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# Organizing and Identifying for Value Innovation in B2B

International Business Master's thesis Sari Makkonen 2012

Department of Management and International Business Aalto University School of Economics



# ORGANIZING AND IDENTIFYING FOR VALUE INNOVATION IN B2B

Master's Thesis Sari Makkonen 17.08.2012 International Business

Approved by the head of the Department of Management and International Business

\_\_\_\_.20\_\_\_ and awarded the grade \_\_\_\_\_\_

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**ABSTRACT** 17.8.2012

Master's Thesis Sari Makkonen

#### ORGANIZING AND IDENTIFYING FOR VALUE INNOVATION IN B2B

#### Objectives

The objective of this study is to analyze how B2B companies should organize their activities in order to identify value innovation opportunities within their value network. This research considers value innovations from an attention-based view of the firm and focuses on how attention should be allocated within organizations in order to promote the creation of value innovation initiatives.

#### Methods

A single case study approach was used in this research. Semi-structured interviews were conducted with the case company representatives as well as the customers and non-customers of the case business. Directed content analysis approach was used for data analysis and interpretation. Five propositions developed in the literature review were analyzed and enriched with the help of empirical data.

#### Findings

The research suggests that the creation of value innovation initiatives is supported by formal innovation processes and knowledge-sharing mechanisms. Furthermore, an organization should adopt an ambidextrous mindset and aim at challenging its business environment by redefining the basis for competition. The role of the value network was emphasized in the findings; an organization should establish learning mechanisms for its entire value network and consider how to add value with the help of and to the entire network, not just its customers. The network aspect was highlighted in a B2B context, especially in terms of interdependencies in the innovation ecosystem. It was concluded that close cooperation with the value network is key when identifying value innovation opportunities. Whereas no given 'recipe' for value innovations can be given, in the case company context it was found that collaboration with competitor-level network actors as well as solutions-thinking could be valid options when determining how to break the traditional industry mindsets. Finally, it was found that different types of customers require different approaches. Thus, offering value propositions that are tailored to specific customers is essential when considering opportunities for value innovations in B2B.

Keywords: value innovation, value network, attention-based view of the firm, B2B

#### AALTO YLIOPISTON KAUPPAKORKEAKOULU Johtamisen ja kansainvälisen liiketoiminnan laitos

**TIIVISTELMÄ** 17.8.2012

Pro gradu -tutkielma Sari Makkonen

#### ARVOINNOVAATIOIDEN ORGANISOINTI JA TUNNISTAMINEN B2B-MARKKINOILLA

Tutkimuksen tavoitteet

Tutkimuksen tavoitteena on analysoida, kuinka B2B-yritysten tulisi organisoida toimintaansa tunnistaakseen arvoinnovaatiomahdollisuuksia arvoverkkonsa sisällä. Tutkimus tarkastelee arvoinnovaatioita huomiopohjaisesta näkökulmasta keskittyen siihen, miten organisaatioiden tulisi kohdentaa huomionsa luodakseen arvoinnovaatioaloitteita.

#### Tutkimusmenetelmät

Tutkimus toteutettiin laadullisena yhden tapauksen tapaustutkimuksena. Haastattelut koostuivat kohdeorganisaation edustajien ohella kohdeliiketoiminnan asiakkaista sekä potentiaalisista asiakkaista. Aineiston analyysin ja tulkinnan lähestymistapana käytettiin suunnattua sisältöanalyysia. Kirjallisuuskatsauksen perusteella luotua viittä väittämää analysoitiin ja rikastettiin empiirisen aineiston avulla.

#### Tutkimustulokset

Tutkimuksen mukaan muodolliset innovaatioprosessit ja tiedonjakomekanismit tukevat organisaatioiden arvoinnovaatioiden syntyä. Lisäksi tulisi haastaa liiketoimintaympäristönsä ja sen kilpailuperusteet omaksumalla "molempikätinen" ajattelutapa, joka huomioi samanaikaisesti nykyhetken sekä tulevaisuuden mahdollisuudet. Arvoverkon rooli korostui löydöksissä; organisaation tulisi kehittää oppimismekanismeja koko arvoverkkoaan varten ja tarkastella, kuinka arvoa voisi luoda koko arvoverkon avulla ja koko arvoverkolle. Tutkimus osoittaa, että arvoverkon rooli korostuu B2B-kontekstissa, erityisesti innovaatioekosysteemin riippuvuussuhteiden osalta. Tutkimuksen mukaan läheinen yhteistyö arvoverkon kanssa on tärkeässä osassa arvoinnovaatiomahdollisuuksien tunnistamisessa. Vaikkei suoranaista "reseptiä" arvoinnovaatioiden kehittämiseen voida luoda, tapaustutkimuksen kontekstissa havainnoitiin, että kyseisen toimialan perinteisen ajattelutavan rikkomiseksi mahdollisia arvoinnovaatioaloitteita olisivat yhteistyö arvoverkon kilpailijatasolla sekä ratkaisukeskeinen ajattelutapa. Tutkimuksessa havaittiin myös, että eri toimialojen vaativat erilaisen lähestymistavan. Täten voidaan päätellä, asiakkaat että arvoinnovaatiomahdollisuuksien tunnistaminen vaatii arvolupausten räätälöintiä yksittäisten asiakkaiden tarpeiden pohjalta.

Avainsanat: arvoinnovaatio, arvoverkko, huomiopohjainen näkökulma, B2B

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#### **1. INTRODUCTION**

In many industries, being in the front lines of innovation has become essential for both survival and growth. Several industries face increased pressure from global competition and rapid technological advancements (Normann & Ramirez, 1993). As interaction between different economic actors is intensifying and customer offerings are becoming increasingly knowledge intensive, the strategic focus of many companies has shifted towards value creation (Wikström & Normann, 1994). It is widely acknowledged that value creation and innovation go hand in hand, as innovative companies are able to create groundbreaking products and services that are valued by their customers (Trott, 2005).

This thesis focuses on the concept of value innovations, which are strategic moves that create extraordinary value for buyers (Kim & Mauborgne, 1997). The concept suggests that a company should break traditional industry standards by offering completely new customer value (Matthyssens et al., 2006; Berghman et al., 2012). Whereas most innovations deal with small incremental improvements, aiming at staying ahead of competition (Veryzer, 1998), value innovations aim at creating uncontested market space and breaking free from head-to-head competition (Kim & Mauborgne, 1997). This view is also defined by Kim and Mauborgne (2004) as blue ocean strategy, which is widely acknowledged as one of the most important strategic management concepts during the last decades (Matthyssens et al., 2006).

#### 1.2 Research problem and gap

In the dynamic knowledge-based business environment, finding new ways to differentiate from competitors has become crucial (Wikström & Normann, 1994; Eisenhardt, 2002; Berghman et al., 2012). Value innovations are especially important since they are considered as important sources of competitive advantage for companies, as they provide superior customer value (Lindgreen & Wynstra, 2005; Berghman et al., 2012). However, there is little research on how companies can actually identify opportunities for value innovations and organize the value innovation process.

Therefore, the objective of this study is to analyze how a company should organize its activities in order to identify ways of creating superior value for its customers. These aspects are researched in a B2B (business-to-business) context from the viewpoint of a single case company and its 'new materials' business function. The study adds to the current pool of research on value innovations by aiming at clarifying the value innovation identification and organization process. The output of the study consists of developing a framework for organizing and identifying value innovations, providing best practices for the case company that is operating in a global and highly competitive market and aims at breaking free from head-to-head competition. From an international business perspective, it is interesting to research how global companies should organize their activities and identify opportunities for superior value creation.

The current literature on practical implementation of value innovations is dispersed and does not provide companies with tangible tools or metrics (Matthyssens et al., 2006). As noted by Matthyssens et al. (2006), the literature on value innovation is still quite 'fragmented and normative and often misses a substantive (scientific) empirical foundation' (p.752). The contemporary value innovation literature has had a strong emphasis on the role of corporate culture in the value innovation process (Kim & Mauborgne, 2003; Dillon et al., 2005; Aiman-Smith et al., 2005; Balsano et al., 2008, Kim & Mauborgne, 2009). Some of the more recent literature has also taken into consideration the role of supply chain and network partners in the value innovation context (Mele et al., 2010; Berghman et al., 2012). However, in order to synthesize the current value innovation literature, a more holistic approach is needed. Therefore, this research uses the attention-based view of the firm (Ocasio, 1997) as a theoretical lens, which allows analysis on both internal and external levels of the organization.

According to the attention-based view, 'firm behavior is the result of how firms channel and distribute the attention of their decision-makers' (Ocasio, 1997:187). The attentionbased view is a theory of firm behavior, which views strategy as a pattern of organizational attention and is able to combine evolutionary perspectives and strategic decision making perspectives on strategy (Ocasio & Joseph, 2008). It focuses on the structure of organizations and the issues to which organizational decision-makers allocate attention. According to Ocasio and Joseph (2005), by focusing attention efficiently organizations can 'adapt their activities to the requirements of a changing environment' (p. 56). From a value innovation perspective the attention-based view is important, as it takes into consideration how attention is allocated to both internal and external stimuli (Ocasio & Joseph, 2005).

In addition to the need for a more holistic overview on the value innovation literature, there is also a limited amount of research concerning value innovations from the perspective of B2B companies (Matthyssens et al, 2006). Kim and Mauborgne (1997, 1999, 2004, 2005) deal mostly with business-to-consumer (B2C) examples and do not differentiate between the special characteristics between B2C and B2B markets in their work. Therefore, more research emphasis should be placed on the B2B sector in order to identify the special considerations of business markets.

#### **1.3 Research objectives and questions**

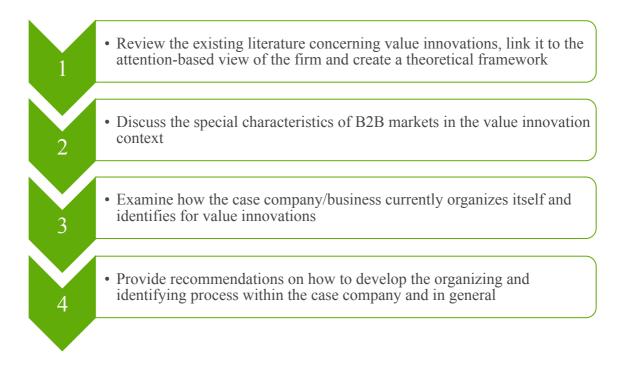
The objective of this research is to evaluate where the case company should focus its attention in the value innovation process by evaluating it from an attention-based view of the firm (Ocasio, 1997; Ocasio & Joseph, 2005, 2008). A theoretical framework for organizing and identifying for value innovation is created based on the attention-based view of the firm. Furthermore, the special characteristics of B2B markets are analyzed in order to define value innovation in a B2B context.

Firstly, this thesis aims at enriching the point of view of current value innovation literature by bringing the attention-based view of the firm into the context of value innovations. The theoretical framework is based on the attention-based view of the firm, aiming at providing a link between management attention and choice-making behavior (Ocasio & Joseph, 2005). The framework is evaluated in the context of the case company and recommendations on how to organize the value innovation process of the case business are given based on the empirical analysis. Furthermore, practical

recommendations for developing the case business are provided based on the empirical evaluation.

Secondly, there are various special characteristics of B2B markets that have not been taken into consideration in the value innovation literature. Examples include the tendency to move towards integrated solutions and develop innovative solutions targeted to specific customers (Mele, 2009), and the interdependency of supply chain partners within the innovation ecosystem (Adner, 2006). Therefore, a central aim of this research is to define what value innovation means in a business-to-business context. All in all, the research objectives can be summarized as follows:

#### Figure 1: Research objectives



The research question of this thesis is as follows:

• How should a company organize value innovation creation in B2B markets?

As the attention-based view of the firm suggests, a firm's behavior is highly influenced by the issues it focuses its attention to (Ocasio, 1997). Therefore, it is crucial to identify which issues are important in the context of value innovations, and especially the process of identifying opportunities for superior value creation. Thus, 'organizing' in this context refers to the activities within the firm, whereas 'creation' refers to the identifying process. It is to be noted that although organizational culture aspects are considered important when organizing for value innovations, the focus of this thesis is more on the organizational processes and network levels. The organizational culture aspects are more thoroughly considered in previous literature such as Balsano et al. (2008) and Aiman-Smith et al. (2005).

#### 1.4 Definitions and limitations

#### Definitions

#### Value innovation

Value innovation is the main concept used in this thesis. However, it is important to discuss the concepts of value and innovation separately before focusing on the overall value innovation concept.

In this thesis, innovation is considered as the reuse of existing capabilities and knowledge combined with completely new knowledge that is commercialized or used by a company (Edvinsson et al, 2004). Thus, innovation can be thought of as using innovative knowledge in order to create value for the stakeholders of a certain industry. This thesis focuses mainly on strategic innovations, which is a term often used in parallel for value innovations (Matthyssens et al., 2006). Strategic innovation does not require technological advancements but rather innovations related to market positioning (Hamel, 2007). Therefore, in this study the concept of innovation is extended to strategic moves, not just technological advancements.

The concept of value is widely recognized as essential in marketing and strategy development (Lindgreen & Wynstra, 2005; Corsaro et al., 2012). In general terms, value can be considered as 'a trade-off between benefits and sacrifices' (Walter et al., 2001:366). In recent years, the importance of joint value creation through business networks has increased (Möller & Törrönen, 2003). Value is no longer considered merely as a concept relating to market transactions, but the emphasis has shifted towards cooperation and long-term relationships between buyers and sellers (Corsaro et al., 2012; Lindgreen & Wynstra, 2005). Thus, this thesis acknowledges that companies should 'examine all interactions that create value in any given customer-relationship instead of just the (augmented) product' (Lindgreen & Wynstra, 2005:738). In addition to the value of goods and/or services, there may be additional relationship-specific characteristics affecting the choice of a business partner, such as reputation and innovative capability (Lindgreen & Wynstra, 2005). As noted by Corsaro et al. (2012), 'value is not determined only by the customer, nor only from interactions in dyads of customers and suppliers, but is instead created through several intermeshed interdependencies which work simultaneously' (p.57). Thus, analysis should be conducted on a multi-layer basis, which refers to analyzing a company's entire web of interactions, i.e. the entire business network of a firm (Corsaro et al., 2012). This thesis recognizes that the environment of a firm should be considered as a network of interorganizational relationships, where cooperation can be an asset in long-term (Helfert et al. 2001; Lindgreen & Wynstra, 2005).

Value innovations are strategic moves that create extraordinary value for buyers and aim at breaking traditional industry models (Kim & Mauborgne, 1997). Value innovation has been suggested by academics as an important variable in the creation of competitive advantage and superior customer value (Wikström & Normann, 1994; Eisenhardt, 2002; Berghman et al., 2012). The aim is the 'creation of new market space enabling companies "out-competencing" (sic.) rather than "out-performing" competitors' (Matthyssens et al., 2006:752). Value innovation 'makes the competition irrelevant by offering fundamentally new and superior customer value in existing markets and by enabling a quantum leap in buyer value to create new markets' (ibid:753).

#### Organizing for value innovation

Organizing for value innovation refers to the ways a company manages itself in order to foster its innovation capabilities by promoting an innovative mindset and establishing systematic processes (Crosswhite & Rufat-Latre, 2009). Crosswhite and Rufat-Latre (2009) emphasize that there is no common recipe for how companies should be organized, as different industries and individual firms have different contexts for innovation. Thus, companies should organize according to their particular business circumstances (ibid.). The key to organizing for value innovations can be found in the alignment of skills, processes, systems, tools, culture, values, and leadership styles (Simon et al., 2003; Crosswhite & Rufat-Latre, 2009). When organizing for value innovation, it is important to identify the success factors of previous innovation initiatives, existing organizational mechanisms and technologies, and the organizational culture (Crosswhite & Rufat-Latre, 2009).

The attention-based view of the firm (Ocasio, 1997), which is used as a theoretical lens for this thesis, is closely related to how companies can organize for value innovation. Ocasio (1997) notes that the decisions a company makes are strongly based on what issues and answers decision-makers focus their attention to. Thus, the way a company organizes for value innovation is closely related to the distribution of attention within the firm and the actions that follow from those decisions.

#### Identifying for value innovation

Identifying for value innovation refers to the value innovation potential in a company and how the company can spot opportunities to create a quantum leap in value for its customers through learning from its value chain and business environment (Goodrich & Aiman-Smith, 2007). This calls for establishment of deliberate learning mechanisms that can foster the ability to identify value innovation opportunities (Berghman et al., 2012). The attention-based view of the firm should also be considered when determining how to identify for value innovation. Ocasio (1997) claims that firms have both existing perceptions concerning what issues are important and prevailing repertoires of possible solutions for these issues. From a value innovation identification perspective, this notion is crucial because the main premise of a value innovation is to challenge existing assumptions and ways of working. Thus, identifying for value innovation requires spotting previously unnoticed opportunities. For example, the current value innovation literature has established different tools to find new opportunities for value innovations, such as analyzing the current industry mindsets and customer's value curves (Kim & Mauborgne, 2005; Matthyssens et al, 2006; Goodrich & Aiman-Smith, 2007).

It should be noted that the concepts of organizing and identifying value innovations overlap to some extent, which makes it hard to separate them in the analysis. For example, the establishment of deliberate learning mechanisms can be considered as organizing the activities of a company so that it can learn from its environment. On the other hand, the outcome of those learning mechanisms is the enhanced ability to identify opportunities for value innovations. Thus, the concepts are partially interrelated.

#### B2B

Business-to-Business (B2B) refers to business transactions between organizations. B2B markets have some important special characteristics, which distinguish them from business-to-consumer markets (B2C). Compared to B2C, B2B markets are characterized by higher levels of direct interaction with the buyer and seller (Hutt & Speh, 1985). Thus, the role of personal selling is highlighted, which leads to closer customer relations (ibid). An important element in B2B is the focus on long-term relationships between buyers and sellers (Hunter & Tietyen, 1997). In B2B markets, there may be relationship-specific characteristics affecting the choice of a business partner, such as reputation and trust (Lindgreen & Wynstra, 2005).

In essence, B2B sellers should understand the unique needs of their individual customers and how to create solutions for them (Michel et al., 1996; Hunter & Tietyen, 1997). Thus, there is a need to personalize the direct relationships between the buyer and the seller (Michel et al., 1996). This is essential in B2B markets as the customer base can be limited and the importance of an individual customer to the supplier can be very high (Michel et al., 1996; Fill & Fill, 2005). There is a link of mutual dependence between suppliers and their customers, which makes the development and maintenance of positive buyer-seller relationships a key success factor in B2B (Michel et al., 1996; Fill & Fill, 2005). This thesis takes into consideration the special characteristics of B2B markets and acknowledges the importance of long-term relationships when providing recommendations for the case company.

#### Limitations

The limitations of this thesis are twofold and relate to the dispersed nature of the available literature as well as the methodological choices. First of all, the value innovation literature is considered highly fragmented and the concept is often used in parallel to others such as strategic innovation and value constellation (Matthyssens et al., 2006). This brings some challenges in terms of reviewing the literature. For this reason, one objective of this study is to develop a clear definition of what value innovation is in a B2B context. Secondly, the use of a single case study method brings some methodological constraints especially in terms of generalizability of the study (Yin, 2003). However, as the nature of this research is interpretive, it does not aim at generalizations but at best aims at comparing the empirical results to previous theory (Yin, 2003). Finally, limitations may arise from the use of semi-structured interviewing as a data collection method. Patton (1980) notes that analysis of semi-structured interviews can be challenging because responses are not systematic or standardized. A more detailed overview on the limitations can be found in the methodology section.

#### **2. LITERATURE REVIEW**

This thesis takes an attention-based view towards value innovation. The literature review aims at applying the attention-based view by Ocasio (1997) to the context of the value innovation process of a global company operating in a B2B market. The main premise of the attention-based view is that 'firm behaviour is the result of how firms channel and distribute the attention of their decision-makers' (Ocasio, 1997:187). Furthermore, decisions are based on attention given to specific issues and answers (ibid). Attention to different issues is given depending on the firm's context and its rules, relationships, and resources, as well as the way issues and answers are communicated in a company (Ocasio, 1997). The focus of this thesis is on this model because the way an organisation focuses attention affects some of the most crucial aspects of value innovation, namely identifying ways to break free from head-to-head competition (Kim & Mauborgne, 1997) through learning from supply chain partners (Berghman et al., 2012).

Firstly, the concept of value innovation is clearly defined. Although Kim and Mauborgne (1997, 1999) are considered as the pioneers of the concept, it is crucial to discuss similar concepts that are often used interchangeably (Matthyssens et al., 2006). Secondly, the attention-based view of a firm is presented and linked to the context of value innovations. A theoretical framework is constructed and then re-evaluated in the empirical part. Finally, in order to analyse how the case company focuses its attention when developing innovations, an understanding of what constitutes a value innovation in a B2B context must be gained. Therefore, the final part of the literature review focuses on defining a value innovation in business markets.

#### 2.1 Foundations of the value innovation concept

Value innovation is essentially based on creating superior customer value through redefinition of current business practices (Kim & Mauborgne, 1997, 1999; Matthyssens et al., 2006; Berghman et al., 2012). Strategic or strategy innovation is a parallel term used in various academic journals. The concept of value innovation is used widely in

B2B marketing literature, whereas management literature has adopted the term strategic innovation (Berghman et al., 2012). Therefore, this chapter aims at introducing these concepts in order to clarify what value innovation means in the context of this thesis.

For both value and strategic innovation, the objective is to gain a sustainable competitive advantage by creating new ways of competing (Matthyssens et al., 2006; Berghman et al., 2012). Kim and Mauborgne (1999) view that the strategic mindset of companies is highly fixated on staying ahead of the competition and matching strategic moves with industry actions. Consequently, head-to-head competition is exhausting and leads to a reactive approach, characterized by imitation rather than innovation. The greatest competitive advantages can be achieved through breaking away from conventional strategic logic and adopting a value innovation mindset (Kim & Mauborgne, 1999, 2004, 2005, 2009). This idea is replicated in the literature concerning both strategy and value innovation, which are almost identical concepts.

Kim and Mauborgne (1997, 1999) view that targeting mass buyers with value innovations is key, even if it would mean that existing customers are lost in the meantime. However, it cannot be generalized that value innovations always target mass customers, nor ignore existing ones. For example, in a B2B context, Matthyssens et al. (2006) and Mele (2009) emphasize that even smaller initiatives that focus on specific customers can be value innovations. Furthermore, the wider strategic innovation literature does not only focus on targeting mass buyers but take a more holistic perspective on value creation, which considers both the internal and network context of the firm (Hamel, 1996; Pitt & Clarke, 1999).

A holistic perspective is introduced by Hamel (1996), who defines strategy innovation as the ability to recreate current industry models so that they create value for customers *and* other stakeholders, while simultaneously inhibiting competition. Furthermore, Pitt and Clarke (1999) take an internal perspective by identifying strategy innovation as systematically coordinated application of organizational skills and knowledge, with a focus on adaptive learning and the transformation of the organization. On a wider scale, this allows firms to not only compete with their competitors but also to out-competence them (Pitt & Clarke, 1999). Similarly to Pitt and Clarke (1999), the recent value innovation literature has also had a strong emphasis on the organizational culture and learning aspects (Kim & Mauborgne, 2003; Dillon et al., 2005; Aiman-Smith et al., 2005; Balsano et al., 2008, Kim & Mauborgne, 2009; Berghman et al., 2012).

In terms of a broader perspective, Tucker (2001) and Berghman et al. (2012) suggest that new ways of creating value for customers can be discovered in various places, such as market positioning, customer outsourcing, customer needs assessment, distribution channels, business models and redefinition of value-added. Finally, Normann and Ramirez (1993) have taken the value chain as a level of analysis, noting the importance of co-creation of value within different players: suppliers, business and alliance partners and customers. This view is echoed in the more recent value innovation literature by Mele et al. (2010), emphasizing the opportunities of value co-creation within the value network.

From these above definitions it can be concluded that although Kim and Mauborgne (1997, 1999, 2003, 2004, 2005, 2009) are considered pioneers of the value innovation concept, it must be taken into consideration that alternative definitions are present. The value innovation definition should not, therefore, be restricted to a single view. Some assumptions of Kim and Mauborgne must be challenged in order to apply the concept to the specific B2B setting of this thesis, as discussed in chapter 2.4.

#### 2.2 Organizing and identifying for value innovation

In order to identify the path to successful value innovation creation, it is crucial to determine how a company should organize its activities to identify value innovations. The aim of this chapter is to develop a theoretical framework for the case business in order to identify how it should focus attention when organizing the value innovation process based the attention-based view of the firm (Ocasio, 1997), which draws on prominent theories concerning firm behavior such as Simon (1947), March and Simon (1958), and Cyert and March (1963).

An attention-based view has emerged due to the notion that organizational research has shifted away from the organizational level of analysis, especially when considering the role of decision making (Gavetti et al., 2007). A behavioral focus aims at providing a more integrative understanding on how organizational decisions and outcomes are shaped by various issues, including both internal and external stimuli (Ocasio & Joseph, 2005; Gavetti et al., 2007).

The main premise of the attention-based view is that the ways in which an organization focuses its attention strongly determine how effectively it can organize different activities (Ocasio, 1997). Attention is defined as 'noticing, encoding, interpreting, and focusing of time and effort by organizational decision-makers' (ibid:189). The behavioral research stream is strongly present in Ocasio's (1997) attention-based view of the firm. It focuses on four main issues that affect the behavior of a firm: firstly, routines and learning, referring to the notion that decision-makers tend to be selective towards specific answers and issues they pay attention to at any given time (Ocasio, 1997; Gavetti et al., 2007). Secondly, the focus is on interrelatedness between organizational problems, solutions and decisions, termed as loose coupling by Gavetti et al. (2007). This suggests that decision-makers act in their specific context according to how the organization distributes and controls the allocation of attention (Ocasio, 1997). Thirdly, the psychological aspects are taken into consideration by claiming that established mental models significantly influence the available repertoire of issues and answers the decision-makers focus on at a given time (Gavetti et al, 2007). Finally, it is noted that organizations should not be considered as stand-alone entities. Instead, there are various other organizations and environments that affect the criteria in which decisions are evaluated (Gavetti et al., 2007). This is referred to as organizational embeddedness (ibid.).

From a value innovation perspective, it is important to adopt the attention-based view, because its behavioral focus allows taking into consideration both the organizational level as well as the environmental levels of analysis (Ocasio & Joseph, 2005). There are several factors that influence how a firm focuses its attention in the following aspects of value innovation:

- Creating superior customer value and new market space (Kim & Mauborgne, 1997, 1999; Matthyssens et al., 2006; Berghman et al., 2012). Creating value innovations requires breaking free from current industry mindsets and thus, attention must be focused towards untapped industry opportunities.
- Creating value to all stakeholders (Hamel, 1998) and co-creating value within different players (Normann & Ramirez, 1993; Mele et al., 2010). This requires understanding the business environment and focusing attention to boosting the ability to create value innovations through learning about the entire value chain, such as suppliers, alliance partners, customers and non-customers.
- Supporting adaptive learning and the transformation of the organization (Pitt & Clarke, 1999; Berghman et al., 2012). After identifying the value chain, an organization must create learning mechanisms, thus focusing its attention on how to discover value for customers from various places (Tucker, 2001).

The objective of the following discussion is to identify where companies should focus their attention when identifying and organizing for value innovations. The situated-attention model by Ocasio (1997) consists of six factors that affect the focus of attention within an organization: environment of decision, issues and answers, attention structures, procedural and communication channels, decision-makers and organizational moves. The discussion is divided into three categories. Firstly, the factors that guide the process of organizing for value innovations are discussed. This category involves most of the constructs by Ocasio (1997), namely procedural communication channels, decision makers, organizational moves and issues and answers. Secondly, the factors that support the identification of value innovations are presented, namely attention structures. Finally, the environment of decision construct is considered to cover both organizing and identifying aspects, thus it is considered as part of the organizational embeddedness aspect (Gavetti et al., 2007). This evaluation is important as it engages

both the individual and organizational levels into the analysis, along with the external environment of the organization.

#### 2.2.1 Organizing for value innovations

The theories on firm behavior emphasize the coordination of individual and group action (Gavetti, 2007). Ocasio's (1997) work includes four factors that can be considered to affect the coordination process, while simultaneously influencing how an organization should organize for value innovations: procedural and communication channels, decision-makers, organizational moves, and issues and answers. The former three relate closely to the creation of an innovative mindset within an organization and the establishment of clear decision-making structures, which are considered key when organizing for systematic innovation (Crosswhite & Rufat-Latre, 2009). Furthermore, issues and answers concern the ability of an organization to make sense of its environment in a proactive manner by looking beyond routine behavior, which is crucial when aiming at staying ahead of the competition (Kim & Mauborgne, 1999).

#### Establishing decision-making structures

The behavioral research stream aims at highlighting the role of decision-making in organizations (Gavetti et al., 2007). Decision-makers represent those individuals who are involved in decisions concerning organizational moves. The ways in which an organization focuses its attention is strongly influenced by social interactions among the decision-makers. Decision-makers are often selective when allocating attention to different issues and answers, and often base their actions on past situations (Ocasio, 1997; Ocasio & Joseph, 2005).

Organizational moves refer to the actions the decision-makers undertake when responding or anticipating changes in the business environment (Ocasio, 1997). They consist of both external exchange of resources as well as changes within a firm's internal resources and attention structures. There may be various organizational moves

to choose from and the selection is based on the issues and answers an organization is focusing on. Responding effectively to issues and answers requires both passive attention to a wide scale of environmental issues, as well as active focusing of energy towards change initiatives.

As the behavioral view suggests, organizations should strive for aligning goals and interests of organizational members to avoid conflicts (Gavetti, 2007). From a value innovation perspective, commitment of the top decision-makers is crucial (Kim & Mauborgne, 1999; Crosswhite & Rufat-Latre, 2009). Goodrich and Aiman-Smith (2007) have noted that the value innovation process starts from promoting an innovative culture within the organization, as well as communicating the importance of innovation in all functional areas of the organization. Since the objective is to move away from the traditional competition-based thinking, the top management has a critical role as a change facilitator (Simon et al., 2003). The organizational culture must be rejuvenated so that it enables radical thinking and questioning existing practices (Sull, 1999). As noted by Christensen et al. (2002): 'a lack of good ideas is not the problem. The problem is the absence of a robust, repeatable process for creating and nurturing new growth businesses' (p.29). Although the organizational culture as a whole is important, the behavioral view emphasizes the role of an individual member of the organization and, therefore, calls for coordination of individual and group action (Gavetti et al., 2007).

Procedural and communication channels represent both formal and informal activities that can affect the value innovation capability of an organization. As described by Ocasio (1997), they are interactions and communications that an organization has set up in order to involve decision-makers in a particular action. The channels consist of meetings, reports, brainstorming sessions and other ways of communication that affect how issues and answers are judged and decisions are made. These decision-making structures are important in terms of channeling behaviors in a given team or an organization (Gavetti et al., 2007). A fundamental issue is how to align the time and energy of both individuals and the broader organization, especially when there are multiple issues that should be considered simultaneously (Gavetti et al., 2007). This

calls for structured processes for information flow and dialogue (Ocasio & Joseph, 2005).

It is important to acknowledge the importance of formal innovation processes as well as mechanisms to gain external information when considering organizing for value innovations. The emergence of formal innovation processes indicates that innovation has become increasingly structured and managed (Cooper et al., 2002). Companies are becoming more and more organized with their innovation practices and have begun to set up ways to involve decision-makers through establishing formal procedures (ibid.). Therefore, formal processes can be considered to be useful when organizing innovation and idea creation process effectively (Crosswhite & Rufat-Latre, 2009). Thus, a combination of formal and informal procedural and communication channels could help decision-makers interact and find new opportunities for value creation within an organization.

All in all, communicating the importance of value innovation is crucial when considering the role of decision-makers in organizing for value innovation. Decision-makers should be broadly involved and share knowledge across the organization in order to develop the innovative capabilities of the entire firm (Ocasio, 1997). Active communication between parties can also promote knowledge-brokering within the company, which is considered an important way to capture ideas and rethink old ones (Hargadon & Sutton, 2000). Interaction between decision-makers is considered an important way to improve decisions, as individuals are able to critically evaluate different ideas and observe which assumptions were used in the process (Schweiger & Sandberg, 1989). Schweiger et al. (1986) consider the ways that information is shared and evaluated within an organization as critical factors in effective decision making. From a behavioral perspective, decision making structures are essential in order to allocate attention to a wider range of issues (Simon, 1947; Gavetti et al., 2007) Therefore, proposition 1 is formulated as follows:

Proposition 1: Formal innovation processes and interaction within the organization can support the coordination of value innovation initiatives, broaden the allocation of attention and thus inhibit decisions based on past behavior.

Notably, whereas formal processes and interaction are part of organizing for value innovation, the outcome can be considered as part of the identifying concept. This is due to the fact that a broader allocation of attention can promote the identification of value innovations.

#### Looking beyond routine behavior

Organizations are often driven by routine behavior based on past experience, which can constrain the decision making ability of an organization (Gazetti, 2007). Ocasio (1997) defines these routines as issues and answers, which represent possible answers to issues an organization is facing within its business environment. Thus, from a value innovation perspective, it is important to consider how managers make sense of environmental stimuli and how they act based on the interpreted information (Thomas et al., 1993). Interpreting ambiguous information is challenging but also considered to be a key success and even survival factor (ibid.). Therefore, in the core of organizational performance are the following factors: seeking information, interactive search of meanings, and actions. This is referred to as sensemaking on a more general level (Thomas et al., 1993).

In terms of organizing for value innovations, it is important to develop sensemaking mechanisms in order to tackle one of the major impediments of innovation: remaining fixed on the status quo (Hamel, 2007). Challenging the traditional assumptions about competition, industry dynamics, as well as organizational ways of working can be hard (Matthyssens et al., 2006). This is often due to established industry recipes, a concept relating to the fact that managerial mindsets within an industry are often homogenous, thus leading to similar strategic decisions (Spender, 1989). In addition, Sull (1999) has identified the concept of 'active inertia', which demonstrates the tendency of organizations to follow established patterns of behavior.

Active inertia is very common among big market players and can lead to the loss of competitive advantage (Sull, 1999). Thus, a company needs to find ways to challenge the traditional mindset, re-evaluate the current status quo, and embrace change. Cohen and Levinthal (1990) emphasize the importance of absorptive capacities, which relate to the firm's ability to 'recognize the value of new information, assimilate it and apply it to commercial ends' (Cohen & Levinthal, 1990:128). Absorptive capacities can be considered as dynamic capabilities, i.e. processes and routines that can create competitive advantages in dynamic markets (Eisenhardt & Martin, 2000). In the core of successful business development is, therefore, the ability to utilize current capabilities in order to identify future opportunities (Böring & Herzog, 2008; Raisch et al., 2009). As emphasized by Birkinshaw and Gibson (2004), companies should focus on organizational ambidexterity, i.e. how to develop their abilities in terms of finding new opportunities while simultaneously exploiting their existing competences.

All in all, it can be concluded that from a value innovation perspective, a company should widen its repertoire of potential issues and answers. This can be done by actively challenging the current mindsets and business practices in order to seek for novel solutions. This however, should not be done in the expense of current operations, which is why an organization should also focus on staying ambidextrous and leverage its existing assets while proactively finding future opportunities. Thus, the second proposition is constructed as follows:

*Proposition 2: In order to find opportunities for value innovations, an organization should be ambidextrous, while challenging the status quo of its business environment.* 

As noted in the previous example, the outcome of the ambidextrous mindset is the ability to better identify possibilities for value innovations. Thus, to some extent both organizing and identifying aspects are involved in this proposition as well, although the emphasis is on the organizing part.

#### 2.2.2 Identifying value innovations

When considering issues that influence the identification of value innovations, cognitive limits of human decision making should be considered (Gavetti et al., 2007). Ocasio (1997) emphasizes in his work two aspects that can limit decision making: attention structures and rules of the game. Firstly, attention structures of a firm can be described as the social, economic and cultural structures that affect the allocation of attention within an organization (Ocasio, 1997). They relate to the way an organization can promote the identification of value innovations. Secondly, rules of the game are considered as principles of action concerning what is the appropriate behavior in a given situation (Ocasio, 1997). The rules make up a set of assumptions concerning competition and how to succeed in a given context. For example, ways to anticipate and react to competitor actions are embedded in these rules. Most importantly, the basis on which to compete is also found in these assumptions, i.e. should the competition be based on price, customer service, low costs, quality, technological innovation or other factors (Ocasio, 1997). In order to create value innovations, an organization must be able to break free from the ways the industry operates, and therefore be able to develop mechanisms to think differently (Pitt & Clarke, 1999).

From a value innovation identification perspective, it is interesting to analyze the rules of the game construct in more detail. By following rules of the game, organizational decision makers have bounded rationality, i.e. they are not always entirely rational in their decisions, and base a lot of decisions on previous experience and information (Simon, 1991; Gavetti et al., 2007). Relating to bounded rationality, it is important to understand the concept of industry recipes, which are established mental models within a certain industry that affect decision making to a large extent (Spender, 1989). The ways in which an organization allocates attention to the established mindsets within an industry can be crucial when determining its success with value innovations (Matthyssens et al., 2006). Although value innovations aim at breaking the established mindsets of an industry, it can be crucial to first understand the current assumptions concerning rules of the game in order to identify points of differentiation. Industry recipes can provide help with this challenge.

Matthyssens et al. (2006) describe industry recipes as the mental models of a specific industry. The industry recipe concept was introduced by Spender (1989) who claims that the mental models and assumptions managers have within an industry are similar to each other. Furthermore, they significantly influence managerial decision making processes and outcomes. As a result, breaking away from the traditional thinking may be a driver for growth and a way to recognize value innovation potential. Mapping industry recipes can aid in identifying the common elements in managerial judgment and action within the industry. Although the industry recipe ingredients vary across industries and are highly context-specific, Matthyssens et al. (2006) suggest that there are some specific questions that can be used to map the industry recipe in business markets. The nature of the industry can be analyzed by evaluating the role of price, efficiency and scale, along with the technology focus and commoditization levels of an industry. The mindset of the industry players can be evaluated by their willingness to innovate and behave in a proactive manner. Furthermore, the value chain should be analyzed by looking at who has the most power in the value chain, whether there is cooperation or not, where the marketing efforts are focused and whether there is service differentiation within the value chain (Matthyssens et al., 2006).

Matthyssens et al. (2006) note that identifying the industry recipe is the first step towards value innovations. Secondly, companies should aim at pinpointing initiatives that try to break away from the traditional industry recipe. According to Kim and Mauborgne (2004, 2005), value curves can be important when trying to break free from established mindsets. Goodrich and Aiman-Smith (2007) explain that value curves are used as an illustrative tool for determining the wants and needs of each customer, identifying the importance of each need, analyzing how customers measure wants and needs, and pinpointing the satisfaction levels customers have with current offerings. This can be of great help when identifying possibilities for value innovations. The value curve tool is illustrated with more detail in the empirical section 4.2.

In addition to understanding the issues that customers value, another important point where companies should focus their attention is identifying the customer who has the valuable information they seek. In order to create value innovation initiatives, a company needs to know exactly how its products are applied and share this information within the organization. Balsano et al. (2008:23) define value innovation as 'delivering exceptional value to the most important customer in the value chain'. From a firm perspective, the most important customer is the one who has information about how to improve and create value to a product. This information is not necessarily gained from the immediate customer in a company's supply chain, which is why extending the traditional definition of a customer is needed (Day & Schoemaker, 2004). In essence, a company should look beyond the traditional viewpoint of a customer. As noted by Goodrich and Aiman-Smith (2007), 'the key customer may not be ours' (p.27). In fact, the key customer may be the innovating firm's customer's customer. Lee and Goodrich (2012) identify three crucial issues that can help in identifying the most important customer in the value chain: firstly, if there is a problem with the offering, it should be evaluated who is responsible for taking action to correct the situation. Secondly, if there is a problem with the offering, it should be considered who would lose most financially. Thirdly, it should be pinpointed who would most likely recognize the value provided by the offering.

In addition to fully understanding the needs of current customers, Matthyssens et al. (2006) acknowledge the importance of non-customer users. This view is also highlighted by Kim and Mauborgne (2005), who suggest that companies should deepen their understanding about their non-customers. Kim and Mauborgne (2005) claim that, given a leap in value, a company can attract several non-customers. In fact, according to Kim and Mauborgne (2005:106.), 'noncustomers (sic.) tend to offer far more insights into how to unlock and grow a blue ocean than do relatively content existing customers'. Furthermore, it is important to identify why non-customers are currently refusing the industry offering. Looking for patterns in the responses can lead to insights about potential demand (Kim & Mauborgne, 2005).

All in all, the concepts of industry recipes, value curves, most important customers and non-customers are crucial for a company that is trying to identify opportunities for value innovations. This is because they aim at breaking the challenge of bounded rationality, which is considered a crucial constraint in organizational decision making (Gavetti et al., 2007). As noted by Matthyssens et al. (2006), the first step to value innovation is to identify how the industry operates and the second is to find ways to deviate from this behavior. Therefore, understanding the current mindsets and basis for competition are the first steps towards value innovation. Furthermore, the importance of speaking to the right current or potential customers in order to identify potential for a leap in value is essential. Therefore, a following proposition can be presented:

Proposition 3: Value innovation creation in an organization requires rethinking the basis for competition and understanding the current and future value potential of the business offering.

#### 2.2.3 Organizational embeddedness

Theories of firm behavior have started to emphasize the role of organizational embeddedness, i.e. the importance of an organization's external environment for decision making (Gavetti et al., 2007). Ocasio (1997) views that the overall environment of decision acts as raw stimuli for decision making within the organization. It is related to both organizing and identifying aspects of value innovations. According to Ocasio (1997), the environment consists of all material, social and cultural factors that affect decision making. In practice, this can refer to multiple factors such as competitors, customers, suppliers, raw materials, labor, technology, and even industry regulations (ibid.). Ocasio (1997) claims that the environmental aspects the organization focuses on form the tool kit for determining which actions to take in a given situation. From a value innovation perspective this is an important issue, because it has been noted that firms are bounded in their ability to consider all factors within their environment (Gavetti et al., 2007). As emphasized by Simon (1991), the key to organizational learning is the understanding of learning mechanisms that allow it to think differently from its status quo. This notion is crucial also when considering how to organize for value innovation.

From value innovation organization perspective, a company should develop learning capabilities in order to avoid constraints that arise from bounded rationality. Furthermore, when considering how to identify value innovations, a company should understand the wider context of its business environment. Thus, two major issues are discussed in the following sections: deliberate learning mechanisms related to the value innovation organization aspect, and value co-creation related to the identification aspect.

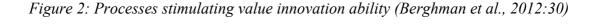
#### Establishing deliberate learning mechanisms

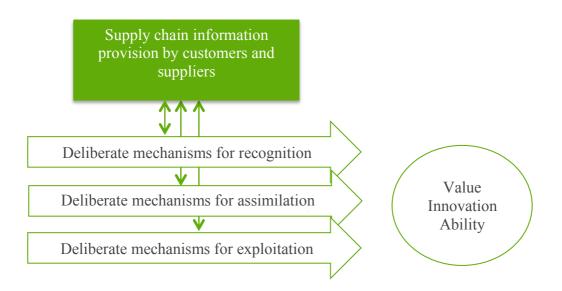
When organizing for value innovation, a company should actively consider how a wide range of external parties such as suppliers and other network partners can be involved in the value creation process. As noted by Matthyssens et al. (2006:752), 'successful value innovation should be firmly embedded in a company's entire network relationships'. This notion is echoed by Kim and Mauborgne (1999), who point out that the importance of strategic relations is increasing rapidly and companies should capture the emerging opportunities from these network relations based on their respective strengths. In order to leverage strategic relations and networks, the ability to learn is crucial. From a behavioral perspective, learning also strongly influences the ability to make decisions and evaluate different alternatives (Gavetti et al., 2007).

One way for a company to gain a wide perspective of its network is to develop deliberate learning mechanisms, which have become an important issue in the context of new strategic moves and the creation of new market space (Berghman et al., 2012). They concern organizational experience accumulation, knowledge articulation and knowledge codification processes that link to organizational routines (Zollo & Winter, 2002). Especially inter-firm collaboration allows access to diverse and novel information (Berghman et al., 2012). This, in turn, can foster the identification of new market opportunities.

In terms of value innovations, dynamic capabilities and absorptive capacities form the basis of deliberate learning mechanisms, through which firms can gain value innovation

abilities (Berghman et al., 2012). As noted by Berghman et al. (2012), three absorptive capacity processes can stimulate value innovation ability within an organization: 'deliberate learning mechanisms for recognition, assimilation and exploitation' (p. 35) (Figure 2):





First of all, mechanisms that foster recognition of new opportunities and options are crucial. Berghman et al. (2012) emphasize the role of information exchange between customers as a way to facilitate the recognition of deeper and more open-minded information about the market. However, the intelligence gained should not be merely focused on current customer needs, since it may even hamper innovation by leading firms to become reactive (Kumar et al. 2000). Berghman et al. (2012) suggest that companies should expand their scope of learning, for example towards new customers, competitors, and channels. This requires a peripheral vision, which is defined as the ability to 'see opportunities and threats, avoid strategic blunders and anticipate changes in the environment' (Day & Schoemaker, 2004:127). Pittaway et al. (2004) emphasize the importance of finding innovation opportunities across business networks. Sources of new ideas and opportunities range from immediate customers and suppliers to

distributors, competitors, co-suppliers, science partners, trade associations, industry networks and business clubs.

Secondly, learning mechanisms that foster assimilation, i.e. the ability to analyze, process, interpret and understand acquired external information, are closely related to the value innovation ability (Berghman et al., 2012). Although the recognition of opportunities is crucial, information overloads can become problematic (Malhotra et al., 2005). Gaining versatile information from both ends of the supply chain is important but may simultaneously increase the probability of conflicting interpretations (Berghman et al., 2012). Thus, knowledge transfer with supply chain parties requires well-managed learning mechanisms.

Thirdly, learning mechanisms that stimulate exploitation of new business concepts refer to the actual value innovation implementation part (Berghman et al., 2012). As the focus of the research is on the identification part, it is appropriate to exclude the exploitation part from this literature review.

In terms of value innovation creation, a major takeaway from the model of Berghman et al. (2012) is that external sources of information interact with internal capabilities of firms and widely affect their value innovation abilities. Thus, the firm's level of absorptive capacities determines how external knowledge flows can be utilized efficiently.

#### Co-creating value

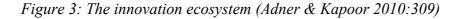
Organizational embeddedness is closely related to value co-creation with different actors that are part of an organization's environment (Gavetti et al., 2007). Gaining a wide perspective on innovation supports organizational decision-making and value innovation identification, as opportunities for value creation can be explored with a peripheral vision within an organization's entire value network (Day & Schoemaker, 2004). There are many possibilities for deciding where an organization should focus its attention when identifying value innovations. For example, different customers may perceive the value of the same product differently, depending on their business context (Lindgreen & Wynstra, 2005). Furthermore, it is important to note that value is increasingly created in business networks rather than single business relationships between two parties (Corsaro et al., 2012).

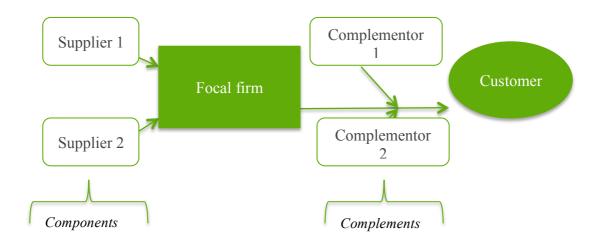
Joint value creation through networks is a contemporary topic of interest (Möller & Törrönen, 2003). The concept is especially interesting as there is potential for value creation that reaches beyond the immediate supplier-buyer relationship towards the entire business network (ibid.). Networks can be considered as 'complex interactions within and between companies in relationships over time' (Ford et al., 2003:18). Networks usually consist of both significant partners such as major customers, key suppliers and co-developers and less significant counterparts (ibid.). As noted by Ford et al. (2003), networks can be an important way to transfer knowledge and create new ideas. From a network perspective, a company is dependent on how it manages interaction with others, as well as how it develops relationships with other actors in the network (Lindgreen & Wynstra, 2005).

The role of networks in innovation is highlighted by Balsano et al. (2008), who note that companies must innovate across their entire value chain in order to achieve long-lasting success and growth. However, value creation should not be considered only in terms of value chains but rather value networks. As noted by Normann and Ramirez (1993), value no longer occurs in sequential chains, but in intricate value constellations. As a result, products and services should be seen as outcomes of relationships among actors in a value creating system rather than a value chain (Normann & Ramirez, 1993). This view is echoed by Pittaway et al. (2004) and Day & Schoemaker (2004) who emphasize the value of business networks in exploring opportunities for innovation.

Related to the value constellation concept, it is crucial to pinpoint the inter-firm linkages that drive innovation. When identifying for value innovation, a main notion is that innovations are not managed in isolation, but rather interdependently across the value constellation of a firm (Hamer, 2010). Adner and Kapoor (2010) have introduced the concept of innovation ecosystem, which acknowledges the interdependent and collaborative nature of innovations. Innovation ecosystems allow creating such value

that a firm could not create alone, therefore making firms increasingly dependent on others (Adner, 2006). As a result, firms must acknowledge two major issues: that their partners must be ready for new innovations and that there may be bottlenecks that hamper innovation outside one's own organization (ibid.). In fact, the success of an innovating firm often depends on the changes in a firm's environment, i.e. the innovations made by the other actors in the environment (Adner & Kapoor, 2010). The basic notion is that there are asymmetries arising from the positions of different actors. First of all, the firm's ability for value creation is affected by both its upstream and downstream partners' innovation abilities and challenges. In essence, challenges faced by suppliers affect the components a firm needs to integrate, whereas challenges by customers limit the value creation ability of the innovating firm as it constrains the ability to exploit the product according to its full potential (Adner & Kapoor, 2010). The idea is illustrated in figure 3.





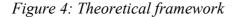
All in all, the environment of decision should be considered as one of the most important issues affecting the ability to identify value innovations. Establishing learning mechanisms that foster the value innovation ability and allow a firm to examine its entire business network are crucial from the organizing perspective. This in turn can support the identification process, as companies adopt a peripheral vision rather than merely concentrating on a single customer. This is important when identifying

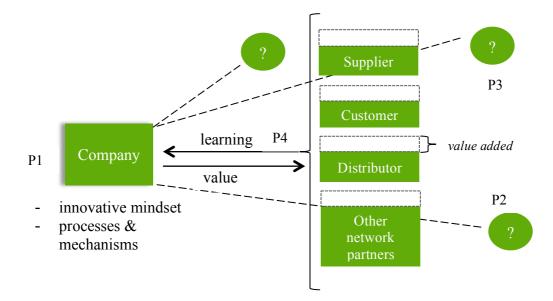
opportunities for value co-creation (Normann & Ramirez, 1993). Therefore, the final proposition can be presented as follows:

Proposition 4: In order to create value innovations, an organization should consider how to add value to the entire network of relationships and establish learning mechanisms for its entire value network.

#### **2.3 Theoretical framework**

Based on the evaluation of the attention-based view in the context of value innovations, four propositions were developed for the theoretical framework. The propositions reflect the given research question 'how should a company organize value innovation creation in B2B markets?'. Whereas the propositions were classified based on whether they relate to organizing or identifying aspects of this research, it should be noted that the concepts are interrelated to some extent, which makes it hard to distinguish them from each other. The given propositions are illustrated in the following theoretical framework:





The framework illustrates how an organization can organize and identify for value innovation. Internally, a company should be organized so that it can strive for an innovative atmosphere within the workplace, which would foster interaction between the decision-makers, therefore allowing for more novel organizational moves (P1). Furthermore, a company should have some formal innovation processes in place in order to effectively coordinate value innovation initiatives (P1). Identifying opportunities for value innovation requires learning from the entire value network, as illustrated by double arrows (P4). A company should also consider how to add value to multiple players within its network, such as customers, distributors, suppliers and customer's customers (P4). In order to evaluate current and future opportunities, value innovation exploration should be also extended outside the current value network of a company, for example towards current non-customers, as illustrated by the question marks (P3). Furthermore, the question marks illustrate how challenging the existing ways of working can reveal previously unidentified opportunities both within and outside the current value network (P2).

By engaging in each of these actions, it is expected that an organization can create superior value to its value network. By taking into consideration both the internal and network aspects of the organization, the process of creating value innovations becomes more clearly defined. When attention is allocated to both organizing and identifying aspects of value innovations, it is possible to create superior value that could not be created without considering both aspects. This implies that combining the organizing and identifying aspects are interdependent and positively correlated to some extent.

Before turning into the empirical evaluation of the theoretical framework, it is important to consider the framework in a B2B context. As the case company operates in a B2B market, there are some important aspects to value innovation that should be taken into consideration.

#### 2.4 Special characteristics of B2B markets

When discussing the concept of value innovation, it is important to consider the special features of B2B markets. As the work by Kim and Mauborgne (1997, 1999, 2004, 2005) is highly focused on consumer markets, it is not considering the special characteristics of B2B markets to a large extent. There are a lot of underlying assumptions in the concept of value innovation that should be challenged before discussing it in the context of this thesis.

Difficulties with business market value innovations are various. Firstly, Kim and Mauborgne (1999) consider that value innovations should target the mass market, even if it would mean losing existing customers. This brings about two major B2B considerations: firstly, a B2B company has a limited customer base and strong relationships with its customers, which makes it risky to completely ignore the existing customers (Fill & Fill, 2005). Secondly, in a B2B context a value innovation is not necessarily targeted to the mass market (Mele, 2009). In essence, developing new value propositions is crucial for B2B firms, since it allows differentiation and enhances relationships with customers (Fill & Fill, 2005). However, as B2B markets are characterized by closer customer ties, the importance of developing solutions to individual customers is highlighted. Business markets are increasingly moving away from a short-term product point of view towards a holistic solution-thinking (Matthyssens et al., 2006). Mele (2009) explains that solution-oriented firms aim at creating a stream of innovative solutions to meet individual customers' problems, rather than targeting the mass market. Mele (2009) clarifies that in her example, 'innovation was not new in absolute terms, but it was 'new' for a specific customer, offering a superior value proposition: it was a *value innovation*.' (p.211). Thus, Mele (2009) notes that a value innovation can also concern only one specific customer rather than the entire customer-base or the mass market as claimed by Kim and Mauborgne (1997).

Secondly, Matthyssens et al. (2006) note that value innovations are easily imitated if they turn out to be successful, since B2B market value innovation initiatives often relate to relatively simple undertakings such as new ways of cooperating within the value chain or combining different value chains. This is a major flaw in the value innovation literature by Kim and Mauborgne (2004, 2005), which disregards the fact that competition will follow as soon as blue oceans are found. All in all, Kim and Mauborgne (2004) highlight the importance of moving away from competition. However, some B2B literature suggests that horizontal supply relationships are gaining importance in B2B value creation and there is increasing interest towards cooperative arrangements with competitors (Möller & Törrönen, 2003; Matthyssens et al., 2006; Wilhelm, 2011). This view differs distinctively from that of Kim and Mauborgne (2004).

Thirdly, although Kim and Mauborgne (2004, 2005) assume that value innovations are completely embraced by the market as soon as they are introduced, the importance of the innovation ecosystem concept should be taken into consideration in B2B markets due to supply chain interdependencies (Adner & Kapoor, 2010). According to the innovation ecosystem approach, the success of an innovating firm often depends on the changes in a firm's environment, i.e. the innovations made by the other actors in the environment (Adner & Kapoor, 2010). Adner (2006) and Matthyssens et al. (2006) note that bottlenecks in the innovation ecosystem can lead to difficulties in implementing value innovation initiatives. This can be seen for example in cases where a supply chain partner's technology does not support a new value innovation initiative (Matthyssens et al., 2006). Furthermore, traditional buying behavior of suppliers and/or customers can hamper the market introduction of the value innovation initiative, or at least delay it (ibid.).

Finally, Kim and Mauborgne (2004, 2005) highlight the importance of creating value for mass buyers, including both customers and non-customers. The concept of innovation ecosystem (Adner, 2006) strongly supports the notion of Michel et al. (2008) who claim that a firm cannot offer value innovations without its customers. However, due to the ecosystem view, a company might benefit from not only focusing on customer value creation but creating value for the entire ecosystem (Adner, 2006). The ecosystem would constitute its entire value network, and even the entire industry. This view is significantly different from that of Kim and Mauborgne (1999, 2005), whose view on value innovation can be described as one-way provision of value from a firm to its end-customer. Furthermore, disregarding existing customers in B2B markets is highly risky, especially due to some reputational characteristics that can affect the choice of business partners (Lindgreen & Wynstra, 2005).

All in all, B2B markets have various special characteristics that should be taken into consideration when organizing for value innovation creation. The following table summarizes the differences between the general definition of value innovation by Kim and Mauborgne and the special B2B considerations that were found in the literature:

| Value innovation   | B2B market   | Implication for value innovation in  |
|--|--|--|
| dimensions (Kim  | characteristic   | a B2B context  |
| & Mauborgne)   |  |  |
| Targets the mass<br>market                                     | Closer ties to customers,<br>fewer customers<br>(Fill & Fill, 2005)  | Value innovation can concern only one<br>specific customer rather than the entire<br>customer base (Mele, 2009)  |
|  | A single customer can<br>account for a large amount<br>of sales<br>(Michel et al., 1996; Fill &<br>Fill, 2005) | Value innovations can be tailored into<br>customer-specific solutions rather than<br>the mass market, including product &<br>service combinations (Matthyssens et al.,<br>2006)              |
| Makes competition irrelevant                                   | Simpler value innovation<br>initiatives in B2B markets<br>(Matthyssens et al., 2006)                           | Competition can imitate quickly, value<br>innovation does not bring a sustainable<br>competitive advantage<br>(Matthyssens et al., 2006)   |
|  | Horizontal relationships<br>important in B2B (Möller<br>& Halinen, 1999; Wilhelm,<br>2011)                     | Potential for breaking the traditional<br>supply chain of the industry through new<br>types of cooperation or new networks,<br>even alliances with competitors<br>(Matthyssens et al., 2006) |
| Value innovation is<br>completely<br>embraced by the<br>market | Interdependencies in the<br>innovation ecosystem<br>(Adner, 2006)  | Interdependencies bring along<br>bottlenecks as value chain partners<br>cannot adapt quickly (Matthyssens et al.,<br>2006)   |
|  | Innovations not managed in<br>isolation, but<br>interdependently across the<br>value constellation of a        | Difficulties/delays in implementing<br>value innovation initiatives (Adner,<br>2006)   |

Table 1: Value innovation concept in a B2B setting

|  | firm (Hamer, 2010)<br>Longer decision-cycles in<br>B2B (Fill & Fill, 2005)                                      | Traditional buying behaviors delay the implementation of value innovations (Matthyssens et al., 2006)                                  |
|--|---|--|
| Firm creates value to<br>customer and non-<br>customer | Limited customer base (Fill & Fill, 2005)   | A holistic perspective on value creation<br>(Hamel, 1996; Pitt & Clarke, 1999)   |
|  | Relationship-specific<br>characteristics affect choice<br>of business partner<br>(Lindgreen & Wynstra,<br>2005) | Disregarding current customers not an<br>option due to reputation effects<br>(Lindgreen & Wynstra, 2005; Möller and<br>Törrönen, 2003) |
|  | Development and<br>maintenance of positive<br>buyer-seller relationships a                                      | Cooperation within the value<br>constellation of a firm (Normann &<br>Ramirez, 1993)   |
|  | key success factor in B2B<br>(Michel et al., 1996; Hunter<br>& Tietyen, 1997; Fill &<br>Fill, 2005)             | Focus not only on customer value<br>creation but creating value for the entire<br>value network (Normann & Ramirez,<br>1993)           |
|  | Co-creation of value<br>(Michel et al., 2008)   |  |
|  | Firm cannot offer value<br>innovations without its<br>customers (Michel et al.,<br>2008)                        |  |

From the perspective of this research, the special characteristics of B2B markets have some implications on the evaluation of the theoretical framework. First of all, as characterized in proposition 4, the innovation ecosystem and the network aspects of value innovation should be emphasized in the B2B context, as supplier-buyer relations within the value network are closer than in B2C markets. Therefore, this thesis is not focusing on the notion of targeting mass markets and disregarding the current customer base but rather focuses on maximizing the value for a specific set of network relationships. Furthermore, due to the closer relationships, formal innovation processes within the firm can benefit from the involvement of external network actors such as research agencies and customers. This is an important notion from the perspective of proposition 1 and can help tackling some challenges that arise from an innovation ecosystem, which may hamper the introduction of value innovation initiatives. When considering propositions 2 and 3, which highlight the importance of deviating from current industry standards and call for organizational ambidexterity, it is important to note that in a B2B context, competitors are likely to follow when value innovation initiatives are found. Thus, this research acknowledges that the competitive advantage arising from value innovations may not be permanent.

### **3. METHODOLOGY**

This chapter outlines the methodology of the thesis and justifies the choices for the research approach and research design. Furthermore, the quality of the study is evaluated by considering the validity and limitations of the research.

#### 3.1 Research method

In this thesis, the concept of value innovation is researched from the perspective of a single firm operating in a global B2B market. The study was conducted as a single qualitative case study. Qualitative research has an interpretive focus to research, with the aim of studying things in their natural settings and attempting to interpret phenomena in terms of 'meanings people bring to them' (Denzin, & Lincoln, 1994:2). The underlying aim of conducting qualitative research is to gain an in-depth understanding of the topic, usually through using multiple empirical methods (ibid).

Qualitative research was chosen because it allows the researcher to gain closer insights on a certain phenomenon through detailed interviewing (Denzin & Lincoln, 1994; Eriksson & Kovalainen, 2008). In order to identify current innovation practices of the case company and give suggestions for improvement for the case business, an approach that allows the researcher to get close to the case company's employees and its customers was crucial in this thesis. This approach also facilitates in-depth understanding about the case company's current practices as well as customer perceptions. Qualitative interviewing was chosen as a method as it was believed that rich descriptions concerning the case company's innovations would be crucial for the subsequent analysis of the data.

In terms of the research paradigm, this thesis requires an interpretive approach. This is due to the high context-specificity of a single case study method and the need to understand the empirical setting and get close to the managers (Dyer & Wilkings, 1991). As the focus is strongly on interpretation of context-specific meanings, an interpretive approach was considered appropriate. The selection of an interpretive research paradigm is also supported by the fact that the thesis is considered as an intrinsic case study (Stake, 2005). This suggests that the aim is to gain deeper understanding of the case in question, i.e. the value innovation process of the case company.

The research approach can be characterized as inductive, as there is no prior knowledge about value innovations in the context of the attention-based view of the firm. Therefore, the research approach is concerned with emerging themes and interpretations concerning them (Dubois & Gadde, 2002). The focus is on interpretive sensemaking (Welch et al., 2011), which is characterized by subjective search for meaning.

## Single case study

Value innovations are considered a relatively new topic area in the field of academic research, which supports the usage of a case research approach (Eisenhardt, 1989). As noted by Yin (2003), case studies are often used when a research question starts with questions "how" or "why" and when a complex contemporary phenomenon is studied.

A single case method was chosen as single case studies provide a unique opportunity to get close to managers and interpret the managerial mindset from the inside of the organization (Dalton, 1959). Although single case studies have gained criticism concerning external validity, Yin (2003) has found justifications for conducting single case studies. The methodological choice for this thesis is based on two important justifications by Yin (2003):

1. The case aims at testing already established theory through applying the attention-based view of the firm to the case company. The aim is to confirm, challenge as well as extend the current theory in the context of the case company.

2. The case represents a revelatory case, i.e. the case is an opportunity to observe and analyze a phenomenon that has been previously inaccessible to scientific inquiry. This is based on the fact that there is no available framework for organizing the value innovation creation process. An attention-based view is appropriate for synthesizing both organizational and environmental issues in the value innovation context.

#### *The case company*

Due to confidentiality reasons, no specific information can be revealed about the case company. In general, the case company is headquartered in Finland, operates in a global B2B market, and is one of the largest players within its field. The case company consists of various business groups, which differ significantly in terms of operating styles and innovativeness. The traditional business of the case company has faced a downturn in recent years. Therefore, there is a need for value adding opportunities, which is seen in the increased development of engineered products, such as the case company's innovative materials (Case Company, 2012a). Furthermore, the role of the innovation ecosystem has become increasingly important, as the focus has shifted towards fostering customer relationships. The importance of new market creation is also highlighted, as the business portfolio focus is shifting towards businesses with sustained growth and value creation (Case Company, 2012a). Thus, the case company aspires to pursue new business opportunities and aims at complementing existing businesses with innovative offerings.

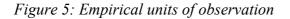
It is important to differentiate between the case company and the case business. Whereas the case company consists of various business groups, the case business represents an entirely new business for the company. Although no details can be given, the case business deals with innovative materials in the B2B market.

## 3.2 Research design

The research design followed a structured approach proposed by Yin (2003). The first element of the research was the identification of research objectives and questions. The research questions provided some guidance to where to begin to look for relevant evidence. This was followed by defining the units of analysis for the study and determining the logic of how to analyze data and criteria for interpreting findings.

# Unit of analysis

The main unit of analysis of this thesis is the innovation process of the case company, with a focus on value innovations. Therefore, the thesis is a holistic case study, implying that there is only one main unit of analysis. It is important to note that in the core of this study is the innovation process of the case company, which is influenced by both internal and external factors. For this reason, the data is gathered from multiple sources. As noted by Fletcher and Plakoyinnaki (2011), it is important to distinguish between the empirical unit of observation and the unit of analysis of the study. Whereas the unit of analysis asks what or who is studied, empirical unit of observation refers to the units from which the data is gathered (ibid.). This thesis is constructed of multiple empirical units of observations, namely the case company, its customers and the industry. Primary data is gathered from both the case company and its customers in the form of qualitative interviews. Furthermore, the industry practices are analyzed through a combination of primary and secondary data sources.





## Case selection

The case and sampling decisions were limited due to the fact that the thesis was conducted in cooperation with a specific case company. Naturally, choices concerning the industry and the case company were predetermined. Furthermore, the case business was decided in advance according to the case company's interests. The main justification for choosing the specific material as a focus area was that it is a completely new business within the case company's business portfolio.

As noted by Stake (2005), single case studies also require several subsequent choices in order to determine the interviewees included in the sample. The choice was made together with the case company representatives. From a pool of approximately 20 potential case company interviewees, ten were selected for further contact. The final selection reflected richness of information, as case company representatives from multiple business functions were chosen. This was done in order to provide the interviewer a wide overview on the different innovation practices within the case company. Furthermore, representatives from the case business were selected as interviewees in order to provide a deep understanding of the case business for the researcher. All interviewees were top-management level in order to ensure high levels of expertise (See Appendix 1 for a list of interviewees).

In terms of customer interviews, the customer base was screened and non-customers identified for the second part of the interviews together with case company representatives. The customer base is still relatively narrow because the case business is new. Therefore, the number of potential customer interviews was limited. With the permission of the director of the case business, three existing customers were contacted for an interview. Furthermore, some current non-customers were screened for additional interviews. Finally, 11 non-customers were contacted and interviews were conducted with four companies. All in all, seven customer and non-customer side interviews were conducted. Thus, the total amount of interviews for this thesis was 17. The interviewees

represented various different industries and were mostly top-management level (See Appendix 1 for a list of interviewees).

## Data collection

The data for this thesis was qualitative to a large extent. Qualitative data consist of detailed descriptions of situations, including direct quotations concerning people's experiences and beliefs (Patton, 1980). The interview data is considered as raw empirical data, which should be open-ended. Whereas quantitative measurement uses tools that provide a closed framework, qualitative approach is focused on capturing 'what people have to say in their own words' (Patton, 1980:23). A quantitative element was included in the empirical data by presenting the customer and non-customer interviewees a short questionnaire, which provide a basis for the value curve mapping in chapter 4.2.

The empirical data was gathered through interviews with the top management level as well as customers and potential customers of the case business. The aim of the managerial level interviews was to gain deeper understanding about the current innovation management practices at the case company, as well as the case business. In terms of the customer and non-customer interviews, the aim was to identify how they feel about the new material and identify suggestions for improvement in terms of supplier relationships between the case company and its clients (See Appendix 2 for an outline of interview questions).

The interviews were conducted over four months, starting from April 2012. Firstly, the case company representatives were interviewed in order to gain understanding about current innovation practices at the company. The interview design was based on the literature review findings, so that main topics relating to value innovation processes were covered. The interview questions were designed with the help of Kvale's (1996) nine question types in order to gain variety to the questions.

In terms of the company interviews, the interview questions were modified to suit the specific context of the interviewees based on the insights gained from the first interviews. The interviewees were approached via email, suggesting a time for an interview. The interview questions were sent out in advance in order to offer some time for preparation for the interviewees. The face-to-face interviews lasted approximately one hour and were conducted in Finnish for convenience reasons. Three of the interviews were conducted via telephone due to geographical constraints. Each interview was recorded with the permission of the interviewee and notes were written down during the interview for increased reliability. For each interview, a proxy document was prepared to allow further analysis.

The customer interviews were conducted both in Finnish and English. Due to time constraints and geographical challenges, the interviews were conducted as phone interviews. Although there were some challenges retrieving information especially from non-customers and the quality of the data differed between the respondents, the data collected was considered highly valuable from the perspective of the case business.

All in all, the response rate for the case company interviews was 100 %, whereas the customer and non-customer interviews were more difficult to organize. The response rate for the customer and non-customer interviews was 50%.

### Analysis and interpretation

The analysis of the data followed directed content analysis (Hsieh & Shannon, 2005). The propositions that were identified in the theoretical framework formed the basis of the data analysis in order to make the process more structured (ibid.). Thus, the data was analyzed based on the themes found in the theoretical framework with the objective of validating or extending the framework (Hsieh & Shannon, 2005), while simultaneously having an open mind to identifying completely new emerging themes. Finally, the customer interviews provided important insights on the value propositions of the case business, which led to some important managerial implications. Based on the insights gained from the analysis, the theoretical framework was adjusted to the context of the

case company. The insights gained from the customers were also introduced in a detailed manner in order to provide improvement suggestions for the case business. As the focus of the thesis is on interpretive sensemaking (Welch et al., 2011), rich descriptions gained from the qualitative interviews were highly valuable in the interpretation process and provided understanding of the subjective experiences of the interviewees.

### 3.3 Evaluation of the study

## Validity of the study

This thesis aims at high quality research by acknowledging most of the parameters identified by Yin (2003) that can be used when evaluating the quality of the case study: construct validity, internal validity and external validity.

Firstly, construct validity refers to the operational measures that are suitable for the concepts that are studied (Yin, 2003). In this thesis, it was considered appropriate to use multiple empirical units of observation in order to gain a wide perspective to the topic in question. Secondly, internal validity, which refers to the ways causal relationships are established, is tackled by using pattern matching as an analytical tool, as it is an integral part of content analysis. This is done through using the theoretical framework as a basis for data analysis.

Thirdly, external validity refers to the generalizability of the study, which can be considered as a barrier when conducting case study research (Yin, 2003). However, it should be noted that the focus of this research is not on statistical generalization, which is usually gaining attention in quantitative research. Rather, in analytical generalization, the researcher aims at generalizing a particular result to broader theory (Yin, 2003). Therefore, this thesis requires the use of theory that forms the basis for generalization of the findings, i.e. comparing the empirical results to previous theory. This indicates that previous theory is applied to a particular context and contrasted to the wider theory

base. Thus, the methodology is considered as appropriate for meeting the research objectives.

In terms of ethical considerations, it is important to note that the researcher was familiar with the case company due to a prior academic project. This may have brought some level of bias to the work as some prior knowledge may have influenced the writing process. However, this should not be considered to be a threat to the validity of the study. The researcher considered that openness of information was significantly different due to the fact that she had previously been in contact with the company representatives. In this sense, it can be claimed that the quality of the research was strengthened due to the fact that the researcher was familiar to some of the firm representatives.

## Limitations

The limitations of the study are divided into two groups: theoretical limitations and methodological limitations. First of all, theoretical limitations arise from the dispersed nature of the available theory. The concept of value innovation is often used parallel to similar concepts such as strategic innovation, value constellation, and strategy innovation, all of which have slightly different dimensions and definitions (Matthyssens et al., 2006). This may have complicated the construction of the theoretical framework. Furthermore, practical applications of the value innovation theory are limited, which posed some challenges when conducting research, especially in B2B context.

As discussed in the validity section, methodological concerns may arise from the single case study approach, which has been claimed to pose concerns to external validity (Yin, 2003). Yin (2003) and Eisenhardt (1989) have criticized the single case study approach by claiming that it provides fragmented data and does not allow generalizations. Yin (2003) also notes that analytic conclusions are stronger with two or more cases because potential for external generalizability is stronger. However, Dyer and Wilkings (1991) challenge this view by noting that the essence of case study research is to gain rich data that can lead to finding new theoretical relationships. Thus, seeking generalizations and

finding support for old theories is not the main interest of this study. In this thesis, it is crucial to gain rich information, so that the current innovation practices at the case company can be evaluated and improvement suggestions derived based on the data analysis. It can be claimed, therefore, that the focus is not on generalizations, since the case study is highly context specific.

Another methodological limitation may arise from qualitative interviewing. According to Patton (1980), analysis of semi-structured interviews can be difficult because responses are not systematic or standardized. In this thesis, it was considered appropriate to some extent tailor interview questions for each interviewee according to the context. This was important in order to ensure as rich information as possible, which is appropriate when considering the nature of the research.

In terms of the qualitative interviews, it was challenging to find non-customer interviewees. The response rate for non-customers remained low, which was mostly due to lack of direct contact information and personal contacts. Some companies also declined to provide information because of privacy issues. More non-customer interviews would have been needed to gain a wider perspective on the topic. Furthermore, the small amount of existing customers also limited the total amount of customer-side interviews conducted. Nonetheless, the data that was collected from the customers and non-customers proved to be valuable and provided the research with important insights.

Finally, due to time and resource constraints, the organizational culture perspective was excluded from the study to some extent. Although the organizational culture aspects are considered in the theoretical framework, there was no space for an in-depth analysis, as it would have broadened the scope of the study excessively. It was considered more important to include both internal and external aspects of the firm, which limited the level of detail in which the organizational aspects were discussed. Balsano et al. (2008) emphasize the role of a supportive culture and environment in the value innovation process. They consider that managers often focus too much on tools and processes side of value innovation, dismissing the aspects that support innovative behavior. While the

researcher and the case company fully acknowledge the importance of the organizational context in the value innovation process, it was not considered suitable to fully exclude value innovation tools and processes from the analysis. However, an empirical study on the cultural enablers of value innovation would be extremely interesting as a future research topic.

### 4. EMPIRICAL FINDINGS

The empirical part will evaluate the case company's innovation processes based on the theoretical framework described in chapter 2.3. The theoretical framework is used as a basis for the data analysis, which follows a directed content analysis approach (Hsieh & Shannon, 2005). Firstly, the ways in which the case company currently operates in terms of organizing and identifying innovations are analyzed. The propositions introduced in the literature review section are used as a basis for analysis.

### 4.1 Organizing for value innovations at the case company

According to Proposition 1, formal innovation processes and interaction within the organization play a large role when coordinating value innovation initiatives. Furthermore, they contribute to the identification of value innovations because they enable a broader allocation of attention. Proposition 2 also relates to organizing for value innovations, suggesting that mechanisms that support ambidexterity and enable the organization to challenge the status quo of its business environment are in the core of the value innovation process. From the empirical interviews, four themes arose that provide insights on how the case company currently organizes itself in terms of innovations. The following analysis looks at processes on four levels:

- processes fostering an innovative atmosphere (P1)
- idea creation and sharing processes (P1)
- idea screening processes (P1)
- sensemaking processes (P2)

## Processes fostering an innovative atmosphere

## Motives for innovation

Prior to analysing how the case company fosters an innovative atmosphere within the workplace, it is interesting to analyse the motives for innovation that were mentioned by

the company representatives. When asked to name the main motives why a company should innovate, ten different reasons arose from the managerial-level interviews (See Appendix 3 for a list of detailed explanations). The most common motivators included growth, competitive advantage/competitiveness, as well as renewal and transformation of the industry. Furthermore, issues such as culture, profit, cost efficiency, customer responsiveness, company vision, staying ahead of competition, and environment gained attention from the case company representatives.

As seen from the responses in Appendix 3, the main motivations for innovation concern growth and competitiveness, along with transformation of the traditional business and the need to renew. Thus, the responses echo the notions of Matthyssens et al. (2006), who note that the core aim of most companies is to create a sustainable competitive advantage, and Eisenhardt (2002), who acknowledges that reaching a competitive advantage is challenging due to the increasing dynamism of traditional industries. Although the need for renewal and developing new things is acknowledged widely, there is little focus on actually aiming to be ahead of competition, which is considered a crucial success factor by Kim and Mauborgne (1997). Whereas only one interview mentioned being ahead of competition, most responses concerned "responding to competition" and "maintaining competitiveness". Thus, it can be claimed that value innovation thinking is not widely spread within the company, as most managers still consider innovation from a head-to-head competition perspective.

Another important observation is the respondents' emphasis on a supportive company culture, which is considered essential by many scholars (Kim & Mauborgne, 1999; Sull, 1999; Goodrich & Aiman-Smith, 2007). On several occasions, the managers praised the case company for striving for an innovative atmosphere and supporting innovative actions within the workplace. In this sense, it can be considered that the company's vision is fulfilled, as noted by one interviewee.

In terms of customer involvement, only three interviews echoed the notion of Von Hippel (1978), who has emphasized the importance of customers in innovation processes. There was a tendency to mention "responding to customer needs" rather than

proactively develop new solutions for them. From this point of view, it was quite interesting to see that the focus was on current customers and providing more to them, rather than seeking completely new customers or applications. As noted by Kim and Mauborgne (1999) current non-customers should be considered as potential customers, which is why they should not be ignored.

Naturally, the specific contexts of the different business functions affect the responses, which is why the responses should not be considered from a stand-alone point of view. Möller and Halinen (1999) emphasize that different customers require different approaches, which can explain the differences arising across different business functions. For example, customer responsiveness is understandable in a mature business, whereas completely new and more innovative businesses may require a more proactive approach. It was noted that in traditional businesses there were some levels of scepticism towards innovation, whereas most of the other functions were heavily emphasizing its importance.

All in all, the importance of innovations was highlighted from three main perspectives: first of all growth and competitiveness aspects that arise from the novel technologies and businesses, secondly the organizational culture aspect that fosters the ability to create innovative solutions, and finally the cost efficiency viewpoint from creating novel and innovative processes.

### Fostering innovative atmosphere

When looking at how the case company fosters an innovative atmosphere within the firm, it is crucial to note the role of company vision. The case company has recently rebuilt its vision to highlight the importance of innovation within the workplace. As noted in one interview, the company vision is a crucial determinant that drives innovation within the firm. This notion is echoed by Goodrich and Aiman-Smith (2007), and Zollo and Winter (2002), who suggest that an innovative organizational culture should be considered as a prerequisite for value innovations, as it can help

creating organizational routines that support innovation. From the empirical interviews it became clear that creating an atmosphere that supports idea development and creation is considered crucial within the case company. A common notion arising from the interviews was that people need new influences and ideas from other business functions in order to really be able to think differently. This calls for coordination of idea and information exchange:

"An employee who has worked in the same business for 30 years may not have innovative ideas but has to get influence from other places." (VP of the case business)

"Combining expertise from different functions is key. We often gather a group of different people and let them present their ideas and challenges they are facing. Experts from other functions then provide their insights and solutions based on their own expertise. This has been the best way of creating innovations in our business. Also, if we learn something from our customer, we consider it crucial to share the insights with our development organization and combine ideas." (Product Development Director at the case company)

These views echo the notion of Hargadon and Sutton (2000), who consider that talking to people with different types of expertise is an important way to capture ideas and rethink existing practices. Furthermore, as proposed by Schweiger and Sandberg (1989), interaction can facilitate critical evaluation of ideas.

The importance of an enabling and innovative culture is highlighted when considering how to take ideas forward (Goodrich & Aiman-Smith, 2007). One of the main concerns identified in the interviews was how to bring ideas forward or deal with possible resistance:

"Talking to others and not shooting down ideas straight away is something everyone should pay attention to." (Head of Strategy Development at the case company) "There must be someone who takes ownership of an idea and pushes it through. -- If you have new ideas it should be built in the organization how to bring them forward, it should not be unclear who is responsible. There are a lot of ideas in place but how to commercialize them is the real question. It will not happen on its own." (Business Development Director at the case company)

One major challenge that can be noticed from the interviews is the lifecycles of different business functions. Even within the same business there can be major differences in terms of innovative mind-sets and efforts.

"We have five businesses within this business group. To what extent can we even have similar processes for innovation when all of the businesses are in very different life cycle stages?" (Head of Strategy Development at the case company)

All in all, fostering interaction among different business functions in order to gain a wide variety of expert insights was considered a crucial way to organize for an innovative atmosphere. As noted by Hargadon and Sutton (2000), this is important as new ideas concerning applications or potential customers can arise.

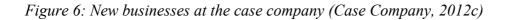
### Idea creation and sharing processes

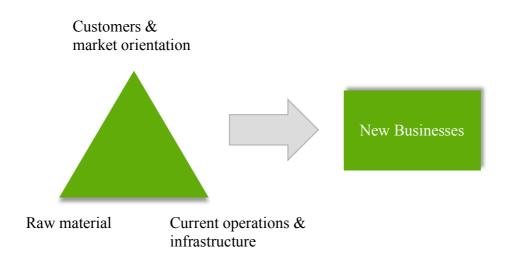
The idea creation process within the case business is organized through the 'new businesses' function that systematically innovates within the company and aims at creating new businesses. Furthermore, a company-wide idea creation tool has been established in order to promote idea development. When considering function-level idea creation, there were significant differences between different business functions.

## New businesses -function

The case company has organized its innovative capabilities in a formal manner by establishing a 'new businesses' -function. The objective of the 'new businesses' -team is to create new growth opportunities through on-going product development and innovation (Case Company, 2012c). Furthermore, the function plays an important role in creating an innovation culture through guiding the development process from ideas to new products and businesses (Case Company, 2012c).

The development of new technologies and products at the case company is based on the integration of current businesses and competencies into new knowledge and operations (Case Company, 2012c). The developed innovations often represent completely new applications and markets. This matches the innovation definition of Edvinsson et al. (2004), who suggest that innovation equals the reuse of existing insights and knowledge plus the invention of new knowledge. This suggests that the 'new businesses' -function aims at being ambidextrous by exploiting existing competencies in the search of new knowledge (Raisch et al., 2009).





#### Online idea collection platform

Another way to organize idea creation within the case company has been the establishment of a company-wide intranet site to promote internal creation and sharing of innovative ideas across business functions (Case Company, 2012b). The tool allows employees to post questions and challenges related to their business, after which others can provide recommendations and ideas. Whereas most interviews acknowledged the importance of the tool, in some businesses the platform was not considered useful, which is why the business had developed its own idea sharing tools:

"The idea tool does not give us many ideas. We have developed our own database, where our customers can directly leave ideas. This is considered more relevant to us than the idea tool." (Product Development Director at the case company)

From the case business perspective, it would be important that the idea tool would be used more widely in order to get idea contributions from a wide variety of sources. There may be employees with expertise who do not actively use the idea tool and thus do not contribute to knowledge-sharing. One idea for this would be to develop a database where each employee's prior industry experience is listed. When topics are posted in the idea tool, there would be e-mail notifications to the employees with specific experience. This type of formal process would have the potential to foster knowledge-brokering within the company (Hargadon & Sutton, 2000).

# Informal idea creation

In addition to the more formal ways of organizing idea creation, it was noted by one interviewee that sometimes it is hard to identify how internal ideas are born informally. Although innovations can be also accidental, multiple interviewees noted that usually customer need is the main driver for innovation. However, according to one interviewee, simple interaction with others through talking to other employees seems to create most ideas.

"Ideas come from multiple sources. Sometimes it's ad hoc, like a light bulb turning on. Other times it may be well planned and sought for, like responding to a specific challenge with thoroughly considered solutions. Sometimes the ideas even come externally." (VP of the case business)

In addition to the established processes such as the idea tool, ideas also can arise from external researchers, especially on a university-level. As noted by one interviewee, a university contacted the case company with an innovative idea, which is now being codeveloped further with the objective of starting full-scale production in the future. Another source of ideas are the customers, who according to one manager often proactively ask for new solutions. Furthermore, other network partners can play an important role. As explained by one interviewee, the case company tested a new material with a company that produces similar types of materials but is neither a customer nor a competitor per se. Finally, specialists internal to the company were noted to play an important role in idea creation, as they have the expertise to come up with new solutions. All in all, there are already some important network actors involved in the idea creation process. However, it would be beneficial to focus even more on peripheral vision and how to search for novel solutions from unexpected places (Day & Schoemaker, 2004).

# Idea screening processes

The importance of using one's own connections and spreading the ideas through informal discussions were considered important at the case company. At the same time, formal processes for idea screening are in place in order to bring some structure to the creative process:

"There are a lot of ideas bubbling under the surface. The challenge is how to bring them up. Check points are definitely needed in order to take an idea onwards" (Business Development Director at the case company) Presented ideas are gathered from the idea tool and evaluated with a business group - specific idea-screen team approximately every three months. The ideas posted in the idea tool are evaluated on three different levels: strategic alignment, business potential, as well as resources and competences needed.

Although various interviews emphasized the need to have a clear scope for innovation, one interviewee was concerned that a too narrow scope may cause the company to miss important opportunities. This view relates to the notion of Sull (1999) and Doz and Kosonen (2008), who claim that narrowing down the scope for innovation can limit an organization's ability to think beyond the status quo.

"We should pay attention to the portfolio strategy of the company, so we must have a scope for innovation to evaluate if ideas make sense. At the same time we should not limit the scope too much, so we won't end up having tunnel vision" (Head of Strategy Development at the case company)

After the initial idea evaluation, idea screening is conducted with the help of a stagegate model, which was in place in most of the business functions. Thus, the ideas are narrowed down through a silo approach, as suggested by Cooper et al. (2002). The role of strategic alignment was highlighted in the interviews. One interviewee emphasized the importance of knowing the strategy of the company in order to decide the frames for innovation. The scope and objective for innovation was considered an important issue to communicate within the business. Moreover, most respondents considered that the business case is one of the major determinants in order to an idea to go forward in the idea screen process. As explained by one respondent, after the most potential ideas are chosen, team members begin to evaluate and screen potential customers and test ideas. In some cases, marketing and R&D cooperate to define the business potential. Workshops can be held both internally and with partners or customers in order to receive feedback and develop products further. In one business the company has adopted a "lead customer" approach (Von Hippel et al., 1999), where some key accounts from each application area are chosen for development and innovation partners. Furthermore, some open innovation practices (Chesbrough, 2004) are present in one business, where customers are offered a platform for idea sharing. Along with the stage-gate approach (Cooper et al., 2002), these are the main formal processes for innovation within the case company.

In terms of interaction within the company, interaction is promoted through gathering ideas internally and making the ideas available for everybody to comment in the company-wide idea tool website. Furthermore, idea-screen teams of different functions gather approximately every three months and include representatives such as marketing, R&D and production. In the case business, different teams systematically evaluate new ideas and analyse the potential business cases. Thus, some of the formal processes include interactive elements.

# Sensemaking processes

As Proposition 2 suggested, it is important to establish mechanisms that enable challenging established business practices and support ambidexterity. Thus, it is interesting to identify how different business functions seek information and meanings from their business environment.

As defined by Raisch et al. (2009) organizational ambidexterity requires organizations to absorb new knowledge rapidly, while simultaneously exploiting their existing competencies. This is basically the mandate of the 'new businesses' -function of the case company, which aims at utilizing the company's material and existing infrastructure in order to create new businesses. Thus, it can be claimed that the case company is taking ambidexterity into consideration. Another important issue is to challenge the current business environment.

In terms of challenging the current business environment, the first step is to acknowledge that the traditional industry of the case company is transforming rapidly. Respondents viewed that the business environment of the industry is in flux, which reflects Eisenhardt's (2002) notion of highly dynamic markets. Two respondents

considered that the downturn of the company's traditional businesses requires the company to renew itself and develop increasingly innovative solutions.

From the interviews, two major approaches to challenging the current business environment arose: customer-centric approach that challenges the industry's traditional focus on merely maximizing production, along with increased focus towards branding as a way to bring value to both the company and the customer.

First of all, the importance of a customer-centric approach was widely acknowledged, suggesting that various businesses should be cooperating increasingly more with customers and developing solutions together, even providing them with more customized solutions, as noted by Pittaway et al. (2004). For businesses that are in the beginning of their lifecycle, developing close ties with big brands was considered important by one respondent, even more important than efficiency. At the same time, however, it was considered detrimental to be too responsive towards the customer and respond to their every need. In this sense it may be useful to consider how too deep collaboration with the customer may limit the strategic freedom or cost efficiency of the company in the long-term (Doz & Kosonen, 2008):

"We are actively asking for development suggestions from our clients, we have an open mind. At the moment we are only focusing on relationship-building, in 3-4 years we will consider efficiency. We shouldn't be too kind, though, because we don't want to end up making 200 different types [of the material]." (Director of the case business)

Secondly, another important point is the coverage that the case company can provide for its customers. Whereas the B2B world is often considered relatively anonymous, i.e. the only brand name in the final product is the one of the end-producer, the case business has taken steps towards cobranding. Especially in the case of start-up customers, the references it may get when cooperating or cobranding with a large company have been considered an important differentiating element within its business environment. This reflects the notion of Lindgreen & Wynstra (2005) and Möller & Törrönen (2003), who

suggest that the choice of a business partner can depend on relational factors such as the networks one party can provide to another.

"The importance of cobranding has turned out to be significant. Our customers can use our name in their marketing. We have more media power than smaller companies" (Director of the case business)

# Factors affecting how to organize for value innovation

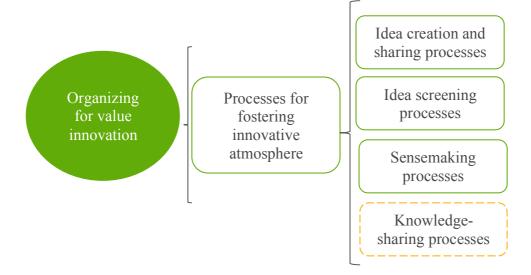
All in all, there are some initiatives the case company has made in order to challenge its traditional business environment, such as customer-centric approach and focus on branding. It has also focused widely on ambidexterity by establishing a separate function that aims at combining current capabilities with future opportunities. However, currently the focus is strongly placed on customers, which may inhibit sensemaking in terms of the rest of the value network. New opportunities could be found from other network partners as well. Therefore, when considering the interaction between different decision-makers, it can be seen that different business functions do not cooperate systematically to a large extent.

As sensemaking concerns seeking information in an interactive manner (Thomas et al., 1993), it is important to highlight the role of knowledge-sharing systems within the company. In addition to the previously identified themes that affect how an organization organizes its activities for value innovation, it can be suggested that knowledge-sharing systems within the firm should be an integral part of the process. As highlighted by Christensen et al. (2002), there are usually a lot of ideas within an organization but the main challenge is to create processes that channel ideas systematically to new growth businesses. This is due to the fact that as a completely new business, there may be fewer established networks the business can take advantage of. By utilizing the knowledge base of the entire organization it might be easier to contact potential customers and find new application areas.

All in all, the key question would be *how* to establish knowledge-sharing mechanisms. Currently, the formal innovation processes found within the case company focus on two issues: idea sharing and idea screening. Ideas are shared on a relatively random basis or through the idea tool, whereas ideas are evaluated based on the stage-gate model (Cooper et al., 2002). Knowledge-sharing concerning industry contacts, leads, strategic decisions or expertise of the employees is not actively promoted. These knowledgesharing systems along with formal innovation processes could bring more awareness about different strategic options and ideas, thus fostering the identification of value innovation opportunities. This would foster systematic interaction across functions and promote knowledge-brokering (Hargadon & Sutton, 2000). From the case business perspective this is extremely important as systematic knowledge-brokering can make it easier to find potential customer leads through internal connections. This could be done for example through creating a database of the case company employees and their prior industry backgrounds and expertise. Thus, when an idea comes to the idea collection platform it would be automatically forwarded to some of the employees with relevant background. This would not only bring more value to the formal innovation process of the firm, but also support the sensemaking process by broadening the allocation attention when identifying new opportunities to challenge the current industry practices.

Figure 7 summarizes the main constructs that affect how a company organizes its activities for value innovation. In the empirical evaluation it was found that several processes support the organisation for value innovation. Firstly, processes for fostering an innovative atmosphere are required to create the basis for innovative capabilities. Secondly, idea creation and idea sharing processes are needed to coordinate the exchange of ideas and drive potential innovations further. Thirdly, sensemaking processes should be in place so that novel ideas can be identified within a company's business environment. Finally, based on the interviews it became clear that there is a need for knowledge-sharing processes that can support the organization of value innovation opportunities. Thus, the construct partly overlaps with the identifying aspect of the value innovation process.

Figure 7: Factors affecting organizing for value innovation



All in all, the figure illustrates that several complex processes and activities are required in order to create value innovations. An organization should, therefore, take a holistic view on its activities, starting from evaluating its organizational culture and moving on to developing idea and knowledge-sharing mechanisms. Not only should these processes be carefully designed, but also continuously developed and evaluated.

#### 4.2 Identifying for value innovation

Proposition 3 suggested that a company should be able to rethink the basis for competition and understand the current mind-set of the industry where it operates. Notably, it should be able to identify ways to deviate from this behaviour in order to create value innovations. This can be considered crucial in the process of identifying value innovation opportunities. This chapter discusses the ways the case company evaluates its business environment and competes. Furthermore, the chapter evaluates the case business with the objective of finding value innovation opportunities.

When considering identifying opportunities for value innovations, the role of the competitors is significant. As value innovations aim at breaking free from head-to-head competition (Kim & Mauborgne, 2003), it is important to understand the actual basis of competition (Ocasio, 1997). Furthermore, opportunities for deviating from the normal way of operating should be identified (Matthyssens et al., 2006). Thus, it is interesting to analyze how the case company is considering the following issues:

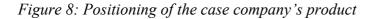
- identifying the basis for competition
- identifying network actors
- identifying the most important customers
- identifying ways to deviate from established industry mindsets

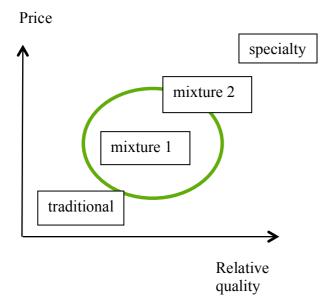
In the previous chapter it was mentioned that the case company is currently challenging its business environment through various ways. It strives for a customer-centric approach and has taken cobranding efforts. These efforts can provide increased differentiation from the established industry practices. However, even more differentiation opportunities can arise when analyzing the fundamental factors that form the basis of competition within the case business. Thus, this chapter takes the case business as the level of analysis, focusing strongly on its specific business context.

As noted by the director of the case business, the main basis for competition within both the traditional businesses of the case company and the case business is price. Aiming for cost efficient processes and low price is the benchmark for most of the case company's businesses. This can sometimes lead to skepticism from the customer side when developing innovative solutions:

"If we want to sell something new to the customer it should be cheaper and better than before. Same applies for environmentally friendly products; they should be cheaper before they can break through on a wide scale" (Business Development Director at the case company)

The new material developed by the case company is positioned in between traditional materials and high-class specialty materials in terms of price. The product is a high quality material compared to other similar products, which have a relatively poor quality perception. Thus, the product is considered an important value-creating element and a point of differentiation for the company's business portfolio (Case Company, 2012d). Furthermore, the carbon footprint of the material is considerably lower (30-60%) than traditional materials (Case Company, 2012d). The product is not a direct substitute for the traditional material, as it offers some enhanced properties.





As illustrated in figure 8, in a price-quality matrix, the material is positioned in between traditional and specialty materials, as represented by the green circle. From a value innovation perspective it is important to note that the material can offer some features of the specialty materials with the price of less expensive materials. In this sense, it can be considered a value innovation. The material is not aiming to compete directly with the traditional material but is focusing on higher quality materials that look for value-added features.

## Identifying the basis for competition

When identifying the traditional mindset within the case business and its industry, it is interesting to look at the concept of industry recipes (Spender, 1989). As the case company is new to the industry with its novel material, it can have the possibility to deviate from the traditional behaviour by rethinking the industry recipe. The attributes identified by Matthyssens et al. (2006) are used for the evaluation in Appendix 4.

All in all, as explained by the director of the case business, it seems that the industry where the case business operates is characterized by high levels of commoditization and a strong price focus, which calls for efficient processes to reach economies of scale. Although the industry can be considered as traditional to some extent, it also strives for continuous innovation especially in terms of finding increasingly environmentally friendly solutions (Case Company, 2012d).

In one sense, the case company has already developed a value innovation within the industry, as it provides differentiated specialty materials with the price range of less advanced materials. Despite the technological innovation, the focus of interest is shifting towards how to be able to compete efficiently in a highly competitive market. Currently there are two aspects of the industry that stand out from the industry recipe evaluation in Appendix 4: cooperation between the levels of supply chain and service differentiation, both of which are currently low. These elements could be important points of differentiation for the case business.

As such, the traditional focus of the case company has been on price and efficiency, whereas offering anything extra has not been considered valuable. With the emergence of more innovative materials, however, the importance of cooperation with the customer and even customization has increased. In some interviews, the importance of solutions thinking was emphasized. This highlights the views of Mele (2009) and Matthyssens et al. (2006) who suggest that firms are increasingly moving away from selling just products to selling integrated solutions.

"The thing that will become a critical competitive advantage is that we are not seen only as producers, but service producers. We can sell a product but maybe we would be better off selling solutions. Through there we could create service concepts that support the value chain of the company and make it more interesting towards the customer, or even the end user" (Marketing and Sales Director at the case company)

The role of services was one area of interest that was discussed in the interviews. Although most managers agreed that they have increased in importance, only a few had considered any particular service concepts. Service offerings are currently mostly related to delivery speed, prototyping and customization. Some ideas for offering consulting services or providing updates on market trends were also suggested. Furthermore, design and other software-based services had been considered as an option in some interviews.

"The role of services is increasing because value chains are dynamic. Everyone operates in a value chain and looks for their place. If a raw material supplier can offer an additional service such as logistics or customization, the exceptions can help to build growth and profitability. Sometimes customers value if someone else takes care of something. It may be a good way to go forward in the value chain." (Business Development Director at the case company)

One interesting service example illustrates how the product life-cycle thinking has been taken further through the introduction of recycling services:

"We have introduced recycling services in our business. We can take care of the customer's or the customer's customer's waste. This has spurred a lot of interest. It is a value-adding service when we can help customers in recycling issues. We have concluded that we do not seek profit from this but we want to break even and help the customer, while simultaneously fulfilling our vision." (Business Development Director at the case company)

Another example of a simple service-related strategic innovation is the pricing innovation in one of the company's advanced material that provided the company with a competitive advantage. However, it is important to note that it did not last for long, as competitors adopted the same practices. This echoes the view of Matthyssens et al. (2006) who have noted that imitation is a big challenge in B2B:

"One example of a service or concept innovation is from our business, we were the first ones to launch price-to-order-size concept in the market. -- This was a major success and it took quite long before the competitors could follow because their systems did not support this approach. We did the groundwork and launched the concept that has now become an industry standard. Now delivery times have shrunk from seven days to 24-48 hours. When one player gives good service others have to follow. Good service innovations often become industry standards." (Business Development Director at the case company)

It is important to note that especially with new businesses, the focus should not move away from the actual product offering too soon. Services may not be relevant before the actual product is ready. On the other hand, with a new business it may be easier to think outside of the box, as there may not be any established industry assumptions in place (Spender, 1989).

"We haven't really thought about any services yet, we are still in the beginning. We are not far enough yet to consider that." (Sales and Marketing Manager of a New Business at the case company) "As a new player in the market and the particular segment it may be easier to bring along some new service aspects and points of differentiation. You will not be as stuck with the current models of operation and there may be appropriate levels of distance in order to spot opportunities. There is real potential for developing something new." (VP of the case business)

Services that skip stages in the value chain were seldom considered among the managers. Some type of warehousing or delivery possibilities were mentioned but all in all, the focus of interest revolved around services that do not have a separate price tag but are embedded in the price of the actual product.

All in all, the interviewees considered the service aspect from a wide perspective. In businesses where no clear service concepts were introduced, the service aspect was reflected in good customer service. This referred in many cases to trustworthiness and extremely reliable supply. This view links to the notion of Fill and Fill (2005), who consider the development and maintenance of positive relationships between buyers and sellers to be the key success factor in B2B markets.

"The service aspect comes from the fact that it is easy to do business with us. Personal contact plays a large role. If our customers get answers to their questions quickly, there are no mistakes, the delivery takes place as agreed, there are no surprises, and the quality is good, those are the basics." (Head of Strategy Development at the case company)

In addition to trust, a cooperative mindset was considered as a strongly supporting factor in terms of customer relationships. Furthermore, it acts as a strong differentiating element in comparison to competition:

"In practice, it is also a service when our specialists help to co-create new products with the customers. We have received direct feedback from our customers that some of our competitors only compete with price. We have been thanked for our cooperation. It is not a service we sell separately, but of course we are willing to help if you are a large customer." (Business Development Manager at the case company)

In addition to services and solution offerings, cooperation within the supply chain was identified as a possible value innovation opportunity. The potential lies for example in channel strategies, alliances and cobranding initiatives (Matthyssens et al., 2006). Whereas the case business has already taken steps in cobranding, other ways to cooperate have not been actively considered. Therefore, the next step is to identify the value network of the case business in order to find possible cooperation opportunities for value innovations.

## Identifying network actors and most important customers

The identification of the value network is considered important for value innovation creation (Berghman et al., 2012). Thus, the next step is to identify how the value network partners could be involved in the value creation process in the case business. This can promote the identification of value innovation opportunities within a firm.

From a traditional value chain perspective, the case business is positioned as a compounder and to some extent distributor. It is partly subcontracting the distribution of the material but is also distributing directly to some of its main customers.

### Figure 9: Value chain of the case company



From a value network perspective, it is interesting to identify how different network actors add value to the case business and vice versa. In addition to the value chain level actors, there are many other value network parties involved. Internally, other functions of the case company could be considered to be part of the network. Notably, in the horizontal level there are direct competitors, such as producers of similar materials. Furthermore, other industry players such as competitors of the case company's core business should be considered as part of the network. Important network partners include professional networks and industry clusters, along with research partners such as universities. Different organizations ranging from environmental to governmental can also play a role in the value creating process. Finally, relations with potential but current non-customers can be important. It should be noted that the value network presented in the figure below is a rough estimate of the business environment of the case business, which is based on the evaluation of secondary and primary data. As highlighted by Ford et al. (2003), networks can vary in different situations and over time, which is why the network should be continuously assessed and redefined.

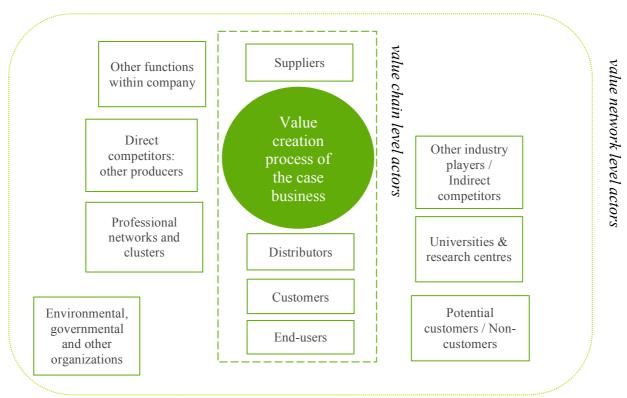


Figure 10: Value network of the case company

Before turning into the network level, which is discussed in more detail in chapter 4.3, it is important to identify the most important customers of the case business.

#### *Most important customers*

Notably, according to the case business interviews, the most important customer for the case business is not the processor of the material but rather the brand owner. Based on the definition of Lee and Goodrich (2012), three factors can determine the most important customer. Firstly, brand owners are the ones who recognize the value of the material, for example by utilizing the enhanced environmental friendliness in their marketing efforts. Furthermore, brand owners are responsible for taking action to correct the situation if there is a problem in the offering. Thus, if the end-consumer has bought a product where the compound is defected, the brand owner is responsible. Brand owners are also the ones who stand to lose the most in financial terms if there is a problem with the material. Thus, the definition of the most important customer by Lee and Goodrich (2012) and Goodrich and Aiman-Smith (2007) is fulfilled.

In addition to the most important customer, it should be noted that the input received from customers differs considerably according to the contact person within the company. If the communication takes place directly with the sourcing department, there is only one interest: as low price as possible. However, sometimes it may be beneficial to speak to other parts of the organization, such as marketing and sales, in order to get the value proposition through. Thus, the company should also consider the most important customer (Lee & Goodrich, 2012).

"We should talk with management or marketing and find win-win solutions. There is no use talking to the buyer because there the price dominates the conversation." (Head of Strategy Development at the case company)

"We have to collect information from other places than just the buyer of the customer. Buyers only want good quality and as low price as possible. We have to go to the sales, marketing or even to customer's customer. They can provide us with valuable information." (Product Portfolio Management Director at the case company)

### Customers and non-customers

In order to gain an in-depth overview on the value of the new material for the customers of the case business, a variety of current and potential customers were interviewed. The aim was to identify the main value creating elements of the innovative product in order to draft a value curve. This can be very helpful when determining where to focus attention in order to create maximal value to the customers, while simultaneously attract current non-customers.

From the customer and non-customer interviews it became clear that different types of customers perceive the current and/or potential value of the material differently. This reflects the notion of Lindgreen and Wynstra (2005), who have noted that customer's perception of value can differ according to their business context. Therefore, value should be considered on a case-by-case basis. This suggests that it may not be possible to draft a unified value curve for all potential customers, but the value propositions should be tailored to each specific customer separately.

There were several different contexts that were identified in the interview. Naturally, the industries where the customers and non-customers operate highly affect how they emphasize different value points (See Appendix 5). For example, two interviewees were strongly focusing on the environmental and safety aspects of the material. Furthermore, several respondents from the field of consumer electronics considered recyclability aspects to be crucial. This reflects the increased concerns towards sustainable materials within the entire industry. On the other hand, one interviewee from another industry almost disregarded the environmental aspects and considered that their brand is so strong that their end-customers hardly pay attention to production materials. Even in those cases, where the environmental aspect was considered important, there was scepticism concerning whether customers would pay attention to the green aspect or not.

"Of course we are also trying to save the world, and we have launched a special 'green' product line that really emphasizes the environmental aspect. But

actually the material also offers some enhanced mechanical properties that are very important for us." (Existing customer)

"We emphasize environmental friendliness and the easiness of disposing the material after use. The material also consists of more natural ingredients, so there can be safety benefits as well." (Existing customer)

"Our customers are not interested in the production material. They buy our products only because they love our brand." (Potential customer)

"I am not sure if our customers would pay attention to the green material we use. After all, the entire product is new, so they cannot really compare." (Existing customer)

Differences between the respondents also arose from the nationality of the interviewees. Those customers that were of the same "nationality" as the case company seemed to emphasize the "Finnish" aspect of the product to some extent. In this instance it should be noted that although the case company is global, it is headquartered in Finland and has Finnish roots. The customers valued the opportunity to combine two Finnish innovations: their own product and the material of the case company. Furthermore, the base material was considered to be typical Finnish. On the other hand, interviewees from other countries did not pay attention to the nationality of the case company.

"It is important for us to combine our innovation with another Finnish innovation." (Existing customer)

"The material is considered typical Finnish, which is also a reason why we are interested in it." (Potential customer)

Finally, differences between value points arose from the size and age of the company. One of the interviewees represented a small start-up company, which emphasized heavily the opportunities to co-brand, receive contacts and network through the case company. On the other hand, an established furniture brand from the high-end furniture segment considered that they have such a strong brand that they do not need any help whatsoever. Whereas the environmental aspects were considered important for marketing purposes, only the smaller companies mentioned the opportunity to benefit from the size and credibility of their supplier.

"[The case company] can act as our marketing channel. As a global and wellknown company it can help indirectly selling our products, for example by using us as a reference in their marketing material." (Existing customer)

A value curve was drafted based on the customer and non-customer interviews in order to pinpoint the wants and needs of each customer, as well as to identify the importance of each need. In terms of the value curve, it is important to distinguish between different companies and their value points. The value points of each customer and non-customer varied significantly, which is why no unified value curve can be presented that would represent the overall value curve for the case business' product. This is mainly due to the fact that the material of the case business can be applied in multiple industries, which brings good opportunities for comparison. The following figure 11 represents value curves that illustrate the issues that different respondents value when production materials are concerned. The curve was plotted on a scale of 1-5 (5 being highly important) according to the value themes that arose from the qualitative interviews.

The main themes included in the value curve consist of physical, trust, branding and efficiency elements (see Appendix 5 for more details). The different colored lines represent different respondents. It can be seen that the value points are widely dispersed across different companies according to their special business contexts.

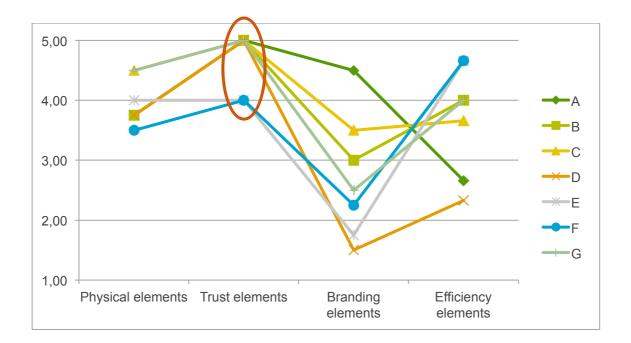


Figure 11: Value curve mapping based on customer and potential customer interviews

From the value curve above it can be seen that there is one aspect that was considered especially important by all respondents: trust elements. This factor gained a score of 4 or 5 in all cases, as illustrated by the red circle. Trust elements refer to cooperation with the supplier and technical support. In each interview, cooperation with supplier was considered essential, regardless of the industry, age or size of the company. Ways of cooperation included co-development of new materials, as well as finding more cost efficient and sustainable solutions. Furthermore, trust and reliability were important sub-points discussed during the interviews. Customer service in terms of technical support was considered especially important, along with proactive two-way communication.

In addition to cooperation with suppliers, there was one sub-point that was highlighted by each respondent. High quality, which is a part of the physical elements factor, was considered crucial and scored a 5 in all interviews.

"We sometimes give even 30 year guarantees to our products, which makes it essential to have high quality with no irregularities" (Potential customer)

Although quality was considered an essential aspect of the material, there were some concerns over cost. The new type of material that the case company offers can be considered environmentally friendly, which in some interviews was considered as an indication of higher price than regular materials. There is a clear assumption that a trade-off between cost and a differentiated material must be made.

"I'm not convinced that the new material would provide our products with a better appearance. Hopefully it could offer a better price, in which case we could consider it." (Potential customer)

"If there are two products with the same price, then the customers would appreciate the greenness aspect of the product. At the same time they do not accept any disadvantages, as the material has to be of the same quality as the product made from the regular material." (Potential customer)

When comparing the responses between existing customers and potential ones, there are notable points of differences in the answers. Whereas some existing customers considered it important to use the case company as a reference and even utilize opportunities for cobranding, others did not value this option at all due to their own strong brand and established customer base. Although most interviewees emphasized eco-friendliness, it was also mentioned in both existing and potential customer interviews that their customers hardly notice whether or not the product is green or not. In some of the existing customer responses, the eco-friendliness of the product seemed to be valued because of its marketability rather than the actual environmental impact. Only one existing customer had considered the advantages the material brings when it can be disposed of after the end of its lifecycle. From the pool of potential customers, there were even some doubts concerning the recyclability of the material. Furthermore, one potential customer explicitly mentioned that it had made trials with similar materials and was disappointed with the results. There was also some level of concern of how a new material would fit into the business ecosystem of different companies. This relates closely to the view of Matthyssens et al. (2006), who note that interdependencies in the business ecosystem can bring along bottlenecks. Therefore, the role of close cooperation with the supplier and the customer was highlighted.

"We currently have a global recycling system for our products. I'm not entirely sure [the new material] could be recycled as easily as we are currently doing." (Potential customer)

"It is difficult to do research without cooperation. We need common tools, even an entire ecosystem when a new material is researched." (Potential customer)

All in all, the existing customers were very satisfied with the material. Some customers were still trialling the material whereas others were preparing for starting full-scale production. From the potential customer side, the overall response towards the new material was positive, with only one sceptical respondent. Even in this case the scepticism arose from previous bad experiences with similar materials. Therefore it is crucial for the case company to break free from the potentially poor image of similar materials that are of lower quality.

The findings from the customer interviews suggest that in B2B markets, it is crucial to consider the specific context of an individual customer. This supports the value innovation in B2B definition that was introduced earlier. Furthermore, the findings support the notion of Möller and Halinen (1999) who suggest that profitable action calls for different approaches for different types of customers.

The next step is to consider how the case business can deviate from the current industry practices and create value for the customers according to the things they value. However, as emphasized by Normann and Ramirez (1993), value creation should not be considered as a one way provision from the supplier to the buyer, but there is co-creation of value for both parties. Furthermore, in order to create value innovations firms should be ready to combine with the capabilities of other firms, i.e. the other network actors (Kim & Mauborgne, 1999). This aspect will be studied further in section 4.3, which discusses value co-creation.

#### Identifying ways to deviate from industry mindsets

From the industry recipe evaluation, two main opportunities to break the industry mindset were identified: cooperation with the supply chain and solutions-thinking. This notion gained further support from the empirical evaluation of the customer and non-customer interviews, which highlighted customer context-specific solutions and close cooperation with suppliers. This supports the notion of Mele (2009), who suggests that value innovations in B2B markets can be tailored to suit the needs of specific customers. Whereas the cooperation with the supply chain is discussed more thoroughly in the next section, the role of services and solutions can be evaluated based on the customer interviews.

In terms of the case business, it is important to highlight the possibility for solutions thinking. However, it should not be ignored that the industry is traditionally competing with price. Thus, service offerings that have a price tag may not be suitable for the purpose of the case business, as it may "scare" away potential buyers, as noted by one case company representative. As the case business is in the beginning of its lifecycle and is only trying to find new customers, services embedded in the network relationships can act as important drivers for longer and stronger relationships.

When discussing the role of solutions and services with the customer and non-customer interviewees, issues such as reliable supply and trustworthy relationships were highlighted. Thus, there are few expectations for any specific services from the customer side. One issue that was mentioned by an existing customer was the need for rigorous customer service, especially in terms of technical material and support. Moreover, it was mentioned by the same customer that a more proactive approach was expected from the case company in terms of updating their customers where they are in their research. Furthermore, the technical material in general should be of higher quality. When considering the solutions-thinking approach, one option would be to establish a 'green material solution' concept that would keep the customers updated about the research efforts by the case company. It could be as simple as weekly newsletters about the case company's undertakings and research, and it could also

include updates concerning the entire field of sustainable materials and what is happening in that area. Furthermore, there would be potential for workshops and even open innovation tools to be utilized with the customers. For example, different types of seminars that gather together various actors who are interested in green material solutions could be held. Active information-sharing was considered as one of the most important issues contributing to supplier-buyer relationships according to the customer interviews. Thus, active communication plays an important part on strengthening the value network. All in all, there is a need for even more systematic cooperation with the customers.

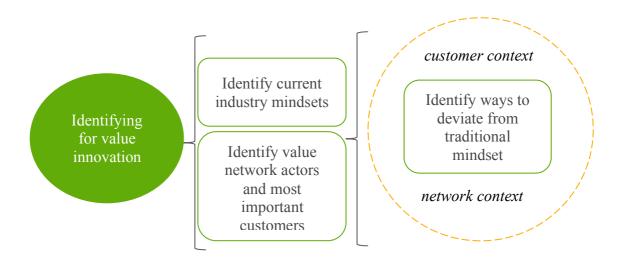
# Factors affecting the identification of value innovations

When considering the overall elements that affect the identification process of value innovations, three main elements are emphasized: identifying the current industry mindsets, the value network actors and most important customers, as well as ways to deviate from the traditional mindset. This supports proposition 3 that highlighted the importance of rethinking the basis for competition. From the empirical evaluation it also became clear that it is important to consider the individual customer and network contexts when considering value innovations. Thus, no common value curves can be identified as each customer perceives the value of the company's material differently. Furthermore, the value network should be considered as an important actor when considering how to deviate from the current industry mindset. It will be discussed in more detail in the next section.

The factors that affect the ways an organization identifies for value innovation are illustrated in figure 12. The process begins by evaluating the industry as a whole and identifying the ways the industry traditionally operates. Secondly, the value network should be analyzed and different actors identified in order to engage various actors in the value innovation creation process. Customer insights are crucial, which is why most important customers should be identified. When considering how to deviate from

traditional mindsets, the role of potential customers is highlighted, as they can offer completely new insights.

Figure 12: Factors affecting identification of value innovations



By combining the insights gained from customers, potential customers and industry evaluation, it is possible to identify opportunities for value innovations. However, it is not easy to identify these opportunities. Therefore, the processes presented earlier that help organizing for value innovations should be in place in order to systematically coordinate the value innovation process.

#### 4.3 Organizational embeddedness

Organizational embeddedness highlights the importance of an organization's external environment for decision making (Gavetti et al., 2007). Proposition 4 suggested that companies should consider how to add value to the entire network of relationships and establish learning mechanisms for its entire value network. Whereas the learning mechanisms concern organizing for value innovations, finding opportunities how to add value for the entire network can be considered to be part of identifying value innovations. The role of the network is especially important as the previous chapter identified opportunities for the case business to create value innovations through closer cooperation with the value chain.

As noted by Lindgreen and Wynstra (2005), companies are highly dependent on how they manage interaction with others and how they develop relationships with network actors. Therefore, it is crucial to analyse the ways the case company handles its network relations in more detail. Especially the opportunities for value co-creation are important, which requires understanding of the entire value network of a business (Wikström & Normann, 1994). In the empirical interviews, it was found that the value chain is taken into active consideration within the case company and some learning mechanisms are already present.

### Learning mechanisms

The case company has established some learning mechanisms that can be used when sourcing knowledge from network partners. Most mechanisms deal with customers and once again, major differences arose when comparing different businesses.

The most common learning mechanisms were established through key accounts, who were considered to be lead customers for many businesses (Von Hippel, 1978). Especially in new businesses, interviewees considered important to first engage in close cooperation with specific partners and develop the product offering systematically before starting large-scale production.

"We are strongly engaged in lead-user thinking. We want that all application areas have one lead user with whom we can openly share knowledge and engage in the process from scratch." (Sales & Marketing Manager of New Businesses at the case company)

"Lead customers and key accounts play a large role. They already have large volumes so it is easier to cooperate. It commits both parties and provides insights." (Business Development Director at the case company)

One major learning mechanism concerned the development of a peripheral vision (Day & Schoemaker, 2004). Some of the interviewees had acknowledged the importance of identifying the most important customer (Goodrich & Aiman-Smith, 2007), as they had noted that their direct customers do not always have the most important information. Sometimes they search for insights from their end-customers in order to 'achieve a pull-effect', as noted by a Business Development Manager at the case company. This reflects 'the key customer may not be ours' –view by Goodrich and Aiman-Smith (2007:27).

The role of workshops was also important, both internally and with external partners. As discussed in the previous part, various managers considered it important to get customers to talk also with each other and get them out from their offices to a setting where nothing else disturbs them. Furthermore, in one interview, cooperation with the customer provided some best practices for the company's internal innovation process. Customer-driven innovation was considered so efficient that the process was adopted also in-house.

## Role of the value chain/network

The concept of value network did not arise often during the interviews. From ten interviews, only two respondents mentioned the term. The overall sentiment towards considering a wide variety of players was strong:

"We aim at bringing value chain partners to the development process early on, so we can ensure that we develop something that someone actually wants. Value network is also considered in that sense that we really think about whether to handle and solve all problems ourselves, or could we maybe involve other players" (VP of New Businesses at the case company)

"It is important to act as a facilitator for the value network and foster interaction and dialogue" (Business Development Director at the case company)

Cooperation with suppliers, customers as well as end users was highlighted in many cases. Customers were naturally considered as the main value network partners. As emphasized by many authors, customers can be a valuable source of ideas for companies (Von Hippel, 1978; Pittaway et al., 2004; Lindgreen & Wynstra, 2005). All except one interviewee emphasised the importance of customer cooperation when developing new innovations. It was found that in more traditional industries, there was less importance placed on the customer and innovations in general. Naturally this is due to the large volumes and relative distance to the end-customer that is found in the traditional businesses. In some businesses, the distributors handle most contact with the end users.

In the more advanced material businesses, the focus on the customer was emphasised heavily. Many interviewees noted that innovations are considered to be customerdriven, as solutions are developed based on customer needs.

"To a large extent we develop solutions cooperatively with customers. We are one step closer than traditional product development, creating different solutions and prototypes for customers. We also have our own innovation tool for our customers, where they can share their ideas. Approximately 70% of our projects arise from end-customer needs. We make questionnaires and talk together." (Product Development Director at the case company) "The customer has a lot of important information. It is partly related to how we can develop our sales relationship but also how we can co-create value, make new products and come up with new ways of working. Dialogue between customer and supplier is essential in this matter." (Business Development Director at the case company)

Although most respondents emphasize a customer-centric approach, multiple interviewees also acknowledged the fact that customers do not always know what they need, or at least cannot express themselves clearly. According to Kumar et al. (2000), this is an important notion because extensive focus on current customers may fixate companies to the status quo.

"It is crucial to understand the context and the needs of customers. They cannot express their future needs explicitly. We have to understand their role and what can and cannot be offered to them." (Marketing & Sales Director at the case company)

From the interviews it became clear that established businesses are rarely in touch with non-customers. Reflecting on the view of Kumar et al. (2000), non-customers could be an important source of novel ideas. Existing customers play a large role in most businesses of the case company, excluding completely new businesses who mainly contact entirely new customers. One reason for not contacting new customers was considered to be close relationships with the established customers or the small number of potential customers:

"It is easier to cooperate with an existing customer because there is already trust and willingness to take things forward. For new customers, we have to show them we are worthy of their commitment before starting to ask for ideas or propose new innovations." (Business Development Director at the case company) All in all, customer cooperation is considered very important, especially in the new materials businesses. However, there seems to be no systematic way of cooperating with customers. Only one business has established an open innovation type of platform for idea sharing, whereas others collect customer insights on a relatively random basis.

A major concern mentioned in two interviews was that sometimes customers may be sceptical towards a completely new product that can be sourced from only one supplier. This notion supports innovation ecosystem view of Adner and Kapoor (2010), which highlights the role of interdependencies within the value network in the innovation processes. Consequently, the role of other suppliers should be taken into consideration.

"If you ask a customer what they want, the answer is often 'nothing special'. If you give them something special they cannot buy it from anyone else. That can be a limitation for the client." (Head of Strategy Development at the case company)

"One thing we have encountered is that if we come up with a completely new product that no one else provides, the customers may be sceptical if they have to depend on only one supplier." (Business Development Director at the case company)

In a couple of interviews there had been thoughts concerning licensing arrangements to competitors or other actors. This could be considered as a solution to the challenge mentioned above. On the other hand, the case business had not come across these types of problems at this point of time. Still, licensing might be an interesting way to reach higher production volumes.

Whereas the importance of suppliers and customers were highly acknowledged in the interviews, the role of competitors was mentioned only when discussing the licensing option. Two interviews mentioned the role of other companies that are not exactly competitors. Some functions within the case company have engaged other composite producers to workshops, where ideas were shared:

"We had a brainstorming day with a specific producer. We are not exactly competitors but have similar types of materials. It was useful, we could have more of these. We are not in the same industry but we may have some important links or cooperation possibilities to share." (Business Development Director at the case company)

The workshop approach was also utilized in the distributor level by the same business function:

"[the business function] had a customer innovation day, where the biggest distributor clients were invited for a couple of days to discuss new ideas and consider the market needs. It was important to get them out of the office for a while. One of the ideas we presented got direct feedback that this is not something our customers would need. The day really provided concrete ideas. More opportunities for this type of cooperation could be important; the potential of external partners could be considered" (Business Development Director at the case company)

In addition to the most important customer, it is often useful to consider other actors in the upstream value chain. For example, within the case business, although the brand owners are considered to have the decision-making power, the producers who make the actual products are also playing a large role.

"The producers don't make the decisions but their clients and even client's clients. Still, depending on the application area we must look to all directions. Because almost all of our contacts are new, we want to be involved. We don't want to mess it up just because the technical people do not know how to do something" (Sales & Marketing Manager at the case business)

Especially in new businesses, the role of research institutions was highlighted by two interviewees. Cooperation with research centres and universities were considered important. In one case the initial idea for an innovation came from a university and the cooperation is still strong:

"Cooperation [among the three players] has been strong. The initiative came from the researchers, and now we have developed both production and application-related innovations together with the external partners. The solutions have the potential to help develop the entire industry of our customers." (Sales & Marketing Manager of a New Business at the case company)

In addition to this example, it can be seen that the case company is aiming at not only to renew its own but also their customers' business environment. Thus, the case company is aiming at creating value for its customers and other stakeholders from a wide perspective, as suggested by Hamel (1998, 2007).

"Other producers told us that our product was fresh, that the industry needed something new. There is excitement." (Sales & Marketing Manager at the case business)

In some cases, the case company had taken value innovation steps in order to move forward in the value chain. This has been done in businesses, where the case company has engaged in B2C marketing. These value innovation initiatives represent new type of thinking within their respective industries.

"We expanded our scope and now sell to both industrial clients and consumers. As a B2C player the main difference is that B2B companies actually know your brand and trust it. -- What used to be a bulk product is now sold directly to the customer, we took a step closer to the end-user in the value chain. New ideas don't always have to be very complicated." (Business Development Director at the case company)

In some cases there was scepticism towards this type of approach, especially in traditional industries:

"This is a well-established industry, there are traditional ways of working. It is hard to leave some activity out from a value chain and go over it. If you try to jump over, you end up competing with your customer." (Head of Strategy Development at the case company)

All in all, there were many approaches in terms of involving the value network within the different functions. As a new business, the case business could benefit from a peripheral vision (Day & Schoemaker, 2004). As mentioned by Möller and Halinen (1999), network actors are not necessarily other firms but can be for example organizations or even individual level actors. The main point is that the actors should be relevant for understanding the network and the value creation potential.

## Identifying opportunities for value creation within the network

From the case business point of view, especially the peripheral vision –approach is highlighted when identifying opportunities within the value network. It is crucial to gain insights on different ways to cooperate with the network in order to co-create value. Some best practices found within the case company included open innovation practices with a wide variety of network partners, such as customers, research organizations and companies that use similar types of materials. As a new business, the case business could benefit from this type of peripheral vision, especially when it comes to collaboration. Kanter (1994:97) defines collaboration as 'creating new value together' rather than just exchanging resources. This would fit the purpose of value innovation.

In addition to collaboration with network partners such as customers and research organizations, there are possibilities for horizontal level cooperation such as joint ventures, alliances and even coopetitive practices with the competitors (Wilhelm et al., 2011; Möller & Halinen, 2003). As the industry is focused on innovations and the development of environmentally friendly materials, there is an opportunity for collective competition, where the competitive game no longer takes place firm versus

firm but group versus group (Gomes-Casseres, 2003). This is also referred to as coopetition, i.e. a situation where companies both compete and cooperate with each other simultaneously (Wilhelm, 2011). According to Gnyawali and Park (2010), coopetitive arrangements, such as joint ventures or strategic alliances among direct and indirect competitors can bring important advantages such as the creation of new knowledge and technology access. Furthermore, combining the resource base in terms of R&D expenses, expertise and other resources can be an important way to diminish and share risks. Finally, strong collaboration can even allow two companies to shape industry standards and create new industry norms.

Moreover, alliances and collaborative ventures are considered to have a positive influence on international competitiveness (Mathews, 2002), as well as innovation capabilities of firms (Noke et al., 2008). These benefits should not be overlooked in the case company context, as alliances and other collaborative ventures offer the opportunity for pooling resources rapidly without long-term commitment on internal development (Nohria & Garcia-Pont, 1991). Examples of coopetitive arrangements are found in various industries, such as automotive, telecommunications, and airlines (Gomes-Casseres, 2003). A collaborative joint venture could provide the case business with better contacts to potential customers, and thus lead to larger volumes and faster market entries. In addition, the case business may boost its efficiency in terms of logistics. Thus, proposition 4 should emphasize the role of collaborative ventures.

Strategic alliances, joint ventures, and other types of collaborative practices can also be an important way to challenge the current practices of the industry. Whereas competition is strong in the industry of the case business, there is a common interest towards developing more environmentally friendly solutions. In the case company interviews it was noticed that competition is considered as something that should be followed or responded to. Only two interviews mentioned the possibility for cooperation with competition, for example through licensing arrangements. Thus, it can be seen that the amount of cooperation within the industry is rather low, which may limit the willingness to openly collaborate and experiment with other players (Doz & Kosonen, 2008). In this sense, the business environment could be rethought.

#### 5. DISCUSSION AND CONCLUSIONS

This chapter aims combines discussion and analysis with concluding remarks, with the objective of synthesizing the main findings from the empirical part and refining the theoretical framework accordingly. Furthermore, it aims at contrasting the initial theory to the findings by taking into consideration the specific context of the case business.

The main contribution of this study has been to develop a framework for determining how companies should organize their activities in order to identify value innovation opportunities. The attention-based view of the firm used as a theoretical lens for the analysis provided important insights on how companies should allocate attention when searching for value innovation opportunities. In addition to the initial propositions identified in the literature review, the empirical analysis provided the study with some interesting additional considerations, which require the theoretical framework to be redefined. The final framework presented in this chapter reflects the synthesis of theory and practice. As a novel research area, the value innovation literature can be considered to benefit from this type of analysis. Furthermore, the case company context provides some important insights on the special considerations of the B2B market, making the research highly interesting from both academic and managerial perspectives.

All in all, the propositions presented in the literature review provided an important outline for the empirical evaluation. From the evaluation of the initial propositions, several sub-factors that affect the organizing and identifying process for value innovations were identified. Furthermore, the analysis provided some new elements that had not been considered in the initial theoretical discussion. The elements that were found to affect the organizing and identifying process for value innovations are synthesized in the following figure, with the initial proposition numbers in brackets.

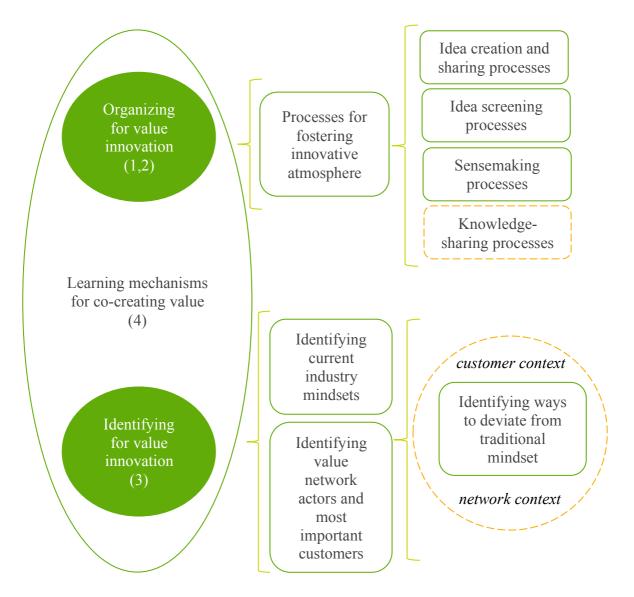


Figure 13: Organizing and identifying for value innovations

As explained in the previous section, proposition 4 overlaps with both organizing and identifying aspects, which is why it is placed in the middle of the left-hand side. The dotted lines on the right-hand side represent new findings that arose from the empirical evaluation. Firstly, the importance of knowledge-sharing processes was not previously acknowledged in proposition 1. Furthermore, the specific context of customers and the network was emphasized when analyzing proposition 3. This refers to the fact that different customers require different approaches and perceive the value of the case business' offering differently. Therefore, it was noted that the case company should tailor its value propositions to meet the special needs of its different customers.

Furthermore, the specific value network of the case business was found to offer some opportunities for value innovations that can be identified by analyzing the current industry mindsets. This suggests that companies should actively analyze their value network when identifying value innovation initiatives.

## **5.1 Practical implications**

From a managerial perspective, this research provides multiple important implications. Notably, the research emphasizes the need for a contemporary managerial mind-set that acknowledges the potential of total solutions-thinking as part of a company's business offering. Thus, instead of focusing on merely products, there is a need to create solutions in order to develop closer relationships with the customers. Furthermore, the emphasis on collaboration opportunities with the value network, especially competitors, calls for an open mind and breaking free from established assumptions of competitors being a threat rather than an opportunity. This illustrates how contemporary managers need to be able to develop their innovative capabilities and constantly renew their way of thinking. They should also develop ways to create and maintain a peripheral vision, searching for opportunities in the wide business network. It is important to consider how to allocate attention to different issues within the organization's business environment in order to identify previously unnoticed opportunities.

The importance of identifying all the network level actors was highlighted in the empirical findings. By mapping the value network, companies can actively seek and evaluate opportunities for value innovations. When considering the value network it is important to note that networks can be highly dynamic. Therefore, it is important to continuously redefine the current and potential value networks and the network partners. Furthermore, the role of most important customers was highlighted in the research, suggesting that managers should frequently evaluate the importance of different customers within their value network. In addition, it is crucial to identify the right individual contacts within the most important customers. For example, in the case company interviews it was found that discussions with the sourcing department are

often considered to be exhausting due to excessive focus on price. This is an important consideration for sales and marketing level managers.

An important finding from a managerial perspective was the need to use different approaches with different types of customers. In order to maximize the value for its customers, a B2B company understand that different customers value different things. Thus, it should tailor the customer offering and emphasize different value points according to the specific business context of the customer. In essence, a value innovation that works with one customer may not be suitable for another. This implies that managers should actively evaluate the specific business contexts of their different customers and match their offerings to those contexts. In the empirical analysis it was found that whereas the needs and wants of different customers fluctuate, supplier relations played an important role in all cases. Therefore, managers should actively focus on the importance of trust-building and reputation. In this sense, it can be considered very important for a B2B company to foster customer relationships by being extremely trustworthy as a business partner. In addition, continuous development of the relationships should be focused on.

Finally, an important consideration for managers is to differentiate between the terms innovation and value innovation. In the case company interviews, it became clear that most managers still think in terms of technical innovations, with little focus on smaller strategic moves that can sometimes lead to important value innovation initiatives. All in all, more emphasis on smaller strategic issues and market positioning is needed. Managers should understand that innovations do not always have to be ground-breaking technological advancements. In fact, value innovations in the B2B world are often very small strategic moves that allow additional value creation, such as alliances, new types of channel strategies or service offerings. Finally, these types of insights concerning possible value innovation initiatives should be coordinated within an organization with the help of knowledge-sharing systems.

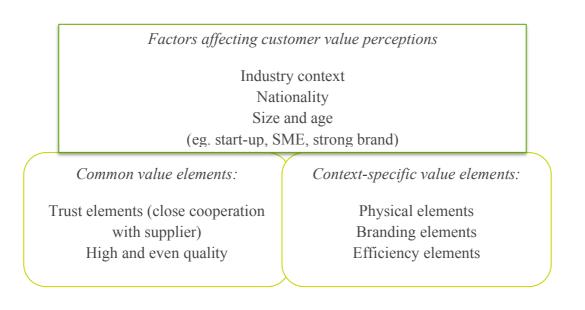
## 5.1.1 Case business context

In addition to general practical implications, there are also various important findings that are interesting in the special context of the case business. According to the empirical findings, in the case business context attention should be focused on the following issues on the network and customer levels:

- *Customer context*: the perceptions of the value offered by the case company's product differed considerably among different customers and non-customers. This suggests that offering solutions that are tailored to specific customers can be the key to success. Green material solutions were suggested as the umbrella concept, which would be tailored according to the special context of the customer (see figure 14). Differences in value perceptions arose from various factors, such as the industry and nationality of the respondents. Furthermore, the age and size of the customers and non-customers interviewed strongly affected the value perceptions towards the case company's product. Tailored solutions in this case do not necessarily imply that the product itself should be modified or customized. Instead, the main focus should be on what type of value proposition is presented to a specific customer, i.e. which value points are emphasized.
- Network context: when analyzing the industry recipe, service offerings and cooperation between the levels of the supply chain were identified as main opportunities for value innovation. Whereas the 'green material solutions' concept partly covers the service aspect, the opportunity for cooperation within the supply chain was extended to cover the entire value network. The potential for collaborative ventures and alliances with direct and indirect competitors was highlighted, as they would help to create contacts, co-develop the material and gain higher production volumes.

Figure 14 summarizes the factors that affect customer value perceptions when choosing a production material, as found in the empirical evaluation:

Figure 14: Factors affecting customer value perceptions



From the customer and noncustomer interviews it can be concluded that the findings are highly context-specific. As different types of customers value different issues and require different actions, there is no unified value curve that can be presented. However, there are some common value elements shared by all the interviewees, as well as some context-specific elements. Figure 14 illustrates the factors that were found to affect customer value perceptions in the case business context, as well as the value elements that were highlighted by different customer and non-customer interviewees. As explained earlier, trust elements were considered highly important by all respondents, along with high and even quality. On the other hand, there was considerable fluctuation between the responses when considering other value elements, such as the importance of environmental friendliness and price. Thus, it can be concluded that the value elements are context-specific and different elements should be emphasized according to the special customer contexts.

Table 2 aims at providing an overview on the current situation of the case business based on the initial propositions. Furthermore, some case business –specific recommendations are given in table 2 in terms of how to create mechanisms for supporting value innovation creation within the case business.

| Proposition  | Current  | Recommendations   | Implications   |
|--|--|---|--|
|  | practices at the case business   |   |  |
| P1: Formal innovation<br>processes and<br>interaction within the<br>organization can<br>support the<br>coordination of value<br>innovation initiatives,<br>broaden the allocation<br>of attention and thus<br>inhibit decisions based<br>on past behavior. | <ul> <li>New</li> <li>businesses -</li> <li>function</li> <li>Stage-gate</li> <li>process</li> <li>Idea tool</li> <li>Innovation</li> <li>teams</li> </ul> | Establishing a knowledge-<br>sharing platform: e.g. a<br>database of employees and<br>their previous experience,<br>which would be integrated<br>with idea tool.  | Promotes knowledge-<br>sharing and<br>knowledge brokering,<br>potential for effective<br>networking and<br>sharing of leads and<br>other contacts.<br>Learning from other<br>functions' best<br>practices.                         |
| P2: In order to find<br>opportunities for value<br>innovations, an<br>organization should be<br>ambidextrous, while<br>challenging the status<br>quo of its business<br>environment.   | <ul> <li>Strong ties</li> <li>with customer</li> <li>Cobranding</li> <li>Low</li> <li>cooperation</li> <li>with rest of</li> <li>network</li> </ul>        | Engaging in collaborative<br>and/or coopetitive<br>arrangements. Consider<br>licensing opportunities.   | Strengthens value<br>network and the<br>relationships between<br>different actors.<br>Licensing allows for<br>higher volumes,<br>collaborative ventures<br>can provide a wider<br>customer base and<br>accelerate market<br>entry. |
| P3: Value innovation<br>creation in an<br>organization requires<br>rethinking the basis<br>for competition and<br>understanding the<br>current and future<br>value potential of the<br>business offering.  | - Prototyping<br>and<br>customization<br>as a service<br>offering  | Solutions-thinking with<br>embedded services:<br>adopting a solution mind-<br>set by offering green<br>material solutions. Setting<br>up seminars and events,<br>provide updates on<br>technological<br>advancements and other<br>relevant issues in the field. | Strengthens customer<br>relationships,<br>promotes trust and<br>communicates<br>devotion towards<br>environmental issues.  |
| P4: In order to create<br>value innovations, an<br>organization should<br>consider how to add<br>value to the entire<br>network of<br>relationships and<br>establish learning<br>mechanisms for its<br>entire value network.                               | - Close<br>relations to<br>downstream<br>value chain<br>- Co-<br>development<br>with customers   | Establish open innovation<br>platforms and hold<br>workshops with a wide<br>range of actors from the<br>value network, not just<br>customers. Engage in<br>collaborative ventures with<br>horizontal-level actors.  | Promotes peripheral<br>vision, strengthens<br>R&D capabilities,<br>widens customer<br>base. Allows for<br>faster moves,<br>increased efficiency,<br>adaptation abilities<br>and higher volumes.                                    |

 Table 2: Case business – specific recommendations

## 5.1.2 B2B context

There are various practical implications for B2B companies arising from this research. The empirical findings support various notions concerning value innovations in a B2B context that were presented in the literature review. As identified in chapter 2.4, the definition of value innovation is affected by various special characteristics of B2B markets, such as:

- customer-specific solutions
- quick imitation by competitors
- interdependencies in the innovation ecosystem
- focus on creating value to the entire network of the firm
- new types of cooperation with network level

All in all, the special characteristics were clearly present in the case business. Firstly, the role of customer-specific solutions and services were highlighted when it became evident that different customers require different approaches in order to maximize value. Whereas customers valued different elements, the role of supplier cooperation was emphasized in all cases. Thus, focus on trust and reliability was identified as a key success factor. Solutions-thinking is an important way to establish closer ties with the customer, thus fostering trust and long-term relations. This is a crucial notion in B2B markets, where the development and maintenance of positive buyer-seller relationships is a key success factor (Fill & Fill, 2005).

Secondly, the competition's ability to imitate was noticed in one example within the case company, where one function had adopted a pricing innovation that was quickly adopted by all industry players. Thus, value innovation initiatives cannot be considered as permanent and B2B companies should acknowledge that others can imitate, as noted by Matthyssens et al. (2006). However, a first mover advantage can be beneficial as closer ties can be developed with customers.

Thirdly, the innovation ecosystem challenges identified by Adner (2006) were apparent in some examples within the case company. There were some cases where buyers were sceptical towards a new product if they had to rely on a single supplier. This could delay the adoption of value innovations within the value network. Thus, B2B companies should actively consider the role of the innovation ecosystem when creating value innovations. This is especially important in industrial markets that are often characterized by traditional buying behaviour, as noted by Matthyssens et al. (2006).

Finally, the role of the value network and opportunities for cooperation should be emphasized. As noted by Hamel (1996) and Normann and Ramirez (1993), value innovations should be considered from a holistic perspective, aiming at providing value to the entire network and all stakeholders. As suggested in the case business context, there are opportunities for cooperative ventures and alliances with a wide range of network actors, such as research agencies and even direct or indirect competitors. This recommendation can be extended to B2B markets in general, as there is untapped potential in horizontal network relationships (Möller & Halinen, 1999; Wilhelm, 2011). From a theoretical perspective this is an interesting notion. Whereas some of the value innovation literature suggests that breaking free from competition is essential (Kim & Mauborgne, 2004), it can be suggested that the objective of providing superior value for customers and the entire network can potentially be fulfilled in cooperation with competition.

## 5.2 Theoretical implications

When considering the initial research question of this thesis, i.e. 'how should a company organize value innovation creation in B2B markets?', multiple recommendations were given based on the research. The five propositions presented in the literature review gained support in the empirical part, along with some new elements that emerged from the empirical analysis. The attention-based view that was used as a theoretical lens for this study was important for synthesizing academic theory and the value innovation literature, which is more practical in nature.

In terms of theoretical implications, the role of collaboration within the value network was emphasized in the findings. This reflects the contemporary research interest towards value co-creation. The value innovation literature suggests that although the focus is on customer value creation, creating value for the entire network is important. The findings highlighted the fact that value can be created for *and* with the help of the value network. Close cooperation with a wide range of network partners can lead not only to increased customer value, but also to increased efficiency throughout the value chain, thus creating value for a wider range of actors. Especially the role of horizontal level supply chain actors were identified as an important opportunity. Collaborative arrangements with direct and indirect competition have not been extensively considered in the case company, making it an interesting value innovation opportunity in the case business context. This notion reflects the increased research interest towards the interplay between collaboration and competition, where competitors are not seen as a threat but rather an opportunity (Gnyawali & Park, 2011). From a value innovation perspective this is an interesting contribution, as value innovations usually focus on breaking free from competition rather than embracing opportunities for collaboration.

Another point of emphasis in this study was the importance of solutions-thinking. The findings suggested that another important way to break traditional industry models in the case business context was to consider services as part of the total offering. In the customer interviews it was emphasized that B2B customers highlight the importance of close cooperation with suppliers, along with high levels of technical expertise. Combining these two notions, it became evident that the case company would benefit from providing total solutions rather than merely focusing on providing products. This reflects the tendency of various industries to shift their strategic focus towards solutions-thinking instead of individual products or services (Brady et al., 2005).

The context specificity of findings proved to be high. Whereas the overall value innovation literature often discusses value curves in terms of what the customer wants and needs, it was found that the needs of individual customers vary to a large extent, making it challenging, even risky, to rely on a single value proposition. Instead, the

value proposition should be tailored to suit the purposes of an individual customer, which increasingly highlights the need for customer-specific solutions.

When considering the main theoretical contributions, the importance of special B2B considerations was highlighted. The research aimed at challenging the popular definitions of value innovation as presented by Kim and Mauborgne (1997, 2004, 2005). The empirical data provided confirmation to some of the special characteristics that should be taken into consideration when organizing and identifying for value innovation in B2B, as suggested in the literature review. For example, whereas the popular value innovation literature focuses on targeting the mass market, it was found that in B2B value innovations can be tailored to a specific customer. Interestingly, the empirical part found support for the notion that in B2B markets imitation of value innovations is relatively easy. Furthermore, the role of the innovation ecosystem and reputational characteristics were identified as important elements. Another major theoretical contribution arises from the fact that the traditional value innovation literature focuses on breaking free from competition, whereas the findings of this research suggest that collaboration with competition can help to create a value innovation. Thus, in some cases creating superior value to the customer may require cooperation with the competition.

#### **5.2.1 Refining the theoretical framework**

The empirical research has provided some important insights on the initial research question 'how should a company organize value innovation creation in B2B?'. Several sub-elements were identified for the process of organizing and identifying value innovations, as was illustrated in figure 13. When considering the initial theoretical framework, some important additions should be made.

First of all, propositions 1 and 2 that dealt with how a company should organize its activities internally in order to create value innovations. The role of knowledge-sharing mechanisms was highlighted in the empirical evaluation. It was found that a company should not only focus on idea creation and sharing, but also how to share best practices,

contacts and expertise within the company and across different business functions. Thus, it is important to differentiate between the focal function and other business functions of the company, which have potential to enhance the focal function's ability to create value innovations by two-way knowledge-sharing.

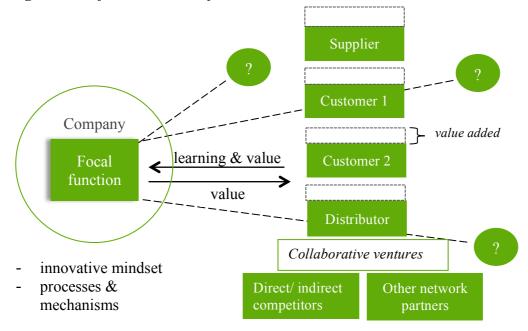
Second of all, the fact that different customers require different approaches should be acknowledged in the theoretical framework. Thus, there should be a distinction between different customers, as they value different things and thus require customized relationships from the focal firm's side.

Third of all, the importance of horizontal level actors such as direct and indirect competitors should be acknowledged, which requires including them in the theoretical framework. It may be useful to consider them as potential value co-creation partners rather than a threat. There is potential for collaborative ventures not only with competition but also with other network partners, such as research agencies and professional networks that are often overlooked.

Finally, it should be acknowledged that whereas value innovations aim at providing value to the entire value network, they can also provide value to the company itself. This is highlighted in B2B markets, where close relationships to customers are essential (Fill & Fill, 2005). Value innovations that provide superior value to customers have the potential to lead to long-term relations. Furthermore, close cooperation with customers enable mutual learning, as well as cooperation with other network actors. Cooperative ventures with competitors can lead to higher volumes, as more potential customers are reached.

Figure 15 illustrates the modified theoretical framework, which takes into consideration the additional findings that arose from the empirical evaluation of this study.

Figure 15: Refined theoretical framework



All in all, the theoretical framework plays an important role in enriching the point of view of the current value innovation literature. By incorporating the attention-based view of the firm with the value innovation concept, important distinctions could be made in terms of where a company should focus its attention when organizing and identifying for value innovation.

## 5.3 Suggestions for further research

This thesis has introduced various concepts that have not been extensively studied in the context of value innovations. Using the attention-based view as a theoretical lens for this research allowed taking into consideration both the internal and external levels of the case organization, thus taking a more holistic perspective on value innovations. Whereas the aim was to synthesize the value innovation literature, it was not possible to take all issues that arose from the empirical evaluation into in-depth consideration. Thus, there are still some important issues that should be further researched from a value innovation point of view.

The importance of the value network emerged as a key concept when identifying B2B value innovations. Networks can be considered as highly complex and dynamic, which is why more in-depth research could be conducted in terms of identifying how different network actors can be identified and how the value networks evolve over time. Especially the ways in which the value network expands can be interesting to study from a value innovation perspective. Furthermore, when considering the value network, especially the role of collaborative ventures with competitor level actors requires more research. Whereas this thesis suggests that the collaboration with competition should be considered as a valid option for the case company, there is still space for more in-depth analysis on the different types of potential collaboration or the validity of this recommendation in other industries. Therefore, the focus of interest in subsequent research could be on different types of collaborations, such as alliances and joint ventures, and their implications on value innovation abilities in different industries.

Another potential direction for further research is the role of organizational culture in the context of organizing and identifying for value innovation. In this thesis, a decision was made to focus less on the organizational culture linkage, as it would have expanded the scope of the research excessively. The decision was based on time constraints and the request by the case company to focus more on the network level issues. Whereas some of the propositions presented in the literature review refer to organizational culture issues, the theoretical framework would benefit from a deeper analysis concerning the role of the organizational culture. Thus, more research could be conducted with the help of previous literature concerning value innovations and organizational culture.

Finally, this research could be extended by evaluating the theoretical framework from a multiple case study perspective. Although a single case study approach was considered appropriate in this thesis, as the focus was on the evaluation of the current value innovation literature from an attention-based view of the firm, the generalizability of results and the evaluation of the theoretical framework would benefit from a wider perspective. The recommendations presented in this study are based on the findings of the case business, which serves customers in multiple industries. Therefore, subsequent research could focus on two or more case companies who serve customers from the

same industry in order to gain more evidence concerning current industry mind-sets and how to deviate from them. Alternatively, different industries could be researched with the purpose of conducting comparisons between the value innovation approaches across different industries.

All in all, there are multiple research directions that can be taken based on this research. As the concept of value innovation is relatively new, there are various opportunities for extending, challenging and refining the current pool of research. Value innovations are an interesting topic for researchers who are interested in synthesizing theoretical contributions by academia and the more practical strategic management literature. At the same time, it is exactly the combination of these two dimensions that make value innovation research challenging.

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# APPENDICES

#### Appendix 1: List of interviewees

The case company:

- 1. Director, Business Development, Business Group X 18.4.2012
- 2. Director, Business Development, Business Group Y 19.4.2012
- 3. Manager, Sales and Marketing, New Businesses 20.4.2012
- 4. Vice President, Case Business 24.4.2012
- 5. Sales & Marketing Manager, Case Business 26.4.2012
- 6. Product Portfolio Management Director, Business Group Z 3.5.2012
- 7. Head of Strategy Development, Business Group Y 4.5.2012
- 8. Director, Marketing and Sales, Business Group Y 8.5.2012
- 9. Director, Case Business 14.5.2012
- 10. Director, Product Development, Business Group V 4.6.2012

Customers:

- 11. Founder, Finnish Technology Company 31.5.2012
- 12. CEO, Finnish Technology Company 8.6.2012
- 13. Feature Leader, Global Automotive Company 19.6.2012

Non-Customers:

- 14. CEO, International Furniture Company 31.5.2012
- 15. Director of Sustainability, Global Electronics Company 18.7.2012
- 16. Technology Expert, Global Technology Company 27.7.2012
- 17. Head of Technical Department, International Furniture Company 27.7.2012

## Appendix 2: Interview questions outline

## Company representatives

## Background

- 1. What is your position at the company?
- 2. Can you briefly describe your business function?

#### Innovations

- 3. What is the role of innovations in your function?
- 4. Can you name three most important reasons for why a company should innovate?
- 5. Can you name examples of innovations within your function?
- 6. How are innovations born in your function?
- Do you have formal innovation processes in place?
   a. If yes, what kind?
  - b. How do they work?
- 8. Where do you get ideas when developing innovations?
- 9. How are innovations evaluated within your function?
- 10. When thinking of successful innovations, what were the key success factors?
- 11. What are the biggest challenges in the development of innovations?

## Customers and value chain

- 12. How is the value chain (around a product or a service) considered in the innovation process? Examples?
- 13. What is the role of customers in innovation development?
  - a. Do you think they have important information?
  - b. How are current customers involved in innovation development?
  - c. How are new / non-customers involved in innovation development?
- 14. Do you have ideas concerning how customers could better be included in the idea creation process and innovation development?

#### Services

- 15. What is the role of services in your business?
- 16. What could services mean in your business?

#### Existing customers

Industry

- 1. Can you tell me about your industry and how it is currently performing?
- 2. What kind of trends are now emerging within the industry?
- 3. How about in the future, how do you think the industry will develop?
- 4. What do you consider to be the critical success factors in this industry (concerning growth / customer satisfaction)?

#### Material

- 5. What has been your company's experience concerning [the case] materials?
- 6. How do you use them?
- 7. Have you considered them useful / successful?
- 8. What is the added value for your product?
- 9. What makes you choose [the case material] over other materials?
- 10. Is there anything you would improve?
- 11. How do you think your customers react to a completely new material?

Supplier relationships

- 12. What do you look for in a supplier?
- 13. How important is cooperation with a supplier?
- 14. What type of cooperation do you look for?
- 15. How do you develop relationships with a supplier?
- 16. How can a supplier help to add value to the end customer?
- 17. Do you consider that services play a role in the development of supply relationships?

Can you evaluate how important the following factors are for you when choosing a production material on a scale of 1-5?

- simplicity of use
- availability
- quality
- price
- environmental friendliness
- differentiated material
- multiple suppliers

#### Non-customers

Industry

- 1. Can you tell me about your industry and how it is currently performing?
- 2. What kind of trends are now emerging within the industry?
- 3. How about in the future, how do you think the industry will develop?
- 4. What do you consider the critical success factors are in this industry concerning growth and customer satisfaction?

#### Production material

- 1. What type of material do you use for your products?
- 2. Is there anything you would improve in your current material?
- 3. Are you familiar with [the case] materials?
- 4. Do you have any experience concerning [the case] materials?
- 5. Do you think they could be beneficial in your products? Why / why not?
- 6. Do you think there could be added value for your product?
- 7. How do you think your customers would react to a completely new material?

Supplier relationships

- 8. What do you look for in a supplier?
- 9. How important is cooperation with a supplier?
- 10. What type of cooperation do you look for?
- 11. How do you develop relationships with a supplier?
- 12. How can a supplier help to add value to the end customer?

Can you evaluate how important the following factors are when choosing a material on a scale of 1-5?

- simplicity of use
- availability
- quality
- price
- environmental friendliness
- differentiated material
- cooperation with suppliers
- multiple suppliers

Item Respon-**Explanation** ses Growth 7 "Innovation builds on future growth and competitiveness" "A company should innovate in order to move forward" "Innovations should ensure growth" "Creating competitive advantages and growth is a major reason to innovate" "Innovation is about creating completely new and better products. It is key to growth" "Innovations help a business to grow" "Concretely, it is important to innovate because in order to develop and grow a business" "Maintaining competitiveness is key" Competitive 6 "Maintaining competitiveness is in the core: it can mean cost advantage / Competitiveness efficiency, better products, business models or services" "Innovative firms perform better than competitors and can build better businesses" "Innovations strengthen competitiveness, finding a point of differentiation is key" "Creating something new can be considered as a competitive advantage" "Creating competitive advantages and growth is a major reason to innovate" 5 Renewal and "As a traditional firm we have to be able to transform. How can we transformation of substitute the downturn of our traditional business by innovating?" "We must innovate because businesses have different lifecycles ---the industry one must innovate to have businesses in the future" "The speed of change is rapid, a company should be on its toes all the time. The markets evolve all the time." "Speed of competition is high, product cycles become shorter and shorter, one must be sharp and innovate. Competitors also respond to your actions faster. Responding and following up competitive challenges is crucial." "It is important to renew and show we are capable of developing new things" Culture 4 "Innovative atmosphere creates positive energy and is good for the entire company" "Developing innovation culture is important. Agility is needed from employees because one has to know where the world is going" "When a company innovates and renews itself it is very motivating also indirectly and allows for better performance in other work as well."

Appendix 3: Main motives to innovate as presented by individuals at the case company

|                                       |   | "People need renewal, ideas and guidelines. If a company is          |
|---------------------------------------|---|--|
|                                       |   | stagnating, it doesn't get the best out of people. People must have  |
|                                       |   | the chance to influence, innovate and do something new. This way     |
|                                       |   | they become more entrepreneurial and committed."                     |
| Profit                                | 4 | "Innovative products allow for better margins"                       |
|                                       |   | "The ultimate goal is to make money"                                 |
|                                       |   | "Innovations can be a boost to sales "                               |
|                                       |   | "Innovations can help strengthen profit margins"                     |
| (Cost) efficiency                     | 3 | "In order to be competitive we need to create efficient production   |
|                                       |   | processes"   |
|                                       |   | "Raw material inflation is important: raw materials get increasingly |
|                                       |   | expensive, so we have to find innovations that save costs and the    |
|                                       |   | environment"   |
|                                       |   | "We should enhance our cost-efficiency, especially as there is a raw |
|                                       |   | material shortages can be a threat"                                  |
| Responsiveness                        | 3 | "Responding to customer needs on a timely fashion is key to          |
| towards customer                      |   | maintaining competitiveness"   |
|                                       |   | "Clients seek new solutions and want new ideas, we must have         |
|                                       |   | something new to show them in order to get a boost for sales"        |
|                                       |   | "We should always think about providing new solutions to the         |
|                                       |   | customer"  |
| Fulfilling                            | 1 | "Our brand requires us to be a front-runner"                         |
| company vision                        |   |  |
| Staying ahead of                      | 1 | "Keeping ahead of the competition by renewing actively and           |
| the competition                       |   | showing we are capable of developing new things"                     |
| Environment                           | 1 | "We have to find innovations that save costs and the environment"    |
| · · · · · · · · · · · · · · · · · · · |   |  |

# Appendix 4: Industry recipe evaluation

| Item                                | High / Low  |  |  |  |  |  |
|-------------------------------------|---|--|--|--|--|--|
| Price as a<br>competitive<br>weapon | High<br>Price is crucial, especially in the traditional material area. Additional   |  |  |  |  |  |
| жеарон                              | properties required to get a higher price. The case company's material price<br>is considered competitive when compared to the specialty materials.   |  |  |  |  |  |
| Efficiency and scale needed         | High  |  |  |  |  |  |
|                                     | High volumes, so economies of scale is crucial. The case company's material aims at high volume from the start, currently other direct small competitors cannot offer the material in high volumes due to high fixed costs. |  |  |  |  |  |
| Technology focus                    | High  |  |  |  |  |  |
|                                     | Technology is well-known in the industry. The case business' main<br>advantage comes from the raw material, which combined with the<br>traditional material is a technologically advanced solution.                         |  |  |  |  |  |
| Commoditization                     | High  |  |  |  |  |  |
|                                     | The traditional material is a pure commodity and other material types are<br>as well, they can be bought anywhere and the volumes are high.   |  |  |  |  |  |
| Willingness to innovate and         | High  |  |  |  |  |  |
| invest                              | Industry is innovating rapidly, especially in the field of sustainable materials.   |  |  |  |  |  |
| Reactive/Proactiv<br>e behavior     | Proactive: High   |  |  |  |  |  |
| c benavior                          | Industry is proactive in the sustainability -side, constantly developing nove<br>solutions. Large mass producers may not be interested in asking small<br>customers what they want but do what is efficient.                |  |  |  |  |  |
| Power play in<br>value chain        | OEM: High   |  |  |  |  |  |
|                                     | Own equipment manufacturers i.e. brand owners have the most power.<br>Processor buys the actual material and makes the final product but brand<br>owner has the power to make the decisions.                                |  |  |  |  |  |
| Marketing focus                     | Brand owners: High  |  |  |  |  |  |
|                                     | Focus is on brand owners.   |  |  |  |  |  |

| Cooperation<br>between levels of<br>supply chain | Low<br>The industry operates through distributors to a large extent. The case<br>business wants to cooperate with larger customers independently whereas<br>smaller ones go through a distributor. |
|--|--|
| Service<br>differentiation                       | Low<br>Does not play a large role. The most important thing is that raw-material is<br>always available through distributors.  |
| Awareness of<br>value innovation<br>potential    | High<br>The large players invest strongly on innovation.   |

|                             | А    | В    | C    | D    | Е    | F    | G    |
|-----------------------------|------|------|------|------|------|------|------|
| Physical elements           | 3,75 | 3,75 | 4,50 | 3,75 | 4,00 | 3,50 | 4,50 |
| Enhanced technical          | 2,00 | 5,00 | 5,00 | 2,00 | 4,00 | 3,00 | 4,00 |
| properties                  |      |      |      |      |      |      |      |
| High quality                | 5,00 | 5,00 | 5,00 | 5,00 | 5,00 | 5,00 | 5,00 |
| Feel of the material        | 5,00 | 3,00 | 4,00 | 4,00 | 3,00 | 3,00 | 5,00 |
| Easiness of use             | 3,00 | 2,00 | 4,00 | 4,00 | 4,00 | 3,00 | 4,00 |
| Trust elements              | 5,00 | 5,00 | 5,00 | 5,00 | 4,00 | 4,00 | 5,00 |
| Cooperation with supplier   | 5,00 | 5,00 | 5,00 | 5,00 | 4,00 | 4,00 | 5,00 |
| Customer service: technical | 5,00 | 5,00 | 5,00 | 5,00 | 4,00 | 4,00 | 5,00 |
| support                     |      |      |      |      |      |      |      |
| Branding elements           | 4,50 | 3,00 | 3,50 | 1,50 | 1,75 | 2,25 | 2,50 |
| Marketability               | 5,00 | 4,00 | 5,00 | 2,00 | 2,00 | 3,00 | 3,00 |
| Environmental friendliness  | 3,00 | 4,00 | 5,00 | 2,00 | 3,00 | 4,00 | 4,00 |
| Cobranding                  | 5,00 | 2,00 | 2,00 | 1,00 | 1,00 | 1,00 | 2,00 |
| Networks and references     | 5,00 | 2,00 | 2,00 | 1,00 | 1,00 | 1,00 | 1,00 |
| Efficiency elements         | 2,66 | 4,00 | 3,66 | 2,33 | 4,66 | 4,66 | 4,00 |
| Price                       | 3,00 | 5,00 | 4,00 | 3,00 | 5,00 | 5,00 | 4,00 |
| Less material usage         | 3,00 | 5,00 | 3,00 | 2,00 | 4,00 | 4,00 | 3,00 |
| End-of-lifecycle treatment  | 2,00 | 2,00 | 4,00 | 2,00 | 5,00 | 5,00 | 5,00 |

Appendix 5: Main value curve elements of customer and non-customer interviewees

Physical elements

- *Enhanced technical properties*: some of the respondents highlighted that the material provides some enhanced properties compared to traditional materials, making it a specialty material.
- *High quality*: each respondent paid a lot of attention to the quality of the material they use in their products. Even quality with no surprises was considered highly valuable.
- *Feel of the material*: Various interviews emphasized that the material feels nicer than traditional materials, which may act as an important differentiating element.
- *Easiness of use*: the simplicity of use was not considered a major concern, as most respondents felt that they are technologically sophisticated.

# Trust elements

• *Cooperation with supplier*: close cooperation with the supplier was considered crucial in all interviews. Current customers considered important to co-develop the novel material to suit their specific purposes. In general, the interviewees emphasized trust, reliability and good customer service.

• *Technical support*: as the material in question is very novel, interviewees emphasized the need for high-quality technical specifications and expert-level technical support.

# Branding elements

- *Environmental friendliness*: the ecological material was considered important in most of the interviews, especially in terms of the lower carbon footprint that the material has in comparison to traditional materials. The eco-friendliness aspect was considered especially important from a marketing perspective.
- *Marketability*: the differentiated material was important for marketing reasons, especially due to its green aspects.
- *Cobranding and references*: Some respondents considered they would benefit from the contacts and cobranding opportunities that the case company can provide them, thus boosting their own business.

## Efficiency elements

- *Competitive price*: the fact that the material provides some enhanced technical properties with the price of traditional materials was considered important. All in all, there seemed to be more focus on the quality than the price per se.
- *Less material usage*: the material is considered more eco-efficient based on the fact that less raw material is needed in order to produce a specific item than with traditional materials
- *End of lifecycle treatment:* only one interview emphasised the fact that, unlike traditional materials, the new material can be disposed of in a sustainable manner at end of its lifecycle. Thus, no excess waste is created from the material.