature (Bamford & Forrester, 2003). Planned approach to change typically highlights the importance of understanding and planning the steps needed between the initial state and the desired target stage (Elrod II & Tippett, 2002; Bamford & Forrester, 2003). Thus, the approach is mainly based on the work of Kurt Lewin and has dominated the change management literature during several decades (Bamford & Forrester, 2003). However, the planned approach has also gained some criticism due to which the other dominant approach, emergent change, has been initiated (By, 2005). The core criticism relates to the inappropriateness of planned change in the current business environment that is characterised by uncertainty and rapid change (Bamford & Forrester, 2003), and as a solution to the problem, the emergent approach considers change as “a continuous, open-ended and unpredictable process of aligning and re-aligning an organisation to its changing environment” (Burnes 2004b, 599). Hence, the core difference relates to how the organisational change is implemented as the emergent approach emphasises the bottom-up approach, whereas the planned change focuses more on the top-down control (Bamford & Forrester, 2003).

Finally, the categorisation based on the scale of change seems to be a less controversial topic as certain common understanding seems to exist (By, 2005). According to the Dunphy and Stace (1993) changes can be categorised into four types of scale that are fine-tuning, incremental adjustment, modular transformation and corporate transformation. Fine-tuning typically involves elaborating and enhancing the consistency and fit between the strategy, structure, people and processes of a company, whereas incremental adjustments are small (but not too radical) responses that minor shifts in environment require (Tushman et al., 1986; Dunphy & Stace, 1993). When it comes to more radical changes, Tushman et al. (1986) refer them as frame-breaking changes, whereas Dunphy and Stace (1993) divide them further into modular and corporate transformations as discussed. Modular transformation typically

involves a major re-alignment of one or more departments or divisions, and the corporate transformation adds the scale further as it concerns the whole corporation and can be seen as radical changes and shifts in business strategy and whole organisation (Dunphy & Stace, 1993).

3.3 Change management models

It clearly seems that change can be approached and structured in various ways, and similarly, there are also several attempts to model the change. As discussed before, the dominant approach for change management models during several decades has been the planned change that is strongly reflected in the three-step model that Lewin (1947; 1958) has presented (Bamford & Forrester, 2003). According to Cummings et al. (2016) the approach “change as three steps” (CATS) is often seen even as an objective self-evident truth, which implies its popularity and dominance. However, also contradictory points of view exist since several authors consider that the approach oversimplifies the change (Cummings et al., 2016), or alternatively, also its applicability in unpredictable and rapidly changing environment has been questioned (Bamford & Forrester, 2003). Hence, as a result, other models of change have also gained significant attention as for example Kotter (1996) has introduced an eight-step model that has been applied widely in the field of change management, also in procurement context (e.g. Day & Atkinson, 2004; Lintukangas et al., 2009). Some of the different change management models will be discussed more in detail next in this chapter.

3.3.1 Lewin’s three-step process and force field analysis

As Lewin’s three-step process of change has been a pioneering model inside the dominant planned change paradigm (Elrod II & Tippett, 2002; Bamford & Forrester, 2003), it provides a natural starting point for reviewing the change management models. As the name suggests, Lewin (1947) structures the change process through three stages: unfreezing, moving and freezing. Thus, in order to succeed in the change, the present level or status must be unfrozen first, after which the transition to the new desired level or state can be taken and frozen again

(Lewin, 1947). In addition, the process also implies that old behaviour must be discarded before the new one can be successfully adopted (Bamford & Forrester, 2003).

However, the three-step model consist only one part of Lewin's work as also field theory, group dynamics and action research can be considered as important interrelated parts of the Lewin's overall contribution (Burnes, 2004a). In this review, the focus will be on the main issues of field theory as it significantly contributes to managing change and helps to explain also the three-step process more in detail. In short, the purpose of field theory is to explain and describe how either balanced or imbalanced force fields define whether social systems maintain their equilibrium or move towards a new state in which the equilibrium settles again (Elrod II & Tippett, 2002). Hence, the in the core of the approach is the concept of quasi-stationary equilibrium in which no social change exists, but still the state is not fully stationary (Lewin, 1958). Rather, the quasi-stationary equilibrium can be compared with a flowing river which velocity and direction remains the same despite some continuous small variations (Lewin, 1947). On the other hand, to compare, a social change would occur when the velocity or direction of the river would change (Lewin, 1958). Thus, in the quasi-stationary equilibrium the amount of driving and restraining forces must be equal, but as some variation exists, the amounts of opposing forces must adapt accordingly (Lewin, 1958). When it comes to changing the quasi-stationary equilibrium, Lewin (1947) sees two alternative options that are either adding forces in the desired direction or diminishing the counterforces instead. Therefore, identifying the forces present in the field can help companies to determine which forces need to be strengthened or diminished in order to change and reach the new planned state (Burnes, 2004a).

The concept of quasi-stationary equilibrium is also crucial from the standpoint of the three-step process, as according to Burnes (2004a) unfreezing requires breaking the quasi-stationary equilibrium by discarding and unlearning the old behaviour before the new behaviour can be successfully adopted. Lewin (1947) suggests that typically changing the quasi-stationary equilibrium may require some emotional trigger to overcome the complacency and self-righteousness, but in the end, the problems in unfreezing may vary case by case. Furthermore, the second stage, moving, relates to another work of Lewin as the option evaluation based on

trial and error clearly refers to the learning approach that Lewin has presented in action research (Burnes, 2004a). Finally, the quasi-stationary equilibrium is again strongly related to the final stage, freezing, since it contains stabilising the behaviour in the new desired quasi-stationary equilibrium (Burnes, 2004a).

3.3.2 Change curve and its responses based on the work of Kübler-Ross

In order to succeed in the change, O'Brien (2015) sees essential to attend to the human reaction to the change, which means understanding how people react to and deal with the change. Hence, one important viewpoint to modelling the change is to adopt the perspective of an individual. When striving to understand the individual reactions and actions, the work of Kübler-Ross (1969) provides a suitable starting point (Elrod II & Tippett, 2002; O'Brien, 2015). In her book *On Death and Dying*, Kübler-Ross (1969) documents the steps that individuals, who confront a trauma or a severe illness, will pass through when coping with the situation. The phases of the process are also widely known as the five stages of grief (O'Brien, 2015) that are namely denial, anger, bargaining, depression and acceptance (Kübler-Ross, 1969). However, it is worth noticing that the stages actually apply to any loss or even a threat of loss (O'Brien, 2015), which can be seen also in the literature as there are many similar models developed in different contexts based on this foundation (Elrod II & Tippett, 2002). One context of application is the organisational change as it always includes a potential of loss for example in form of losing a job, a way of working or anything that feels comfortable (O'Brien, 2015). Table 9 provides an extended view of the stages of grief that is adapted to fit better to the organisational context as O'Brien (2015) suggests.

Table 9. Stages of change with their responses (based on Kübler-Ross, 1969 and O'Brien, 2015)

Stage	Description	Response
Immobilisation	Describes the shock when the change is announced.	Support – be present and provide help and support when needed.
Denial	The first reaction and a temporary	Support – be present and provide

	defence mechanism that involves the unacceptance of the facts.	help and support when needed.
Anger	The individual accepts the facts, but questions why exactly he or she is confronted by the situation.	Listen – listen and support without trying to fix the situation.
Bargaining	Starts when the change truly hits and involves in the organisational context the use of power to ensure the most optimal outcome.	Listen – listen and support without trying to fix the situation.
Depression	Relates accepting the change but with mainly negative emotions attached.	Listen – listen and support without trying to fix the situation.
Experimentation	Can be considered as the beginning of acceptance and involves experimenting the ways to cope with the change.	Encourage – help to see the new desired state and encourage in getting there.
Acceptance	Signals that the previous phases are processed and the previous anger or depression has disappeared.	Praise – reflect how far they have been able to get and praise for achieving the new state.
Completion	Illustrates that the overall well-being and motivation of an individual are already on higher level than before because the pain and struggle has made the individual stronger than before.	Praise – reflect how far they have been able to get and praise for achieving the new state.

Table 9 clearly illustrates that the stages of grief are highly relevant also from organisational change perspective, but it seems that in the organisational context individuals tend to go through more steps than when facing a severe illness as O'Brien (2015) adds three stages called immobilisation, experimentation and completion into the model. When adapted to the context of organisational change as described above, the model is typically called as change curve (Schneider & Goldwasser, 1998; O'Brien, 2015). O'Brien (2015) also suggests four basic responses related to coping with each stage of change as provided in Table 9. Immobilisation and denial require support, anger, bargaining and depression are tackled by listening, experimentation calls for encouraging, and finally, acceptance and completion need

to be praised (O'Brien, 2015). Wiggins (2009) also translates the responses into the different types of communication needs and states that in the support phase the communication should provide enough information broadly, listening should include only few carefully considered communication interventions, encouraging should provide people the vision of the future, and in the praising phase, the communication should also involve employees so that integration and commitment can be achieved.

3.3.3 Kotter's eight-stage model

Another widely-known model of change is the eight-stage model that Kotter (1995) has presented in order to guide leaders to transform their organisation successfully and avoid the common pitfalls (Figure 12). Furthermore, Kotter (1996) has also gathered the insights into a book *Leading Change* that has brought the eight-step process into wider awareness. The model has received a significant popularity in the context of change management (Appelbaum et al., 2012; Pollack & Pollack, 2015), and even some applications can be found from the procurement context (e.g. Day & Atkinson, 2004; Lintukangas et al., 2009). Kotter's model cannot be clearly categorised either as a planned or as an emergent approach as By (2005) sees the eight-stage model as a way to structure the emergent change, whereas Worley and Mohrman (2014) and Cummings et al. (2016) consider the eight-step process more as a continuum of the planned approach as they state that the steps of Kotter's process can be mapped into the three steps Lewin has initially proposed. Hence, it seems that clear consensus about the categorisation of the eight-stage model does not exist even though it is widely applied in many organisational contexts.

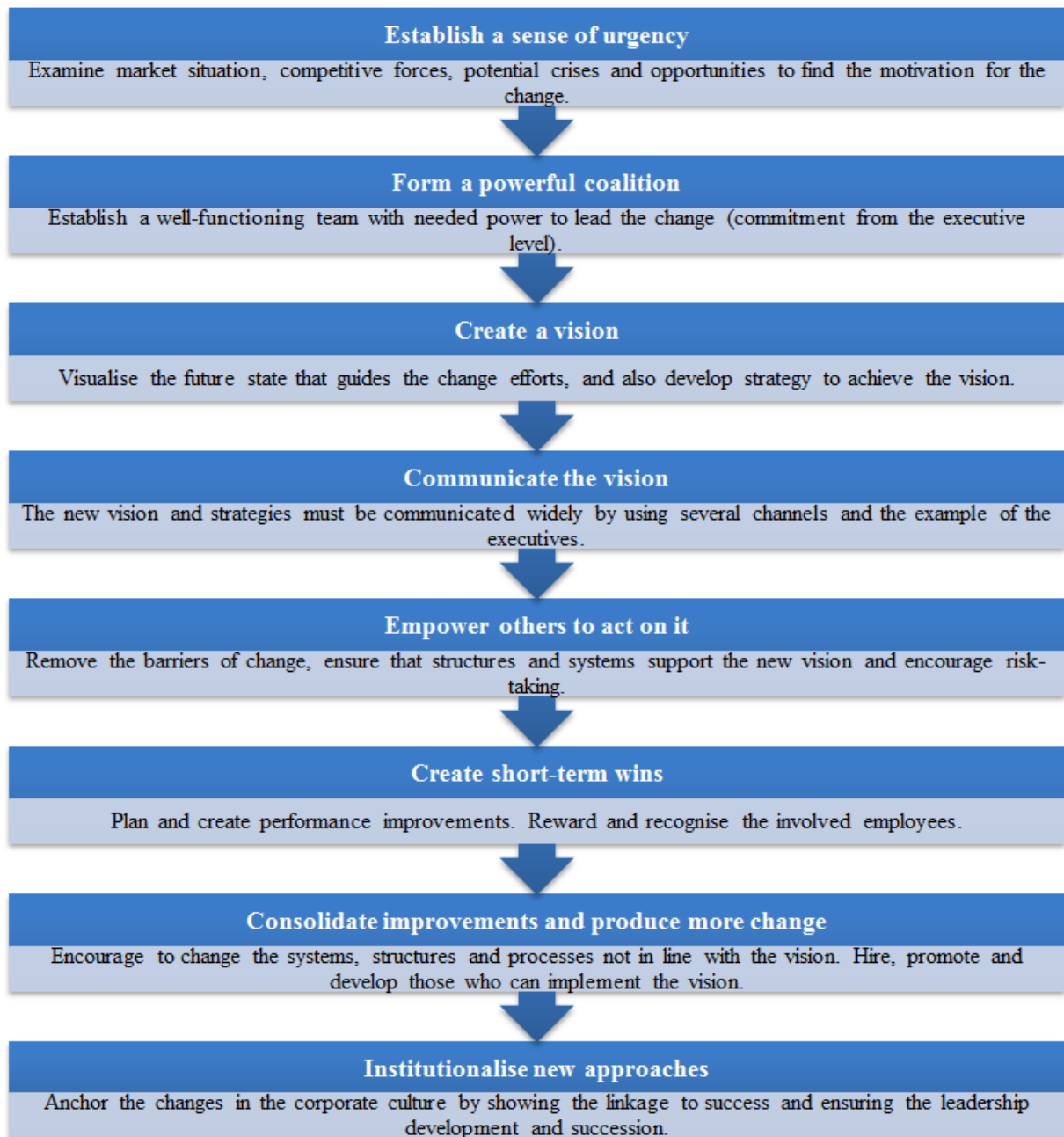


Figure 12. Kotter's eight-stage model (based on Kotter, 1995)

As Figure 12 presents and the name suggests, Kotter (1995) models the change process through eight steps that are (1) establishing a sense of urgency, (2) forming a powerful guiding coalition, (3) creating a vision, (4) communicating the vision, (5) empowering others to act on the vision, (6) planning for and creating short-term wins, (7) consolidating improvements and producing still more change, and (8) institutionalising new approaches. As presented here,

Kotter's change process may appear as a sequential process, but in reality, the process can be more complex than a linear series of stages as the speed of different sub-groups in an organisation moving through the stages may vary, or alternatively, the stages can be even overlapping in a real change process (Pollack & Pollack, 2015). In the same vein, Appelbaum et al. (2012) present some criticism for example regarding the rigidity of the approach, but on the other hand, they also acknowledge that the eight-stage process provides a good starting point for implementing change and it is likely to improve the results even though its relation to success should not be taken for granted.

4 METHODOLOGY

The research is conducted as a qualitative research. According to Eriksson and Kovalainen (2008) qualitative research is often applied in order to understand the reality as socially constructed, which means that qualitative methods often require interpretation and understanding, and aim at creating a holistic insight of the issue concerned in the study. As category management and change management in the procurement context are emerging topics lacking comprehensive prior knowledge in academic research (see e.g. Heikkilä & Kaipia, 2009; Hesping & Schiele, 2015; Schneider & Wallenburg, 2013), there is a need to understand those phenomena in a detailed level and produce new knowledge. Furthermore, qualitative research suits well when the phenomenon is sensitive in its context (Eriksson & Kovalainen, 2008). Change management is especially a context-specific topic for example due to its dependency on organisational culture and values, and thus, needs to be studied in the concerned organisation.

The research combines two qualitative research approaches: case study and action research. A case study has typically two main characteristics: firstly, it focuses on investigating a contemporary phenomenon in-depth in its context, and secondly, the phenomenon and the context cannot be separated from each other (Yin, 2009). This study also focuses on emerging topic that requires profound understanding. Moreover, as the research is targeted on change management approach, it is not easy to set clear boundaries between the phenomenon and the context since the context strongly influences the change management required. As case study is especially a useful approach when striving for an in-depth analysis of phenomenon (Ellram, 1996; Kähkönen, 2011) that can be relatively novel and only little is known before (Ellram, 1996), it can be applied in this research to gain a better understanding about the concerned phenomena that are relatively immature in the procurement context. In addition, case study is particularly suitable for research questions that aim at answering “how” or “why” (Yin, 2009), which makes it also relevant for this research as the main research question starts with “how” and concerns a contemporary phenomenon with only little control. To be more specific, the research can be considered as an exploratory case study since according to Voss et al. (2002) exploratory case studies are typically needed in the beginning when the topic is relatively

novel, which applies also to the topic of this research. Hence, the aim is to identify questions to investigate in the further studies (Kähkönen, 2011), which can be also seen as a goal and contribution of this study.

Secondly, the research can be considered as action research that according to Eriksson and Kovalainen (2008) involves not only deriving the research problem from practice, but also actively collaborating in solving the research problem through engaging and working with the business. Hence, this research can be considered as actions research since the researcher is part of the case organisation and involved in the implementation of category management process on a daily basis. Furthermore, action research is particularly useful in describing series of actions occurring over time, which makes it especially suitable in studying the process of change (Eriksson & Kovalainen, 2008). Thus, also in this study, action research can provide significant value since the change management perspective is adopted for the implementation of category management.

4.1 Case selection and description

Regarding case studies there are some common aspects to address in the case selection, and those typically involve the selection of the case, case companies, together with the number of cases, the unit of analysis, and the time perspective for the research (Kähkönen, 2011). Yin (2009) proposes to structure the case study designs along two dimensions from which the first distinguishes between single and multiple case studies, and the second refers to the unit of analysis and divides the designs into holistic and embedded ones. Following the structure above this research can be considered as a holistic single-case study because it focuses on a single implementation project in one organisation. The single-case design is here preferred over multiple cases since for example the organisational culture, values and strategy strongly influence the required change management. In that respect, fewer cases typically allow a greater depth of observations (Voss et al., 2002), which is considered important in this research as the complexity and context-specificity of the topic requires developing a profound understanding. On the other hand, the holistic approach is selected because the implementation

is considered in the context of whole organisation for example instead of studying it from the perspective of each division. When necessary, the significant differences between divisions are pointed out, but in general, creating first an overall picture of the successful implementation in the whole organisation was seen as a more important starting point.

When it comes to the time perspective of the research, several challenges exist from the methodological perspective (Halinen & Törnroos, 2005). Regarding the time, retro-perspective and longitudinal cases can be distinguished from each other (Voss et al., 2002). The use of longitudinal methods should be considered especially when a change process is under investigation (Halinen & Törnroos, 2005). However, the longitudinal methods often involve an access problem that could be overcome by using a clinical perspective characterised by active participation in formulating and observing the organisational change (Voss et al., 2002). Hence, at this stage the features of action research provide help regarding the time perspective. This research also involves illustrating a change process, and thus, the question is relevant from the standpoint of this study. Here, the suggestion from Voss et al. (2002) is taken into use as features of clinical perspective and action research are used as the research is strongly involved in the implementation.

The selected case company operates in construction industry and is involved in two different types of business, namely projects and services that are organised through seven divisions. From the geographical point of view, the operations of the case company are limited to Europe, but still encompassing several countries with focus on Nordic, Central and Eastern Europe. In 2017 the turnover of the company was over 2 billion euros, and the company employed around 16 000 people. The widespread geographical nature and the previous decentralised way of working in procurement naturally provide a significant challenge for the category management implementation. Hence, the conditions for the implementation are far from easy and simple. However, Pagell and Shevchenko (2014) state that currently the academic research often focuses on studying the average results, which provides only limited understanding as it excludes the possible radical ideas. Thus, similarly regarding the context of organisational change and implementation process, studying average companies and standard conditions might not reveal all complexities of the required change. Hence, studying a

challenging set-up can provide an interesting basis to discover complexities that for example the long-lasting tradition of decentralised environment provides.

4.2 Data collection and analysis

When it comes to data collection, case studies typically take advantage of several data collection methods such as archives, interviews, questionnaires and observations (Eisenhardt, 1989). This research also utilises two different primary data collection approaches namely interviews and observations. Data is collected in the first place by conducting interviews inside the case company, but in addition, observations are used to support and complement the interview data. Interviews conducted in the case company encompass a large sample of interviewees across the divisions and different organisational positions. The interviews cover all seven divisions of the company, equalling to 37 interviews and 41 interviewees in total. According to Table 10 that gives an overview of the interviewees, the amount of interviewees from the division A seems to be slightly dominating, but the effect is mainly caused by a merger of two divisions recently. Even though category management is a procurement-driven approach, it requires full commitment from the business. Therefore, regarding the organisational positions, the interviews include personnel from both procurement departments and business operations. When selecting the informants, sufficient language skills were considered as most of the interviews were conducted in English that is not mother tongue either for the interviewees or for the researcher. Hence, it can be concluded that the study involves triangulation related to both data collection methods and interviewees.

Table 10. Interviewees of the study

	Division A	Division B	Division C	Division D	Division E	Division F	Division G	Total
CPO of division	2	1	1	1	1	1	1	8
Procurement, category team member	5	0	1	0	2	0	0	8
Procurement, out of category teams	2	0	0	1	4	0	0	7

Head of projects	3	1	0	1	0	0	0	5
Head of region	2	1	0	1	1	0	0	5
Unit manager	1	1	1	0	1	0	0	4
Project manager	0	1	1	0	1	1	0	4
Total	15	5	4	4	10	2	1	41

The interviews were conducted as semi-structured theme interviews. Thus, the interview was built around selected central themes that must be covered during the interview, but in the end, the interview neither included a strict structure of questions that must be followed nor is totally open without any guidance for the interviewee (Vilkka, 2015). In this case, the interviews were structured along three main themes that were organisation and role of procurement, category management, and implementation and change management as Appendix I presenting the interview questions clarifies. Each theme consisted of several supporting questions that were used to structure and guide the interviews. However, the semi-structured nature of the interviews allowed asking further questions in case the interviewees mentioned issues that were not considered when preparing the interview question. The set of questions was same for all interviewees, but if needed, the questions were adjusted based on the interviewee's role in the case organisation. The interviews were mainly conducted as individual interviews, but due to schedule constraints three of the 37 interviews were conducted as pair or group interviews. Furthermore, the most of the interviews, precisely 27 interviews, were conducted as face-to-face interviews. However, due to wide geographic coverage, ten interviews were conducted via an audio conference system. Interviews were audio-recorded for analysis purposes, and in addition, notes were taken during the interviews.

In order to analyse and display the interview data, it was first coded along the main themes of the interviews that were derived from the research questions. Those main themes included driving and restraining forces of category management implementation, practices to reduce the restraining force and increase the driving forces, and the benefits of category management implementation. According to Miles and Huberman (1994) this stage can be called as first-level coding because it involves summarising segments of data, meaning that tags or labels that are commonly called codes are attached to a piece of data being it a word, a phrase, a

sentence or a paragraph. On the other hand, the process can be called also open coding as Corbin and Strauss (2008) name it. Furthermore, the coded data was categorised further based on different frames derived mainly from the existing literature, but also from the practice as the category management process of the case company was used to structure some themes. Miles and Huberman (1994) name this stage as pattern coding in which the purpose is to group the first-level codes into a smaller number of constructs or themes. Corbin and Strauss (2008) call the same process as axial coding. For the data analysis purpose, with-in case and cross-case analyses provide powerful tools that help to structure and process the data (Eisenhardt, 1989). As the data in this research is collected inside the case company and the study follows a single-case design, the data analysis here relies on with-in case analysis.

4.3 Validity and reliability of the study

Furthermore, the methodological choices and their effect on the quality of the research must be carefully evaluated. Evaluating the quality of the research typically involves considering the validity and reliability of the study (Eriksson & Kovalainen, 2008). According to Yin (2009) in case studies it is particularly important to address construct validity, internal validity, external validity and reliability. Hence, those concepts are defined and considered in Table 11 that also provides an overview of common case study tactics that can be used to take the measures into account. In addition, the table clarifies how the measures are addressed in this study.

Table 11. Validity and reliability of the study

Dimension	Description	Case study tactics	Actions taken in this study
External validity	Concerns the generalisability of the results outside the concerned case (Yin, 2009).	Replication logic – replicate the study in different contexts (Ellram, 1996; Yin, 2009).	No possibility to replicate the study in the scope of this project, but replication suggested to be addressed in further studies. Acknowledged in limitations.
Construct validity	Concerns establishing	Use multiple sources of	Multiple data sources are used:

	correct operational measures for the concepts that are studied (Voss et al., 2002; Yin, 2009).	data, establish a chain of evidence and let the interviewees review the initial case report (Yin, 2009).	interviews and observations. Data triangulation: interviewees from different divisions and organisational positions.
Internal validity	Concerns the problem of making inferences and only applicable for explanatory case studies (Yin, 2009).	Conduct pattern-matching, explanation-building and time-series analysis (Yin, 2009).	Not applicable because an exploratory case study in question.
Reliability	Whether same findings and conclusions could be achieved if another investigator would replicate the study by following the same procedures (Voss et al., 2002; Yin, 2009).	Use case study protocol and develop a case study database (Yin, 2009).	All documentation including interview data, coding and analysis files are stored in one place. Benchmarking case study protocols.

The most common concern related to case studies is the lack of generalisability that may cause external validity problems (Ellram, 1996). However, for example Dubois and Araujo (2007) state that also case studies can be generalised since only the way of generalising differs: case studies rely on analytical generalisations whereas quantitative approaches rely on statistical generalisations. Similarly, Ellram (1996) concludes that the lack of generalisability can be easily addressed by replicating case studies. In the scope of this research replication is not possible, but that can be seen as a suggestion for further research. When it comes to ensuring construct validity, multiple sources of evidence are efficient way to tackle the challenge (Yin, 2009). In this study, the needed triangulation is achieved by selecting interviewees from various divisions and organisational positions, but also triangulation of methods exists as both case study approach and action research are applied. As internal validity does not relate to exploratory studies (Ellram, 1996), it is not considered here. Finally, the reliability of a case study can be enhanced by using case study protocol and developing a case study database (Yin, 2009). Thus, in this study, case study protocol proposed by Ellram (1996) is benchmarked and the documentation is stored in one place forming a case study database.

5 CHANGE MANAGEMENT IN IMPLEMENTING CATEGORY MANAGEMENT

The empirical part of the study focuses on discussing the change management related to category management implementation in the context of the case company. Firstly, the organisation of procurement and category management in the company are discussed so that the current situation is understood as it creates the basis for the required change. Thereafter, the focus is targeted on the change and change management that are required in the category management implementation. The empirical analysis related to the change is approached based on the ideas that Lewin (1947) has introduced about the planned change since the field theory is applied in evaluating the force fields of the current state and the three-step model of change is used as a guiding principle to structure chapter as Figure 13 illustrates. The three-step model is preferred over other earlier presented models of change as together with the field theory it creates a coherent combination for investigating the change management in the context of category management implementation.

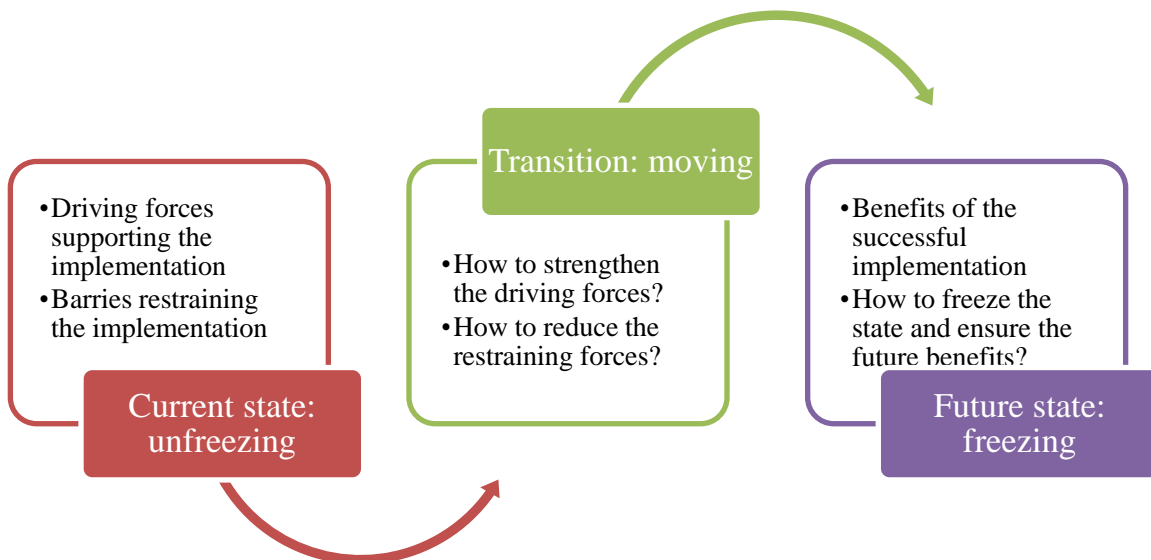


Figure 13. Structure of empirical analysis

Firstly, the current state is evaluated from the viewpoint of drivers and barriers that enable or restrain the company from achieving the future state that is the efficient category management process fully implemented at the group level and continuously providing the expected benefits. The identification of the drivers and barriers is crucial in order to unfreeze the current state. Secondly, the transition that is required in order to achieve the desired future state in the company is examined in the light of the needed changes in the drivers and barriers. Both alternative options meaning either strengthening the drivers or reducing the barriers are taken into consideration. Finally, as the achievable benefits are also often seen as a significant driver of the implementation, the desired future state is approached by the benefits that are expected from the successful implementation. In addition, freezing the state and keeping the achieved benefits is considered in the final part of the empirical analysis.

5.1 Organisation of procurement in the case company

Currently, procurement is organised in the case company in a relatively decentralised way as the procurement organisation of the parent company consists of only few people coordinating group-wide activities, whereas the procurement departments of the divisions are working independently and autonomously in the interface of the business operations. The parent company's procurement department is mainly responsible for group-wide development activities, reporting, creating and implementing common guidelines and policies, and coordinating some of the indirect procurement categories such as travel and IT that encompass significant synergy benefits.

Overall, the organisation of procurement can be seen as a matrix as the leaders of divisional procurement organisations formally report to the CEO of their division, but still, in the procurement topics they have also co-operation with the CPO of the group. The co-operation between the group-level procurement organisation and the divisional organisations is guided by monthly meetings where common topics and reports are discussed, and activities in the divisions reviewed. Hence, a formal meeting structure exists, but the group-level co-operation can be considered still relatively light as the formal reporting line of the divisional

procurement leaders is inside their own division. However, there has been an increasing need to enhance the co-operation and control in procurement, and therefore, as a part of the strategy execution the group-level category management has been established to realise the full purchasing potential that the company in total has. Thus, there is a clear target to move from relatively decentralised organisation of procurement towards more hybrid approach, more precisely centre-led model, in which category management has a strong role in fostering the co-operation and integration.

As the divisions act relatively independently in several procurement topics, the organisation of procurement also varies from division to division. The characteristics of each division are summarised in Table 12 below and discussed further next. As the Table 12 indicates, the variations start already from the size of the procurement department as in some divisions the central procurement organisation consists of only few people, whereas in some of the divisions the central procurement employs a few tens of people. Despite the differences in resourcing, in each division the central procurement organisation is responsible for strategic purchasing such as developing category strategies, selecting preferred suppliers, making framework agreements and managing the supplier relationships. Hence, the strategic procurement can be considered as a common role for each divisional procurement organisation even though it is worth noticing that differences in resourcing might affect the professionalism of the strategic procurement as those with small resources have to prioritise their tasks.

Table 12. Organisation of procurement in divisions

Division	Spend (2017)	Size of central procurement	Strategic purchasing	Operational purchasing	Model
Division A	180 M€	20	Central procurement	Business operations with procurement support	Hybrid
Division B	300 M€	20	Central procurement	Business operations with procurement support	Hybrid

Division C	190 M€	4	Central procurement	Business operations mainly	Decentralised hybrid
Division D	70 M€	3	Central procurement	Business operations mainly	Decentralised hybrid
Division E	330 M€	40	Central procurement	Central procurement mainly	Centralised
Division F	100 M€	20	Central procurement	Central procurement mainly	Centralised
Division G	90 M€	10	Central procurement	Central procurement mainly	Centralised

On the other hand, when interpreting the Table 12, the variations seem to increase when considering the operational purchasing as the different ways of organising the operational procurement can be divided roughly into three different alternatives. The first model is mainly applied in divisions E and F in which the operational purchasing is mainly controlled by the central procurement department as there are operational purchasers focusing on procurement issues located in several branch offices across the divisions. Hence, the first approach can be described as relatively centralised. The second approach involves significant co-operation between the central procurement department and the business operations as typically there are no dedicated operational purchasers, but instead, the business representatives such as project or services managers or even technicians are responsible for ordering the goods based on frame contract done by procurement. Alternatively, in complex categories or bigger projects the central procurement is highly involved in the operational purchasing. Therefore, the approach can be considered as a hybrid model. Finally, the third option includes no or little involvement from the central procurement in the operational purchasing itself as for example tendering for bigger projects is often done by project managers themselves, but the frame

contracts are still used as a basis for standard purchases. Thus, the third alternative can be described as decentralised hybrid.

5.2 Category management in the case company

Category management is executed in the case company in different levels. Firstly, some divisions practice category management inside their own division and have dedicated resources and category managers for different categories. On the contrary, some division do not have currently any local category management practices. Secondly, the case company has initiated last year a group-level category management that is in the scope of this research and discussed here more in detail. Overall, the group-level category management has been established as a result of the recent strategy work that has identified procurement and logistics as a key contributor for operational excellence. In addition, category management was identified as suitable way of working for achieving performance improvements, increasing the intra-company collaboration, and utilising the full purchasing power that has been so far fragmented to the divisional level. Hence, the core motivation behind initiating the group-level category management is the power of collaboration that can be achieved by consolidation volumes, sharing best practices and learning from each other.

The group-level category management is organised around five main categories, three concerning direct materials, one for subcontracting, and another for indirect and IT that each of them have a cross-divisional and sometimes cross-functional team built around them. Hence, the teams consist mainly of divisional employees, but also some parent company employees that all are part-time members as they have the role in category team on top of their daily tasks. Furthermore, each team has a named category lead that is in charge of the progress of the team and acts as a project manager who guides the work of the team. On top of the teams, there is also a steering committee that regularly monitors the progress of the teams and validates their decisions. In addition, the executive support is visible in the steering committee as two of the members are part of the management board of the company. To conclude, the

whole category management structure is built up on the divisional procurement organisations, which also highlights their role in the implementation of category strategies.

The current category management process of the case company is illustrated in Figure 14. The process includes six steps: as-is analysis of the current situation, engaging stakeholders, supply market analysis, developing category strategy, category strategy execution, and implementation and follow-up. As-is analysis aims at creating a comprehensive picture about the current situation of category by understanding the spend, current buying habits and identifying the current suppliers across the divisions. Engaging stakeholders includes the identification and on-boarding of internal stakeholders whose support and expertise is needed during the process, whereas supply market analysis targets the focus on supplier side and strives to create a comprehensive picture of the current and potential new suppliers in the markets. The previous three steps enable the fourth step called category strategy development that combines the output of the previous steps and addresses how the category should be handled in the future. Category strategy contains the scope of supply, supply base, supply chain, supplier selection methods and criteria, and suggestions of the future contractual approach. The fifth step focuses on executing the developed strategy that often involves running a request for quotation process, negotiating with the suppliers and finally, selecting the preferred supplier(s) and making contract(s) with the selected vendor(s). Thereafter, the hard work begins as the selected supplier(s) must be implemented in the local divisional organisations, the compliancy must be followed, and the supplier relationships have to be maintained. Furthermore, the iterative nature of the process is acknowledged since category management is seen as a continuous way of working.

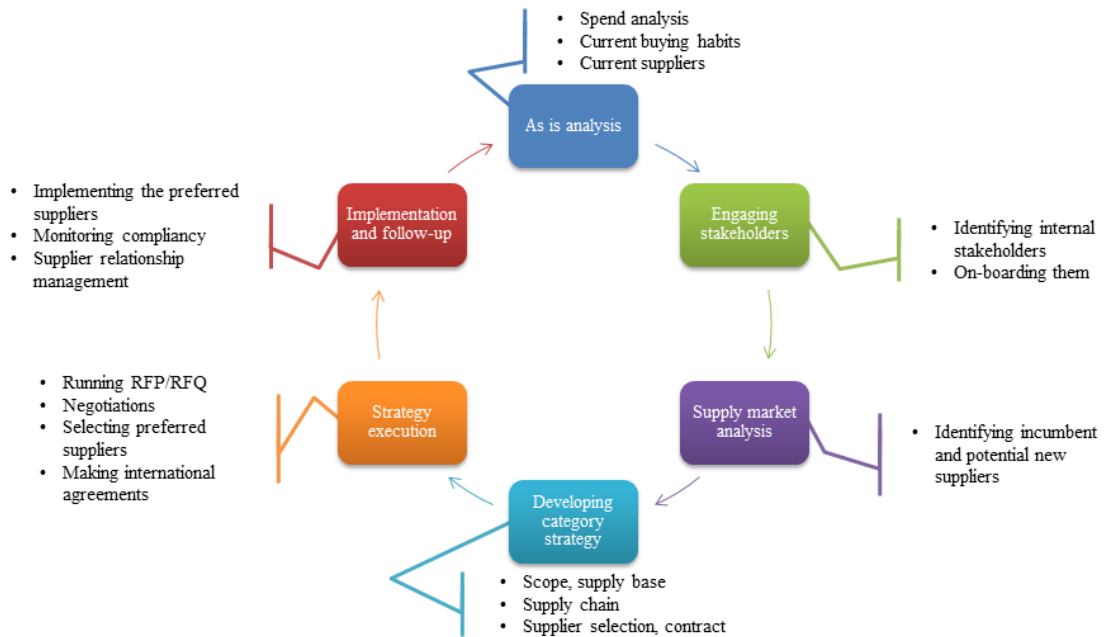


Figure 14. Category management process in the case company

It is worth noticing that the current category management process in the case company focuses on the work among a selected category. Thus, it does not describe any preparations such as selection of the category or team formation. The practice in the case company is that each team selects inside their main category a subcategory which is validated by the steering committee, and thereafter, they start to work through the process steps by utilising virtual meetings and some face-to-face workshops. Secondly, the engagement of stakeholders has been so far illustrated as a single step in the process even though the contribution of the stakeholders is required through the entire process. In addition, the category management teams have been so far only running their first pilot categories. Even though the teams are close to finalise the first pilots, it must be acknowledged that the experience about the applied process and approach is limited, and both the process and the approach in general are open for further development based on the first experiences.

5.3 Current state: drivers and barriers of category management implementation

Implementing group-level category management would require giving up some of the autonomy and independence that the divisions in the case company have had before since the new centre-led approach that category management involves would require more collaboration in order to succeed. However, unfreezing the existing state before moving towards the new target state has encountered some difficulties. Therefore, it is important to analyse the force field of the current situation so that the driving and restraining forces of the change can be identified. Without identifying the forces currently affecting, it is impossible to plan how the target state of successful category management implementation could be achieved. Hence, this step of analysing the current state will lay the groundwork for defining the actions that successful implementation would require.

5.3.1 Drivers of category management implementation

Typically, identifying the drivers of category management implementation was significantly more challenging for the interviewees than describing the restraining forces. However, interviewees were still able to identify some drivers that are summarised in Figure 15. The drivers can be divided into two categories based on their initial source that can be either inside or outside the organisation. As the Figure 15 illustrates, the interviewees saw the driving forces stemming more from inside the company than from the external environment. To be more precise, internal drivers were mentioned in the interviews 50 times and almost by all interviewees, whereas the external drivers were mentioned only 11 times. Hence, the implementation of category management is merely driven and supported by intra-company factors.

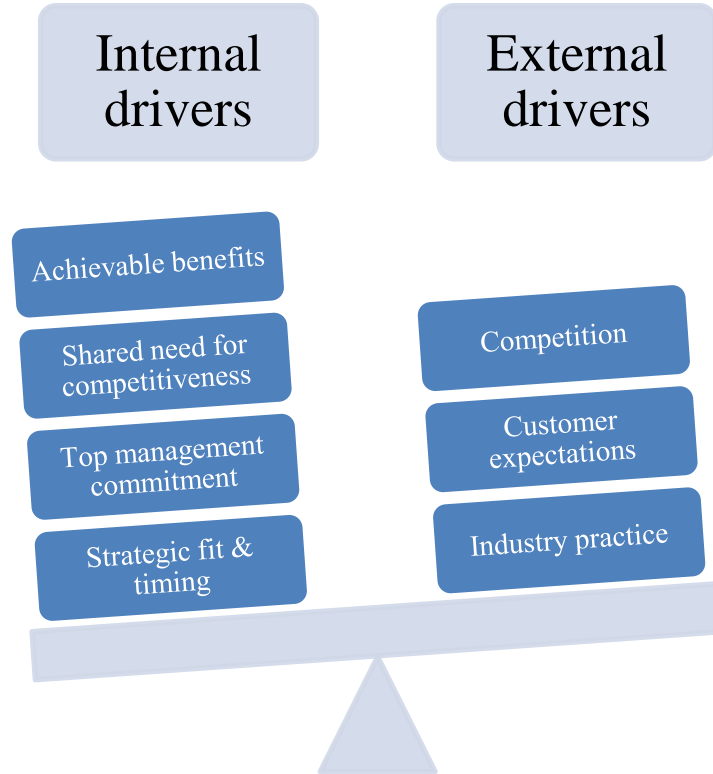


Figure 15. Summary of the category management implementation drivers

In general, the external drivers were mentioned only seldom, but the most popular of them, namely fierce competitive environment, was an exception as it was mentioned nine times out of 11. Hence, interviewees from both procurement and business operations considered the tough competition to enforce the implementation of category management significantly. As interviewee 4 formulated it: “We have one quite significant difference compared for example to our one big competitor, company X, because we have domestic technicians. They [company X] use a lot of foreign subcontractors and get competitive advantage already there, which means we have to be able to buy the products much cheaper than they so that we can be competitive in the overall price.” In addition, one interviewee also referred to industry practice and stated that as other companies are also utilising this type of way of working that is typically associated with modern procurement, there should not be any reason why the case company also should not be adopting the similar way. Furthermore, another interviewee mentioned the customer expectations related to sourcing more internationally. The interviewee

emphasised that implementing category management would be a prerequisite for fulfilling those expectations.

Most of the interviewees related the drivers to internal forces that support and guide the implementation of category management forward. Majority of the interviewees saw the benefits that can be achieved as a main driving factor that contributes to the successful implementation. Some only mentioned the benefits in general level, whereas other interviewees specified the achievable benefits to include factors such as price and quality improvements, more efficient processes, increased information sharing and innovation. Price and quality improvements together with innovations were highlighted in most cases by the employees working in business operations, whereas the representatives of procurement personnel focused more on information sharing and process efficiency. Furthermore, the competitive environment also turns into an internal driver as there is clearly a common need to increase the competitiveness of the company. The shared need for competitiveness was especially evident in divisions A, B and C, which may indicate some market specific differences between the divisions. However, it seems that a shared need for the change exists quite widely. In addition, a few employees highlighted the role of top management support, strategic fit and timing as driving forces of the implementation since the first two of them show the way for the change and the third guarantees that the momentum supports the implementation. Regarding the strategic fit it was considered that a clear link between the company strategy and category management implementation exists, and also the appropriate timing was associated with the launch of the new strategy.

5.3.2 Barriers of category management implementation

Whereas identifying driving forces was sometimes considered as a challenging question, all interviewees were able to easily identify the forces that currently restrain the full implementation of category management in the case company. The overview of the barriers is represented in Table 13 that also indicates the frequency of each barrier. The restraining forces can be categorised based on the category management process stages that are applied in the

case company and presented before. As the process description of the case company did not include any prior steps before starting the work among the selected category, the classification below adds one more stage called preconditions in order to consider those issues that should be in place even before the work with a selected category starts.

Table 13. Summary of category management implementation barriers

Stage	Barrier	Frequency	Frequency (%)
Preconditions	Resourcing	18	7,9 %
	Language skills	15	6,6 %
	Lack of common processes	14	6,1 %
	Support from IT systems	10	4,4 %
	Too high expectations	4	1,8 %
	Cultural differences	4	1,8 %
	Lacking professional competencies	3	1,3 %
Sum of preconditions		Σ68	Σ 29,8 %
As-is analysis	Availability of data	4	1,8 %
Sum of as-is analysis		Σ 4	Σ 1,8 %
Supply market analysis	Laws, regulations and technical specification	18	7,9 %
	Supplier resistance	14	6,1 %
	Lack of local support	7	3,1 %
	Market differences	5	2,2 %
Sum of supply market analysis		Σ 44	Σ 19,3 %
Implementation and follow-up	Old habits and relationships	23	10,1 %
	Delivery and logistics requirements	14	6,1 %
	Communication	11	4,8 %
	Resistance to change	11	4,8 %
	Customer demands	11	4,8 %
	Suppliers not respecting the frame contract (offer lower prices locally)	9	3,9 %
	Short planning range	8	3,5 %
	Lacking compliancy and its follow-up	8	3,5 %
	Lacking procurement early involvement	7	3,1 %
	Too complex ordering process	4	1,8 %
	Increased risk	4	1,8 %

	Wrong internal incentives	2	0,9 %
Sum of implementation and follow-up		Σ 112	Σ 49,1 %
Sum of all barriers		Σ 228	Σ 100,00 %

As the Table 13 illustrates, the barriers of category management implementation in the case company are related to four process stages, namely preconditions, as-is analysis, supply market analysis, and implementation and follow-up. Hence, the interviewees saw that the another process steps, meaning engaging stakeholder, developing a category strategy and executing the strategy, do not cause significant challenges that would hinder the implementation, whereas the above mentioned four process steps included some problems that prevent the successful implementation. Based on the frequencies of the restraining forces and the amount of barriers, it can be concluded that most of the barriers are related to the implementation and follow-up stage as they were mentioned 112 times that accounts for almost half (49,1 percent) of the all observations regarding the barriers. Significant amount of barriers also originates from preconditions and factors related to supply markets. Restraining forces related to preconditions were mentioned 68 times (28,9 percent of all observations), and slightly behind, supply market focused factors were recognised 44 times that constitutes 19,3 percent of all observations. Regarding as-is analysis, there was only one barrier that related to the availability of the data, and it was mentioned 4 times meaning only 1,8 percent of the total observations.

Implementation and follow-up seems clearly a critical process stage regarding the successful implementation as it includes 12 barriers that together account nearly for the half of the observations of restraining factors. According to the interviewees, the most significant barriers for the successful implementation are the existing habits and relationships that are difficult to change and unlearn. In addition, several interviewees were concerned about the delivery times and logistics capabilities of suppliers as group-wide category management could potentially increase the amount of international purchases that are more challenging from the logistical perspective. Currently, insufficient communication, customer demands and resistance to change seem to also complicate the implementation since they were frequently mentioned in the interviews. Resistance to change can be seen as an overarching factor that encompasses

several other barriers, whereas communication and customer demands are single contributing factors. Hence, the current communication is not considered to support the changes as it should. Furthermore, there is a concern that customer or designer demands for certain products overrule the preferred supplier selections, which makes guiding volumes for the selected suppliers challenging. Relatively many interviewees were also concerned about the ability to get lower prices locally by contacting the supplier, which clearly implies that the suppliers are not always loyal for the frame contracts. In addition, the lack of internal compliancy and short planning range were common topics under discussion. It was also emphasised that the short planning range creates ad-hoc needs that are again challenging from the perspective of international purchasing. Finally, other occasionally acknowledged barriers included lack of procurement early involvement, too complex ordering process, increased risk in international procurement and wrong internal incentives that direct the focus only on price instead of using the preferred suppliers.

Another great obstacle for the implementation seems to stem from the lacking preconditions as the barriers related to this preceding stage composed almost one third of the all barrier observations. On the other hand, the stage already included less restraining factors because only seven barriers could be identified. The most common concern related to preconditions was resourcing both in the category management organisation and in some of the divisional procurement organisations in general. The interviewees saw that the category teams cannot work as efficiently as they should because the team members are participating in the work only on top of their own daily tasks. The concern regarding overall procurement support that would be needed to implement the results of category management was mainly faced in divisions C and D, but also in division B some were concerned about the limited resources working among operational purchasing. Challenges with sufficient language skills were also mentioned in each division especially when assuming that the group-wide category management would also increase the share of international purchasing. Last two major barriers regarding preconditions are clearly interconnected. Many interviewees especially in divisions A, B, C and D were concerned that the basic procurement process is not in place and fully implemented among the business operations. They saw the process incompliancy as a root cause for several other barriers. The problems related to the process were usually also

connected to the procurement IT systems that according to some interviewees do not support the process optimally. The systems are not always optimised from the perspective of business processes, but in addition, the used IT tools among procurement vary significantly from division to division, which complicates the consolidation when working in category management together as one company. Finally, high expectations, cultural differences and lack of some new professional capabilities were also seen as hindering forces by some of the interviewees.

The third bigger group of obstacles is related to the supply markets and comes forth in the stage of supply market analysis. Supply market analysis includes four barriers in total, and the most significant of them is related to different laws, regulations and technical specifications. Some products categories typically involve country-specific regulations, and therefore, using suppliers from other countries can create a significant obstacle. Alternatively, it might be that some suppliers are not operating in the full scope of the countries in which the case company is operating because of the regulatory issues. On the other hand, interviewee 8 acknowledged some common EU regulations that would enforce the cross-country co-operation: “I have to emphasise the cooling appliances with natural refrigerants as it will be a future trend. The legislation drives towards those in whole EU area, so it will be one where we could make international agreements because none of our countries can avoid it.” Furthermore, as category management involves consolidating volumes, the interviewees saw that some suppliers might be reluctant to engage in category management tender processes because they would not like the buying company to benefit from the volumes. Some of the interviewees were also concerned about losing the close local support from the suppliers due to increased international purchasing and the higher-level supplier relationship management. Finally, couple of interviewees mentioned the market differences in general level as a possible hindering factor.

Table 14. Differences and similarities between the divisions

Barrier	Division						
	A	B	C	D	E	F	G
Resourcing (P)	x	x	x	x	x	x	x

Language skills (P)	x	x	x	x	x		x
Lack of common processes (P)	x	x	x	x			
Support from IT systems (P)	x	x		x		x	x
Too high expectations (P)	x			x	x		
Cultural differences (P)	x		x				
Lacking professional competencies (P)	x						x
Availability of data (A)	x					x	
Laws, regulations and technical specification (S)	x	x	x	x	x	x	x
Supplier resistance (S)	x	x	x		x	x	
Lack of local support (S)	x			x	x	x	
Market differences (S)	x				x		
Old habits and relationships (I)	x	x	x	x	x	x	x
Delivery and logistics requirements (I)	x	x	x	x		x	
Communication (I)	x	x			x		
Resistance to change (I)	x	x	x		x		
Customer demands (I)	x	x		x	x	x	
Suppliers not respecting the contract (I)	x	x		x		x	
Short planning range (I)	x	x	x	x			
Lacking compliancy and its follow-up (I)	x	x	x	x			
Lacking procurement early involvement (I)	x	x		x			
Too complex ordering process (I)	x	x					
Increased risk (I)	x		x				
Wrong internal incentives (I)				x			

On one hand, as indicated above, not all barriers are relevant for all division. On the other hand, there are clearly some common nominators across the divisions. Table 14 above increases the awareness about the differences and similarities in barriers between the divisions. Clearly, the most frequently mentioned barriers in preconditions, supply market analysis, and implementation and follow-up are common obstacles that were mentioned in case of each division. However, some interrelated barriers such as lack of common process, short planning range, lacking compliancy and its follow-up, and lack of procurement early involvement were each mentioned in the same divisions, namely A, B, C and D that clearly form a stack of divisions that share common forces restraining the category management

implementation. Furthermore, some barriers such as wrong internal incentives, increased risk, too complex ordering process, market differences, availability of data, lacking professional competencies and cultural differences that were not mentioned too frequently seem to be concerns only for one or two divisions indicating that the challenge is not fully a shared one.

5.4 Transition: strengthening the driving forces and reducing the restraining forces

As discussed before in the literature review, the case company has two different ways to move towards the desired target state since they can either strive to add the driving forces that guide the company towards the future state, or another option is to reduce the counterforces that prevent the company from progressing as they would wish. However, based on the interviews, it seems that in the case company both tactics might be needed to achieve the maximal progress because the interviewees were able to describe the role of both actions in enforcing the change. Hence, it seems that both tactics have their own function in moving towards the desired future state in which the case company could enjoy the full benefits.

5.4.1 Strengthening the drivers

When focusing on the drivers, there were clearly two themes: the achievable benefits and the tough competition that dominated the supporting forces. Whereas the benefits can be seen only as an internal driver, the competition covers both internal and external sources as the competition itself comes outside the company, but also a shared need for increasing the competitiveness exists inside the company. As those drivers play a significant role in the current force field, it is reasonable to focus on them and their role when considering how to enforce the positive effects of the drivers. When it comes to strengthening the drivers in general, the interviewees saw the role of communication crucial in order to take the full advantage of the drivers. On the other hand, the role of the two main themes, benefits and competition, may differ in the change process. Therefore, in order to utilise them as efficiently as possible, it is crucial to identify in which stage of the change they are the most effective. Figure 16 structures the role of the main drivers and illustrates how they can be strengthened.

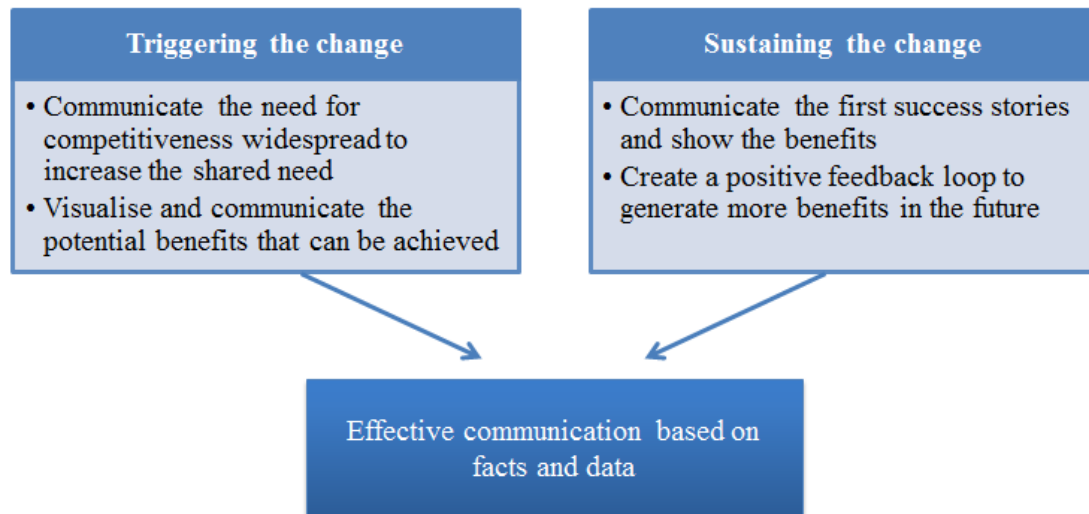


Figure 16. Strengthening the drivers in the different stages of change

Firstly, there is a need to unfreeze the current state, which typically requires some trigger in order to get the change started. In that respect, the acknowledged competitive situation can act as a significant stimulating force since several interviewees acknowledged its importance as a justification why category management needs to be implemented in the case company. Hence, to utilise the force fully, the competitive situation and the need for increasing competitiveness must be communicated widely inside the company so that the shared need can spread even wider in the company. Regarding the widespread communication, another identified driver, the strategic fit, may provide help as the performance management programs, also regarding procurement and logistics, have a significant role in the strategy. As the strategy is communicated widely and continuously in the case company, the communication can significantly increase the shared need for increasing the competitiveness. In addition, interviewee 21 also mentioned the role of group-level category management as a differentiating factor from the smaller local competitors: “We are a large company. We have more overhead costs than the smaller companies, and we should try to get some volume discount out of it that we are a big company. (...) So, I think for a large company like us, it is a must to find ways that we could use our size.” The comment is a good example of a differentiation message that could be used in the communication when expanding the shared need and taking full advantage of it.

Whereas the competition factor can be used to trigger the change, the role of achievable benefits is twofold. First of all, visualising the possible benefits that can be achieved through category management can be used in a similar way to trigger the change as many interviewees noted that showing and communicating the benefits would be crucial to get the business onboarded in category management and to get them believing in the approach. On the other hand, when the case company has the first results of category management, many interviewees saw crucial to communicate the first success stories so that wider audience can see what has been achieved. As interviewee 6 mentioned, the success stories often create a positive feedback loop that enforces the implementation further. Thus, when the future state with some benefits has been achieved, it is still important to show and communicate the benefits so that the future state can be frozen and the benefits generated also in the future. Therefore, benefits can be utilised continuously in the change process, but in order to strengthen their effect, they must be communicated efficiently. Interviewee 41 crystallised the importance of communicating the benefits well: “Maybe they [benefits] are obvious for us, but then it is also good to highlight them for others so that we can gather the volumes together, because the volumes of course interest the vendors.” Hence, even though the achievements are obvious for the procurement personnel, procurement must ensure that also others understand them.

To conclude, the key aspect in strengthening the drivers of category management implementation seems to be effective communication that in case of driving forces should be widespread as the commitment and support from the business operations is needed to realise the benefits in the end. However, then another important question relates to how to make the communication the most effective. Several interviewees emphasised that in order to be successful and powerful the communication should be based on facts and data as much as possible. When the message has strong and clear evidence, it will be accepted more easily, which in the end will make it effective and enables changes in the behaviour. Therefore, it seems that the role of communication and planning it carefully should not be underestimated when strengthening the drivers.

5.4.2 Reducing the barriers

Furthermore, another key activity for the case company is to focus on reducing the restraining forces that prevent the successful implementation of category management. As the interviewees identified quite significant amount of barrier regarding the current state, decreasing them should be taken seriously. Previously, the barriers were identified to be associated with four stages of the category management process, and hence, now each stage will be reviewed from the viewpoint of possible actions that could be taken to reduce the barriers and enable moving towards the target state. The as-is analysis stage of the process will be excluded from this review as it contained only one barrier concerning availability of data that will be tackled also in the preconditions. Figure 17 provides an overview of the process stages, and blue colour is used to highlight those process steps that are reviewed next because they involve the earlier identified barriers that need to be mitigated in order to succeed in the implementation of category management.

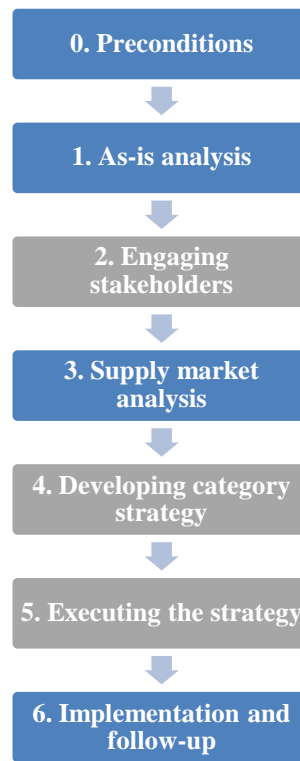


Figure 17. Process stages to address when reducing barriers

The first stage prior the process itself relates to creating the right preconditions that enable the success of category management. Figure 18 provides an overview of the barriers related to preconditions and practices to mitigate them. In this stage, resourcing was seen as the most significant barrier for category management implementation, and also reducing its effect would require several actions. Firstly, interviewees from the divisions B, C and D from both business operations and procurement considered that the first step would be fixing the divisional resourcing especially regarding the operational procurement and support for the business operations. Furthermore, there was a clear common need to improve the group-level category management resourcing, and the involvement of the divisions in the category teams was considered as an important aspect that should be secured also in the future. However, primarily the interviewees identified two alternatives to improve the resourcing: either through recruiting more employees on the divisional level or increasing the resources centrally on the group level. Adding resources in the divisions was mentioned more often, and many of those calling for group-level resources would have simultaneously improved the resourcing in the divisions. Thus, the alternatives are not exclusive and can be combined despite the fact that currently the interviewees would see increasing the divisional resources as a more favourable option. In the team interview interviewees 36, 37 and 38 mentioned that it would be important that some of the resources could focus only on group-level category management instead of the current solution in which everyone is handling the category management duties on top of their daily work.

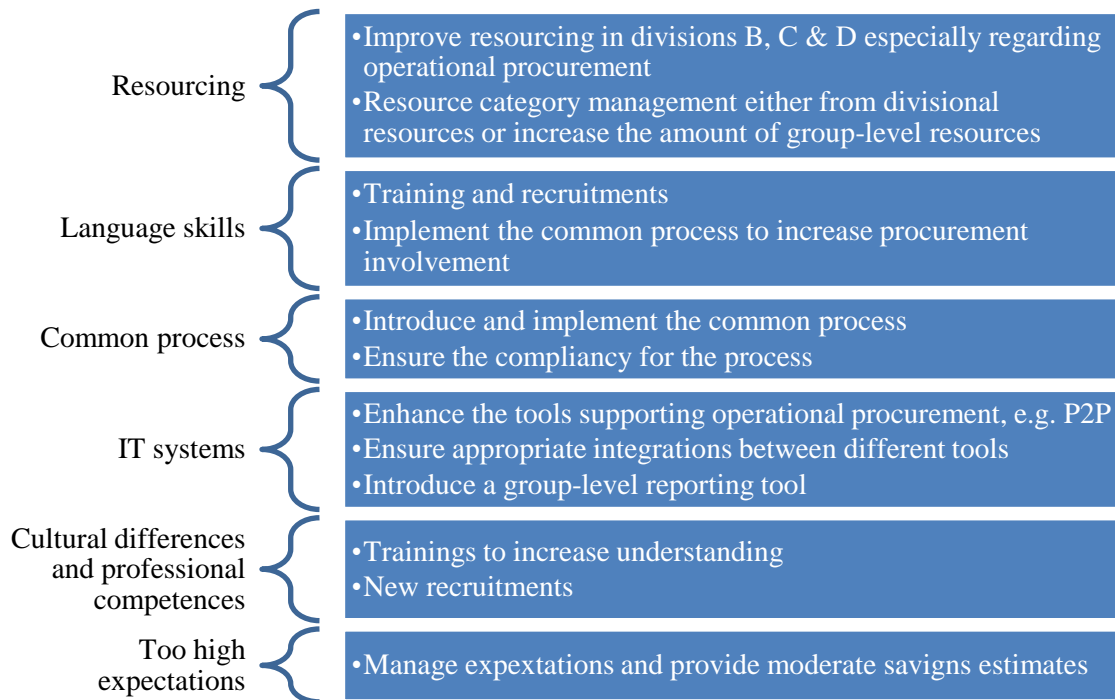


Figure 18. Barriers of preconditions and practices to reduce them

Second frequently mentioned barrier related to preconditions was language skills. Most of the interviewees that were worried about the lacking language skills proposed language training to mitigate the challenge, but on the other hand, interviewees 10 and 41 mentioned new recruitments as an alternative way to increase the amount of employees with sufficient language skills. In addition, interviewee 5 pointed out that implementing and integrating the procurement process well would increase the procurement involvement in the business operations, which again reduces the need for language skills in business operations as procurement handles the international tendering processes and provides instructions in local language. Hence, a combination of all tactics above could be needed to efficiently mitigate the language barrier.

Next barrier regarding the lack of common processes is highly interrelated as noted above, and therefore, important to address. Hence, the interviewees mainly from divisions A, B, C and D that were concerned about the differences in the ways of working emphasised the importance of introducing and implementing a common process that defines and harmonises the ways of

working. Furthermore, couple of interviewees acknowledged that even though there would be currently a common process, the process is not fully followed meaning it has not been properly implemented. When it comes to bringing the process into reality, interviewees 7, 9 and 26 emphasised the role of educating the process for the employees in business operations. In addition, interviewee 9 mentioned that the compliancy for the process must be required and forced in the beginning, and afterwards, when seeing the improved performance, people start to believe that it is the right way of doing things. Closely related to the process, the lack of supporting IT systems should be also approached from various angles. First of all, several interviewees mentioned that the tools supporting operational procurement such as procure-to-pay tool should be developed or changed so that they would support the business better. In the same vein, interviewees 7 and 16 mentioned that the integrations between different tools should be carefully considered so that they would for example support the procurement early involvement starting from the sales and tender calculation. As another dimension regarding IT systems, employees working among category management proposed that a group-wide reporting system would be crucial to have consolidated information in use. Interviewee 39 also proposed that common standards for using the ERP system should be created.

The remaining barriers regarding preconditions are too high expectations, cultural differences and lacking professional competences that were not considered that significant in the overall picture. However, interviewee 29 considered that the high expectations could be managed by convincing the management that category management is a long-term process, whereas interviewees 25, 30, 31 emphasised the importance of moderate savings estimates. On the other hand, those concerned about cultural differences saw that training regarding the differences could increase the understanding, which again would mitigate the effect of them. Similarly, training was proposed as solution regarding the lacking professional competencies. However, interviewees 5 and 41 considered that new recruitments may together with trainings help to gain the new competencies that category management at group level requires.

The second significant stack of barriers is related to the supply markets and typically faced in the stage of supply market analysis. Those forces with practices to reduce them are illustrated in Figure 19 and opened next one by one. Sometimes external aspects such as the supply

market characteristics can be difficult to influence from the buying company perspective, but still, the interviewees were able to name some actions that could help to overcome the supply market related barriers. When it comes to laws, regulations and technical specifications that may vary country by country, most of the interviewees saw that those aspects should be taken into account when selecting the subcategory. The interviewees proposed that the teams should try to focus on categories in which the international co-operation among the divisions makes sense meaning that the categories should not be too complicated to handle. Furthermore, some interviewees mentioned that having local contracts below the international framework contracts would help to mitigate the regulatory requirements as the local agreements could be based on the local law. However, interviewee 1 acknowledged the situation, but concluded that often the regulatory requirements could be taken into account when formulating the request for quotation or request for proposal. Hence, it seems that first of all, acknowledging the differences in legislation and requirement is needed so that correct actions can be taken.

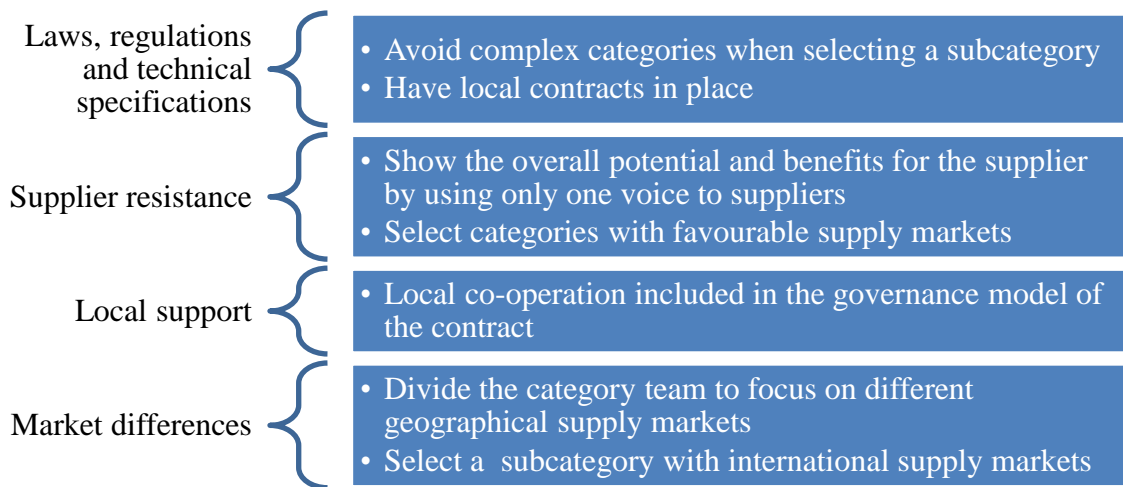


Figure 19. Barriers of supply market analysis and practices to reduce them

When it comes to the supplier resistance, the most common tactic to reduce the restriction would be showing the supplier the overall group-wide potential and benefits that they could gain. As interviewees 29 and 39 formulated it: “We should have one voice towards our suppliers.” Using only one voice and presenting the full potential can help the suppliers to see the benefits also from their perspective creating a win-win situation and improving the

supplier willingness to participate in such an initiative. Interviewee 29 also highlighted that when dealing with bigger corporations, it is increasingly important to convince the management of the company both in local and global level in order to realise the benefits. In addition, interviewee 21 emphasised the role of internal control and following the chosen path inside the case company. According to the interviewee, only by strictly following the common path, suppliers will gradually learn that this is the approach for doing business with the case company. On the other hand, interviewee 7 suggested focusing on those product categories in which the supply market is more favourable and less resistance exists.

For the rest of the supply market barriers, namely lack of local support and market differences, the suggestions for improving were more rare, which is of course natural as they were not considered as that big restraining forces either. The adequate local support should be definitely considered in the supplier selection, but in addition, interviewee 1 proposed that the local co-operation should be considered in the governance model of the contract. When the local co-operation is formally enhanced, it also can positively contribute to the level of local support received. When it comes to market differences, interviewees 2 and 26 proposed that one option could be to divide the category team so that a group of members always focus on different geographical market. However, simultaneously they acknowledged that the approach may lead to reduced effects regarding volume consolidation. As an alternative option, some interviewees again proposed to consider the differences when selecting the subcategories. According to them, those subcategories that can be handled in an international level without significant differences in supply markets should be the ones where the most of the effort should be targeted.

Finally, barriers related to implementation and follow-up stage set a significant constraint for the implementation of category management. Usually, the realisation of the benefits is highly dependent on the stage of implementation and follow-up, which makes it a critical phase that should receive wide attention. The barriers of this critical stage with the possible mitigation mechanisms are presented in Figure 20 and reviewed below more in detail. First and foremost, the attention should be targeted on reducing the effect of old habits and relationships, which is typically easier said than done. However, several interviewees saw that showing and

communicating the benefits and results of the new approach clearly and based on facts helps to convince the people. Furthermore, especially when implementing new international agreements, the interviewees emphasised that it is important to communicate what has changed compared to the previous local agreements, but also to justify and explain why the change has been done. In addition, the stick and carrot system was mentioned. Some of the interviewees were more in favour of incentivising for the correct behaviour, whereas others called for stricter orders, compliancy follow-up and consequences from the wrong behaviour. On the other hand, couple of interviewees such interviewees 5, 10 and 16 mentioned that both incentives and consequences could be needed to achieve the desired outcome.

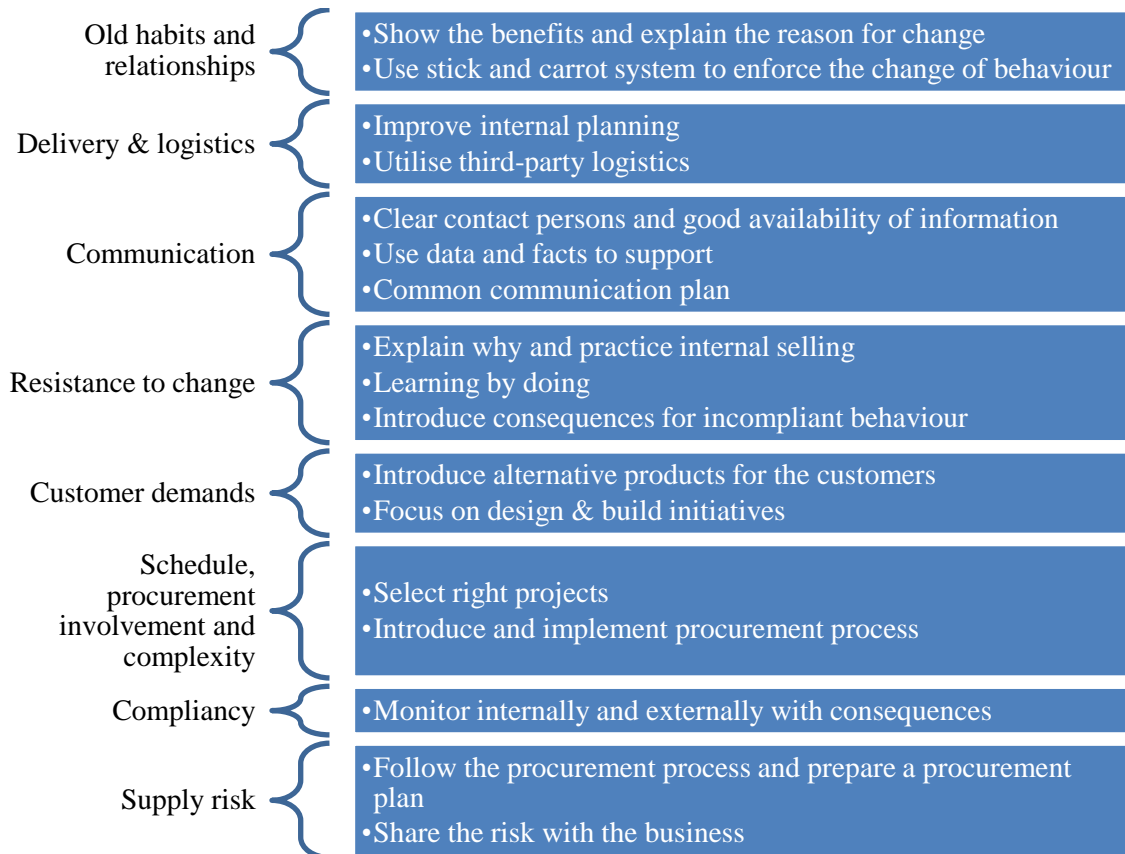


Figure 20. Barriers of implementation and follow-up and practices to reduce them

When it comes to the concerns related to delivery and logistics requirements, there are several ways to mitigate the barrier both internally and externally. Obviously, as interviewee 40 suggested, the flexibility of the deliveries and logistics capabilities can be considered when

selecting the supplier. Furthermore, if neither supplier nor the case company have adequate logistics capabilities, interviewee 11 pointed out that the services of third-party logistics companies should be considered as an option. However, some interviewees saw that the challenges related to delivery and logistics could be also mitigated inside the case company. Couple of interviewees reminded about the importance of considering the total cost of ownership (TCO) in order to avoid unpleasant surprises in the end. On the other hand, interviewees 7, 21, 25 and 26 noted that the case company should also strive to internally improve the planning so that the deliveries can be planned already well beforehand, which helps to avoid any delays and ad-hoc needs.

As discussed before, currently many interviewees consider that the communication does not provide the support it should, which can be seen especially when implementing the contracts and the selected preferred suppliers. However, defining the best approach to address the communication seems to be much more difficult and the opinions regarding the best way of communicating differ significantly depending on the context, but also on the person in question. When it comes to general rules that are widely applicable, interviewee 32 mentioned that in a big company having the contacts persons well documented and easily available is a prerequisite for any successful interaction. Furthermore, interviewees 17 and 35 pointed out that the availability of the information should be guaranteed and preferably stored only in one place to avoid any unnecessary confusion. When it comes to the content, several interviewees mentioned that facts and data should be primarily used as a basis for any message in order to make it the most effective. Finally, interviewees 6 and 16 highlighted that there should be a common communication plan for category management. Especially, when starting to implement the contracts, it should be done consistently in each division.

When it comes to mitigating an overarching barrier, resistance to change, the importance of communication is emphasised again. Interviewees 29 and 32 stressed the importance of explaining the reason for the change and specifying why the change is needed. Furthermore, couple of interviewees also mentioned the role of internal selling that is needed to show the benefits of category management. On the other hand, interviewees 9 and 12 reminded that in the end, the change is about learning by doing and repetition is needed to make it happen.

However, interviewee 9 also highlighted the importance of participating in the change and showing example as the whole change narrows down into management challenges. In addition, interviewees 10 and 22 took another perspective and mentioned again the role of consequence management. In their opinion, non-compliance should have consequences as otherwise realising the change is difficult if the old behaviours can be sustained.

In the implementation and follow-up stage, several interviewees were concerned about the customer demands that may complicate using the preferred suppliers that are selected as a result of the category management work. However, despite the challenging nature of the topic, interviewees came up with some solutions that could be used to reduce the barrier. First of all, interviewees 19 and 35 agreed that the case company could try to propose an alternative product for the customer by showing the benefits that it would generate for the customer. In addition, some interviewees noted that the case company should pay special attention in so-called design and build projects in which they can better determine the products that will be used. On the other hand, some interviewees were also worried about the increasing risk that might be accompanied with the increasing international purchasing. In this respect, interviewee 7 reminded about the role of procurement plan as an important step of the procurement process since a well-defined plan can easily help to avoid many risks. Furthermore, interviewee 21 proposed sharing the risk with the business operation at least in the beginning so that the business operations would be more in favour of trying new suppliers and generating positive experiences out of those.

Another central barrier is the compliance both externally and internally. Regarding the external side of compliance several interviewees were concerned about the suppliers' compliance towards the contracts as there have been cases in which the suppliers have locally provided lower prices than the frame contract prices and hence, have not been respecting the frame contract. Interviewee 8 from the business operations noted that procurement should strive to keep the suppliers compliant, but interviewee 9 also from business operations reminded that the situation might not be always so black and white since it might be that the business operations' representatives might sometimes lack the view of total costs meaning the price might not be actually any lower but only considered as lower. When it comes to internal

compliance and its follow-up, several interviewees emphasised that the case company should monitor buying better and have some clear consequences if purchasing instructions or preferred supplier selections are not followed as they should.

Finally, short planning range, lack of procurement early involvement and too complex ordering process were seen as barriers influencing the implementation and follow-up stage. When it comes to mitigating them, more time in planning would improve them all. In addition, regarding the short planning range, interviewee 25 noted that it would be important to focus on getting the right projects which have enough time for planning as currently too many of the projects have extremely tight schedule resulting in ad-hoc needs. More time for planning would be beneficial for procurement early involvement as currently some representatives from business operations mentioned that involving procurement is not possible because of schedule constraints. Furthermore, also introducing and implementing the common procurement process integrated into business operations would guarantee the involvement. However, some interviewees noted that the resourcing in operational procurement should be improved in order to guarantee that procurement has the sufficient resources to help the business. In addition, couple of interviewees again emphasised the role of communicating the benefits that the business would have if procurement is adequately involved. Finally, implementing the procurement process and guaranteeing the procurement involvement would also provide help regarding the complex order processes as even though the businesses may consider the process complex, for procurement it is not necessarily that difficult as it is a core part of their role.

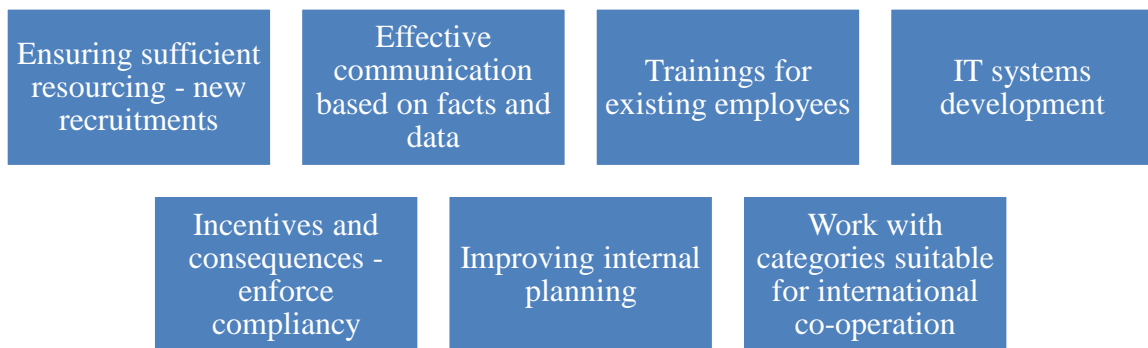


Figure 21. Common practices to reduce the barriers

Hence, it can be concluded that overcoming the barriers related to preconditions is essential in order to succeed in implementing the rest of the category management process. For example, introducing and implementing the procurement process that is well-integrated with the business processes can significantly help to reduce other barriers in the stage of implementation and follow-up. Furthermore, when it comes to practices that are efficient in reducing many restraining forces, there are even more helpful practices in common for several barriers as illustrated in Figure 21 above. Overall, the role of communication should not be underestimated in case of overcoming the restraining forces. Furthermore, ensuring sufficient resourcing through new recruitments accompanied with trainings for existing employees ensures that needed time and capabilities are available. On the other hand, developing the processes and planning, as well as requiring compliancy against them would help in several ways especially when supported with IT systems development. Finally, due to scarce resources it is crucial to focus on subcategories that have significant potential for international co-operation among the divisions.

5.5 Future state: benefits of successful category management implementation

When it comes to defining the future state that is targeted by implementing the group-level category management in the case company, it is clear that the benefits achieved by the category management approach act as a main describing characteristic. Acknowledging the benefits that are expected to be gained is important as they provide direction for the change and define the state that should be achieved in the future. Without a clear and visible goal the change is unlikely to succeed. Hence, the benefits that are expected to be gained from the successful implementation are illustrated in Table 15 in which they are also categorised based on the classification presented earlier when discussing the literature findings regarding the benefits. In addition, the table includes the frequencies of each benefit and their share of the all observations, which indicates the relative importance of each factor from the interviewees' perspective.

Table 15. Benefits of successful category management implementation

Type of benefit	Benefit	Frequency	Frequency (%)
Economic	Cost reductions	32	27,6 %
	Competitive advantage	12	10,3 %
	Better terms and conditions	8	6,9 %
	Better payment terms	5	4,3 %
	Better annual bonus	4	3,4 %
	Managing markets (e.g. price levels)	1	0,9 %
Sum of economic benefits		Σ 62	Σ 53,4 %
Operational	Process efficiency	8	6,9 %
	Reduced supply risk	5	4,3 %
	Innovation (e.g. products, logistics and IT systems)	4	3,4 %
	Quality improvements	3	2,6 %
	Standardisation of products	3	2,6 %
	Better acceptance of Supplier Code of Conduct	1	0,9 %
Sum of operational benefits		Σ 24	Σ 20,7 %
Co-operation	Information sharing	22	19,0 %
	Better supplier relationships	3	2,6 %
	One voice to suppliers	2	1,7 %
	Strategic sourcing	1	0,9 %
	Creating one common procurement culture	1	0,9 %
	Common ways of working	1	0,9 %
Sum of co-operation benefits		Σ 30	Σ 25,9 %
Sum of all benefits		Σ 116	Σ 100,0 %

Clearly, the interviewees associated the benefits of successful category management implementation strongly with economic factors as they were mentioned 62 times out of 116, accounting for 53,4 percent of all benefit observations. On the other hand, the remaining half was almost equally distributed between operational and co-operation benefits even though co-operation-related benefits were mentioned slightly more frequently constituting 25,9 percent of the observations. However, it is noteworthy that despite the differences in the amount of observations, all three benefits categories included an equal amount of different benefits as each category consisted of six separate benefit factors. Furthermore, another remarkable

aspect is the dominating role of two benefit factors, namely cost reductions and information sharing that gained together almost half of the observations. The two factors were equally mentioned regardless of the divisions or the organisational role indicating importance in all markets and among all employees whether working in procurement or business operations.

Economic benefits that account for the most significant part of all observations have three clear main themes: cost reductions, competitive advantage and improvements in terms and conditions. Cost reductions were mentioned almost in every interview meaning they were seen as the most significant benefits by all divisions and employees regardless of the organisational position. Secondly, the interviewees saw that when implemented successfully, category management can also substantially contribute to the competitive advantage of the company. Interviewee 5 formulated the role of competitive advantage as follows: “For sure, we will get more competitive prices, which we then of course have to turn in to competitive advantage in the business.” Moreover, when the drivers of the current state were considered, competitiveness played a significant role especially in divisions A, B and C, and the same applies to the importance of competitive advantage here in the context of benefits. The third theme builds around improved terms and conditions. Most of the interviewees focusing on terms and conditions mentioned them only in general level, whereas couple of interviewees approached the topic from more specific perspective and named payment terms and annual bonuses as the main improvement areas regarding the terms and conditions.

When it comes to the operational benefits, the observations have been distributing more equally for each benefit as there is no single benefits that would be dominating the category. However, when examining the benefits under operational issues, it seems that the interviewees saw process efficiency as the most important operational benefit. Interviewee 16 described the role of process efficiency very concretely: “You save a lot of time from it if you do it in a right way. Let’s take the RFQ that we have done now. That would have been maybe six different RFQs in each division instead of just being one. And of course, you go in the meetings and it takes time even if you do it in a global level. But it is still more time efficient than if we would have done it by ourselves, all of the divisions.” Other central topics related to operational benefits are reduced supply risk and possible new innovations that can emerge as open

innovations from the suppliers for example related to products, logistics solutions and IT systems. However, supply risk seems to be a slightly controversial topic as it was also identified as a barrier of category management implementation. It seems that procurement personnel tends to take more the benefit perspective and consider category management as an opportunity to decrease the supply risk, whereas from the viewpoint of business operations the supply risk is expected to increase, and hence, create a barrier. On the other hand, especially the interviewees from business operations saw category management as a potential source of quality improvements. Some interviewees also expected that category management creates an opportunity to standardise the used product selection, which again simplifies the assembly work as technicians would be familiar with the limited amount of products. Furthermore, interviewee 39 mentioned that category management could enhance the acceptance of supplier code of conduct as the approach presents the case company as a single entity with increased negotiation power.

Finally, also the co-operation benefits played a significant role in the benefit portfolio according to the interviewees. Co-operation benefits included one main factor, namely information sharing that gathered the most of observations in this category of benefits. Most of the interviewees who considered information sharing as a central benefit represented procurement departments, but also few business representatives acknowledged the opportunity for sharing information more openly creating increased transparency. Many of the interviewees who mentioned information sharing as a key benefit emphasised the opportunity to learn from each other like interviewee 23 formulated it: “We can also learn from each other. Use new materials, use new suppliers and also new solutions.” Furthermore, couple of interviewees expected to achieve better supplier relationship, but also establish one common voice towards the suppliers. Furthermore, in one interview strategic sourcing was mentioned as a benefit that enforces intra-company co-operation as the appreciation of procurement increases. Going hand in hand, creating common procurement culture and common ways of working were both mentioned once when the benefits of group-level category management were considered.

In addition to the benefits above, there was also one benefit that did not fall into any of the predefined benefits categories as it was more or less all-encompassing. Two of the interviewees were able to take a step ahead towards the overall picture as they considered the preferred customer status as a possible larger-scale benefit. They both considered that consolidating the volumes through the category management approach would make the case company more attractive in the eyes of suppliers, which could also lead to preferential resource allocation. Hence, category management could improve the attractiveness of the case company since it enables the company present itself better as strategic and stable partner that is capable for good co-operation in long run. The preferred customer status was also closely linked to emphasising the one voice towards the suppliers since presenting the company as one entity was seen as prerequisite for the attractiveness.

However, as visualising and achieving the target state is not only enough, there is also a need to freeze the state with the benefits when the well-functioning process is fully implemented. In order to freeze the desired state, it seems that the role of communicating the benefits continuously by using data and facts to support is significant as highlighted several times before. As interviewee 6 mentioned, sharing the success stories will create a positive feedback loop that helps to achieve the benefits also in the future. Consequently, the positive feedback loop will help to make category management the common way of working and to sustain it also in the future. It is clear that without proper freezing, the target stage is unlikely to sustain and become a common practice across the company.

6 DISCUSSION AND CONCLUSIONS

The aim of this study has been to shed light on how the change of successfully implementing category management could be facilitated. First of all, the relevant existing literature related to category management, its background and implementation as well as change management insights has been reviewed in order to create a comprehensive view on the current state of research that serves as a basis for the further contributions. Secondly, the study has provided empirical evidence on the enablers and driving and restraining forces of category management implementation, as well as on the practices that can be used to shift the forces on the desired direction so that the required change can be realised. Finally, the empirical study has also contributed on the benefits of successful category management implementation as visualising the future targets is seen important factor contributing to successful change. Next, the answers for the research questions will be presented starting from the sub-questions that are needed to provide the answer for the main research question.

What are the enablers of category management process?

The evidence is clear that category management process cannot be implemented into an organisation suddenly without proper planning and preparations. This is also emphasised for example by Dupre and Gruen (2004) who highlight creating the right conditions as a first stage of category management implementation and by O'Brien (2015) who emphasises the role of foundations and pillars of category management. Similarly, also this study demonstrates that introducing the category management process successfully requires that certain preconditions are in place as they enable running the process smoothly. Hence, they can be called as enablers of category management process. In this study the enablers can be clearly tracked into both drivers and barriers of the implementation as some of the enablers are already in place whereas some not. However, the set-up still enables to identify the aspects that need to be in place before starting to run the category management process itself.

The study has identified some factors that have been in this case categorised as drivers because they already exist in the case company, but can be also seen as enablers as they must

be in place in order to succeed in the implementation. Those factors include top management support, fit with the overall company strategy, shared need for implementing category management as a new way of working and the right timing. In the same vein, several authors have also emphasised the role of top management support (Rozemeijer, 2000; Monczka & Markham, 2007; Lintukangas et al. 2009; O'Brien, 2015), the importance of alignment with the business strategy (Rozemeijer et al., 2003; O'Brien, 2015), and finally, O'Brien (2015) also acknowledges the necessity of shared need.

On the other hand, there are some enablers that are clearly not yet in place in the case company, hence categorised in this case as barriers related to preconditions. Those missing enablers are related to sufficient resourcing, adequate language and professional competencies, common processes and IT systems, realistic expectations and ability to understand cultural differences. Even though the latter stack of enablers does not fully exist in the case company yet, focusing on developing them is crucial as early as possible when targeting for the successful and smooth implementation of category management because the importance of most of them has also gathered wider support in the existing literature. Rozemeijer (2000) and O'Brien (2015) identify also the role of adequate resourcing, and common processes and tools as important enabling success factors of category management implementation, and in addition, O'Brien (2015) agrees about the need for new capabilities.

What are the driving and restraining forces that either enable or decelerate the implementation of category management?

When it comes to the driving forces of category management implementation, it can be seen that the driving forces can stem either from outside the company being external drivers or from inside the company being internal drivers. The external forces that drive the implementation can stem from the competitive situation, customer demands, or from the example of other companies in the same industry. However, it seems that the internal drivers originating from inside the company play clearly a more significant role in driving the change towards the successful implementation. The dominance of internal drivers is evident also in the existing literature as it is mainly lacking external drivers except that O'Brien (2015)

mentions end-customer focus as a driver. Hence, on one hand, this study confirms that the role of external drivers is still minor compared to the internal ones, but on the other hand, the study already creates a more comprehensive picture of the possible external drivers.

The most significant force that stems from inside the company and drives the implementation is the idea of the benefits that can be potentially achieved. Furthermore, also the shared need for increasing competitiveness, top management support, strategic fit and timing provide support for the implementation. In terms of the internal drivers it seems that the above mentioned supporting forces are relatively universal as the shared need for change (O'Brien, 2015), top management support (Rozemeijer, 2000; Monczka & Markham, 2007; Lintukangas et al. 2009; O'Brien, 2015) and strategic fit (Rozemeijer et al., 2003; O'Brien, 2015) are mentioned also in the existing literature. However, it is noteworthy that the amount of drivers identified in this study is quite moderate when compared all the factors identified in the previous studies.

Restraining forces that hinder the implementation of category management implementation seem to be significantly easier to identify when compared to the driving forces as their surprisingly large amount indicates. The barriers create a wide and complex wholeness that can be structured along the stages of category management process so that some clarity can be found. Most of the barriers are related to the implementation and follow-up stage as factors such as old habits and relationships, delivery and logistics requirements, communication, resistance to change, customer demands, incompliance towards the contracts both internally and externally, short planning range, lack of procurement involvement, complex ordering processes, increased risk and misguiding internal incentives are considered as common restraining forces. The great challenge that implementation and follow-up of category strategies provide is also acknowledged by Dupre and Gruen (2004) as well as by O'Brien (2015). In that respect O'Brien (2015) has also emphasised the problems related to resistance to change and incentives, whereas the compliance problems are closely related to maverick buying that Rothkopf and Pibernik (2016) see as a serious problem.

Secondly, shortcomings in preconditions that enable the successful category management implementation are seen as a significant threat in the case company, but also emphasised by Dupre and Gruen (2004) and O'Brien (2015). Those barriers include resourcing, language skills, lack of common processes and IT systems, too high expectations, cultural differences and lacking professional competencies that in the existing literature are mainly considered as enabling drivers, hence indicating that the case company should strive to turn these barriers into drivers. The third significant stack of barriers emerges in the supply market analysis phase and encompasses difficulties related to laws, regulations and technical specifications, supplier resistance, lack of local support, and market differences. It seems that so far these types of barriers have not been widely acknowledged in the existing literature, but still Trautmann et al. (2009) have acknowledged that the different characteristics of categories determine their suitability for international co-operation. Finally, availability of data is seen in this study as a minor restraining force when conducting the as-is analysis. However, O'Brien (2015) considers the use of data more as a driver and success factor indicating again that the role of this forcer should be rather improved and changed in the future.

Which practices can be used to strengthen the driving forces and reduce the restraining forces?

It seems that there is one common nominator that helps to strengthen the main drivers of category management implementation and shifts the organisation towards the desired target state. When considering the achievable benefits and the shared need for competitiveness as main driving forces, the results indicate that effective communication based on facts and data would be the best approach to take the full advantage of them. Likewise, many other authors also highlight the importance of communicating the success and the benefits (Rozemeijer et al., 2003; Lintukangas et al. 2009; O'Brien, 2015). In addition, O'Brien (2015) states that keeping high profile increases the shared need, which is again in line with communicating the shared need for competitiveness in this case.

However, the results also show that strengthening these two drivers may have slightly different purpose and role during the implementation process. Strengthening the shared need

for competitiveness by communicating the competitive situation may act as a great trigger for the change, whereas the achievable benefits seem to have a more versatile role as they could be either used to trigger the change or alternatively to sustain the achieved change and the benefits of successful category management implementation. The role of communicating the benefits and achievements to sustain the change and increase the credibility seems to be acknowledged also by Rozemeijer et al. (2003) and O'Brien (2015), but instead, the triggering role of both benefits and shared need does not seem to have gained that much attention yet.

On the other hand, focusing only on strengthening the driving forces is not enough when aiming to move towards the target state of successful implementation. In order to enable the organisation to move, the restraining barriers must be mitigated. As the significant amount of barriers presented before indicates, reducing the restraining forces requires a more complex set of practises. Despite the complexity, there are clearly some practices that help to reduce several barriers. First of all, ensuring sufficient resourcing contributes to overall resourcing problems, but as it also encompasses new recruitments, it may help in gathering employees with sufficient language skills and professional procurement competencies. Similarly, O'Brien (2015) acknowledges the role of recruitments, but as an alternative approach he suggests forgoing some old tasks and replacing them with category management duties since clear changes in resourcing are needed to make category management to succeed. Secondly, the recruitments could be combined with trainings for existing employees as it may increase the language and professional competencies as well as support in implementing the common processes. Using trainings is also embedded in the 5P governance model introduced by O'Brien (2015) as it is an integral part of the second P standing for proficiency.

Furthermore, the role of effective fact-based communication is highlighted also in terms of barriers as several barriers regarding implementation and follow-up might be easily mitigated with adequate communication. Developing the IT systems also mitigates several barriers as it affects the preconditions, but also enhances the availability of data in as-is analysis and supports the implementation of common processes. Both efficient communication called as promote and common tools and processes embedded in proficiency are included as well in

O'Brien's (2015) 5 P governance model, which indicates that the results of this study support their role when striving for successful implementation of category management.

In addition, based on the results, using incentives and consequences to enforce compliancy, helps in reducing several barriers such as lack of common processes, resistance to change, old habits and other general compliancy-related challenges, whereas improving internal planning may contribute to delivery requirements and the pressure from short planning range. When it comes to the compliancy problems, also Rutherford et al. (2007) acknowledge the role of both monitoring and incentives in mitigating agency problems such as those concerned here. However, in procurement context the previous research seems to report contradictory results regarding the effect of monitoring and sanctions as Karjalainen and van Raaij (2011) as well as Rothkopf and Pibernik (2016) conclude their inefficiency in reducing maverick buying. One reason for the difference might stem from the context as Karjalainen and van Raaij (2011) has conducted their study in public procurement and the case company concerned here is a private company equipped with more comprehensive reward systems. Moreover, this research shows that most of the barriers related to supply markets can be mitigated by focusing on those categories that have potential for international co-operation, which is in line with the findings of Trautmann et al. (2009) who see that the category characteristics define whether the category is suitable for purchasing synergy initiatives such as group-level category management or whether the category should be handled locally. Finally, the results above indicate that it is worth focusing first on practices that improve the precondition and those barriers as their resolution mechanisms are highly interrelated and simultaneously contribute to reducing the barriers in other stages of category management process.

What are the benefits of the successful implementation of category management?

Finally, considering the benefits that the successful category management implementation may bring is crucial in order to have a clear vision about the direction that is targeted. The benefits seem to fall into three categories, namely economic, operational and co-operation benefits, thus, supporting the classification found based on the existing literature. However, it is noteworthy that the results indicate the significant importance of the economic benefits as

over half of the observations related to benefits can be considered as economic factors. On the other hand, the remaining two categories seem to be quite equally important even though the co-operation benefits account for slightly more observations compared to the operational ones. The dominating role of economic benefits may indicate their importance as those are typically the ones actively measured in organisations, but in addition, they might be the easiest to identify for the interviewees, which might also contribute to their emphasised position.

In addition to examining the benefits through broader categories, they can be also brought to a more concrete level. The economic benefits encompass according to this study cost reductions, increased competitive advantage, better terms and conditions including improved payment terms and annual bonuses, but also the ability to manage markets for example by coordinating the price levels. When it comes to existing literature, the role of cost reductions seems to be widely acknowledged (Rozemeijer, 2000; Englyst et al., 2008; Heikkilä & Kaipia, 2009; O'Brien, 2015), and in addition, also the resulting competitive advantage has been mentioned by several authors (Bozarth et al., 1998; Heikkilä & Kaipia, 2009; O'Brien, 2015). However, it seems that improvements in terms and conditions have not yet gathered that wide attention and support from the literature.

The co-operation benefits, in turn, refer to enhanced internal information sharing, better supplier relationships, one voice towards the suppliers, acknowledging the strategic contribution of procurement, creating one common procurement culture and common ways of working, from which information sharing (Faes et al., 2000; Rozemeijer, 2000; Englyst et al., 2008; Heikkilä & Kaipia, 2009; O'Brien, 2015), strategic sourcing (O'Brien, 2015) and common ways of working (Faes et al., 2000; O'Brien, 2015) are also supported by previous findings. Finally, the operational benefits include more efficient processes, reduced supply risk, access to different types of innovation for example related to products, logistics and IT systems, as well as quality improvements, ability to standardised products, and suppliers' acceptance for buyer's code of conduct and other similar documents simplifying the buyer's operational work. It seems that process efficiency (Faes et al., 2000; Englyst et al., 2008; Heikkilä & Kaipia, 2009; O'Brien, 2015), access to innovations (Bozarth et al., 1998; Faes et al., 2000; Heikkilä & Kaipia, 2009; O'Brien, 2015) and reduced supply risk (O'Brien, 2015)

have been knowledge also before and also supported by this study. However, surprisingly the results of this study regarding supply risk are controversy as it has been mentioned in terms of both benefits and barriers. In addition, regarding the remaining benefits such as product standardisation this study can clearly provide new contributions.

How to facilitate the change of implementing category management successfully?

Finally, the main research question can be answered by combining the contributions of the sub-questions above. Firstly, the study clearly highlights the role of enablers that can be considered as preconditions which must be in place in order to succeed in the category management implementation. As mentioned before, the importance of enablers is also evident the in the implementation model that Dupre and Gruen (2004) present, which strengthens the idea that securing them is a crucial aspect when facilitating the category management implementation. Hence, the results clearly indicate that top management support, strategic alignment, shared need for change, right timing, sufficient resourcing, common processes and IT systems, language and professional competencies, realistic expectations and cross-cultural interaction skills are important requirements that should be assured in the early steps of the implementation. In addition, the study shows that the three-step process and force field analysis initiated by Lewin (1947) act as efficient facilitators when evaluating whether the enablers are in place or whether some of them restrain the implementation and should be fixed urgently before going forward.

As a second step in their category management implementation model, Dupre and Gruen (2004) highlight the role of implementing category strategies. However, this study shows that the implementation and follow-up of category strategies is not the only critical category management process step that must be in place to guarantee the benefits. There are clearly barriers related also to other category management process stages like as-is analysis and supply market analysis in this case. Hence, the results highlight that it is important to evaluate all stages of category management process and ensure their smooth execution. Similar to the model of Dupre and Gruen (2004), this study also emphasises the role of overcoming barriers related to implementation and follow-up of category strategies, but in addition, the role of

supply market related barriers is emphasised. Again, the study shows that Lewin’s (1947) three-step process and force field analysis help to analyse the key contributors and improve them. Based on such an analysis, this study shows that practices such as efficient communication, training employees, using incentives and consequences as well as improving internal planning can clearly improve the fluency of the process.

As a result of ensuring the existence of enablers and the smooth category management process, the benefits of successful implementation are likely to be realised into use of the organisation. This is also supported by the implementation model suggested by Dupre and Gruen (2004) as they see the sustained competitive advantage as the final step. This study especially highlights the role of economic benefits, but in addition, the co-operation and operational benefits seem to play a significant role next to the dominating economic benefits. Furthermore, this research acknowledges the twofold role of benefits as in addition to seeing them as an end result that helps to sustain the change, their role is emphasised in triggering the change. In that respect communicating the achievable benefits widely seems to be crucial. Finally, the description above is illustrated and summarised in Figure 22 below.

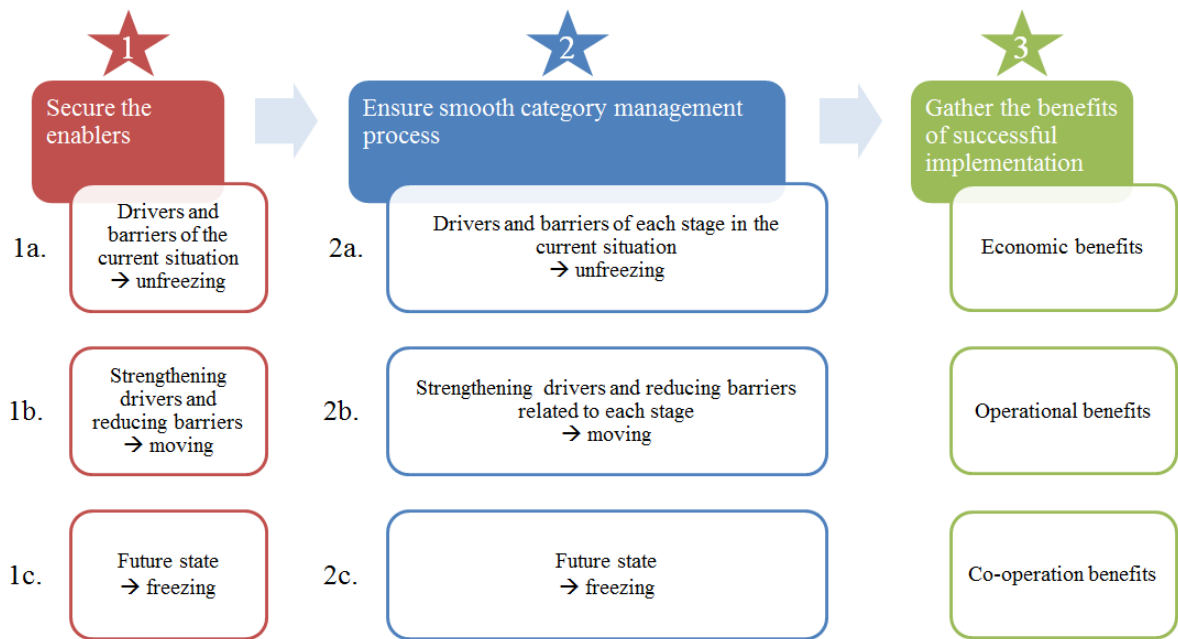


Figure 22. Implementation and change management model of category management

To conclude, as Figure 22 describes, the successful implementation of category management can be facilitated through a structured process that includes securing the enablers, ensuring smooth category management process, and finally as a result, gathering the benefits achieved. Furthermore, the study has demonstrated that the implementation process typically includes significant changes that can be facilitated and supported by applying Lewin's three-step process and force field analysis. Hence, the change management interventions seem to create an integral part of the implementation process.

6.1 Theoretical implications

The theoretical implications of the study are twofold. Firstly, the results clearly validate and extend the implementation model of Dupre and Gruen (2004) in the procurement context. First of all, the study confirms the critical role of the first step related to enablers that create the basic requirements for category management to succeed. However, when it comes to the second and third step of the process, the study proposes to extend the model. As initially presented by Dupre and Gruen (2004), the second step concerns implementing category strategies and handling barriers related to them. Despite the relative importance of the implementation and follow-up stage demonstrated also in this research, the results show that barriers can emerge also in other category management process steps. Hence, it is suggested that second step should be extended to concern ensuring smooth executing of the whole category management process. In addition, regarding the end results achieved in third stage, the reserach here confirms the role of competitive advantage as in important benefit, but adds another significant economic, operational and co-operation benefits into the model.

Secondly, the study demonstrates the applicability of Lewin's (1947) three-step model and field theory in procurement context. The three-step model seems to provide a feasible process framework for conducting the changes that the successful implementation of category management requires, whereas the force field analysis based on the field theory acts as an efficient analytical tool that helps to evaluate what are the changes needed and how the changes could be executed. Finally, the study confirms the strong link between category

management and change management that is also proposed by O'Brien (2015). The successful application of the three-step model and the force field analysis indicates that the change management tool kit O'Brien (2015) presents could be extended by these tools.

6.2 Managerial implications

Firstly, the study indicates that when managers start to implement category management in their organisation, they should first ensure that the needed preconditions that enable running the category management process are in place. Thus, the managers should not rush straight into planning a sophisticated category management process and start using it without preparations. Instead, they should first evaluate the enablers by considering the forces that either support or restrain running the category management process efficiently, and based on the evaluation define the practices that are needed to secure the enablers. This study suggests that such a process should result for example in robust top management support, strategic alignment, sufficient resourcing, common processes and tools, and adequate skills and capabilities that all enable the upcoming steps of implementation.

Secondly, the managers should pay attention to ensuring the smooth execution of category management process steps. Again, they should evaluate the driving and restraining forces, and define actions to increase the driving forces and to reduce the restraining forces. This research proposes that managers should for example utilise efficient and fact-based communication, provide trainings for the employees, use incentives and consequences to enforce the compliancy, develop initiatives for improving internal planning, and focus on selecting the most suitable categories for the group-wide purchasing synergy co-operation when they want to move towards the smooth execution of category management. Finally, in addition to gathering the benefits in the end as a result of well-prepared preconditions and smooth process, the companies should acknowledge the twofold nature of benefits as visualising and communicating the achievable benefits can also act as a significant trigger for the change that is needed.

Lastly, the results indicate that companies should start to consider change management as an integral part of category management implementation as they are clearly linked to each other. In that respect, they should also increasingly apply change management models and tools such as the three-step process and force field analysis to structure and support the change. By using the change management tools to facilitate the process, companies can easily pinpoint the possible obstacles proactively and develop measures to overcome them. Even though it is acknowledged that any tool and process does not bring the change itself, the study clearly demonstrates their value and contribution and brings the concept of change management in the middle of the successful category management implementation.

6.3 Limitations and further research

When it comes to the limitations of the study, it is noteworthy that the research focuses only on the perspective of the case company as it is conducted with a holistic single-case design. Hence, the results must be interpreted in their context and cannot be straight generalised to other context such as other companies or industries. However, wider generalisability to other contexts has not been even the goal of this study as also Yin (2009) proposes that the aim of case studies is not to provide statistical generalisations from sample to other populations.

However, selecting a different research design could provide interesting avenues for the further research. In the future, it could be interesting to dive deeper into the differences in implementation between the divisions of the case company and to see for example how the existing organisational set-up and cultural aspects affect the implementation. Thus, selecting an embedded single-case design could potentially provide valuable deeper insights in the context of the case company. Dubois and Araujo (2007) also argue that selecting the embedded sub-cases as units of analysis in the single-case study would strengthen the research, which would also make the approach interesting in the future. In addition, in order to improve the external validity, Yin (2009) suggests replicating the study in different contexts. As replication was not possible in the scope of this research project, replicating the study for example by using multiple-case design could be an interesting research project in the future.

Studying the successful implementation of category management in several contexts such as different companies and industries could reveal the potential differences and similarities, and provide interesting information about the effect of company culture or industry on the implementation process and its complexities.

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APPENDIX I. Interview questions

Role of procurement

1. What is currently the role of procurement in your division?
2. How the current system works? How satisfied are you with it?
3. How would you change the role if needed?

Category management

4. It is widely discussed that the company should start to act more on a global level to utilise the full benefits of its purchasing power. How well you think global category management serves that purpose?
5. What are the benefits that can be achieved through global category management in your opinion?
6. How would you develop the current category management process if there is something to develop?
7. How would you select the subcategories for category management? What are suitable and potential subcategories for international co-operation?
8. How would you organise the global category management?
9. How the global category management affects our suppliers?

Implementation and change management

10. How the implementation of global category management affects your daily work?
11. How you have to change your ways of working in order to ensure that benefits of global category management are utilised?
12. What are the main challenges in implementing global category management from your perspective?
13. What kinds of tools and practices could be used to mitigate the challenges you identified?
14. Which issues support and drive the implementation of global category management?
15. How could the driving supporting forces be strengthened and taken full advantage?
16. Involving stakeholders has been usually named as one of the success factors of category management. How should the stakeholders be involved?

- a. How should the stakeholders be selected / who are the ones to involve?
 - b. In which part of the category management process should the involvement be highlighted?
17. How should the communication be constructed during the as-is analysis and strategy preparation = the first steps of the category management process?
- a. What information should be communicated?
 - b. How should it be communicated – through which channels?
 - c. To whom to communicate?
18. How should the communication be constructed after finalising the contract negotiations when starting to implement the contract?
- a. What information should be communicated?
 - b. How should it be communicated – through which channels?
 - c. To whom to communicate?
19. What are the main reasons why people would not use the global framework agreements?
20. How would you ensure that people act according to procurement instructions and use the agreements that global category management provides?
21. How should the employees be trained in order to get familiar with the new way of working?
- a. What kinds of competencies are needed?
 - b. Who need the training?
 - c. How to train them?