Utilizing Market Knowledge to Create Competitive Advantage in the Interface of Inter- and Intra-Organizational Coopetition

Case Study: An SME in the Information Security Industry

Authors: Kirsi Jokipii
Sara Kuusinen

Supervisor: Jessica Eriksson

Student
Umeå School of Business and Economics
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Abstract

It has been widely acknowledged that today’s business world is characterized by severe competition. To remain competitive, firms have to employ alternative strategies to keep up with the fast-paced development. One such strategy is coopetition; firms collaborate in some areas to combine their resources while competing in other areas. Thus, instead of trying to master everything within a company’s own walls, emphasis is towards gaining access to external resources and coordinating the wide array of expertise in the best possible way to achieve competitive advantage. In addition, growing requirements from the customer end force firms to combine their resources to be able to put together tailored solutions. This entails a notable customer input in product development and firm’s ability to utilize market knowledge can not be undermined. However, before the feedback gained from the market can act as a source of competitive edge, it has to be further processed into a form in which it offers strategic value for the company.

This research aims to study how market knowledge is utilized to create competitive in the interface of inter- and intra-organizational coopetition. Even though competition is often considered to take place between firms, competitive elements can also be found within firms. For that reason, we include both inter- and intra-organizational coopetition in the research. In terms of the process involved in market knowledge utilization, three steps are appointed; transfer, translation and transformation of knowledge.

To perform the research, we selected a high technology company belonging to SME category present in the information security business as case company. Six semi-structured interviews were conducted on three different occasions. Due to the sensitive nature of the research topic, the case company remains anonymous and is referred to as Case Company in the research. By ensuring respondents’ anonymity, the gained responses are more likely to be honest and thus more reliable and comprehensive.

The empirical findings revealed differences in market knowledge utilization between inter- and intra-organizational coopetition. While coopetition taking place between firms was characterized with dominating competitive element and protection of one’s own assets, only preliminary stages of market knowledge utilization were found to be present. This entailed that knowledge transformation was absent in the inter-organizational context. On the other hand, on the intra-organizational level a collective approach to knowledge coordination was employed and attention had been paid on establishing sufficient structural conditions to support the knowledge utilization process. Thus, the process within the company was more efficient and it completed the knowledge utilization process at the inter-organizational level as knowledge transformation took place only within Case Company.

While coopetition is a rather new field of study, we believe that the performed research provided information on inter- and intra-organizational coopetition in an SME present in the high technology industry and gave insights of the knowledge exchange both within and across companies. In the end, we have built up a model including the most important findings of the study. The figure entails the market knowledge utilization processes visualized in both inter- and intra-organizational contexts.

Key words: Coopetition, market knowledge, market knowledge utilization process, market orientation, and information security
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1. Introduction

Innovation is a cornerstone in determining an organization's success. In today's world, the extremely severe competition forces companies to invest resources to innovation activities in order to stay competitive (Bessant & Tidd, 2007; Willoughby and Galvin, 2005; Hauser, Tellis & Griffin, 2006). The importance of innovation has been recognized in a broader context as well. Innovation has in fact been placed at the heart of the Europe 2020 strategy. The Europe 2020 strategy states that researchers and innovators should be able to work and cooperate across the EU as easily as within national borders. The European Research Area is going to be completed in the coming years to put in place the frameworks for a free movement of knowledge. According to the report also the barriers to bring “ideas to market” are to be removed (European Commission, 2010: 3).

As the importance of access to knowledge has been acknowledged in EU, the development is towards firms loosening their company boundaries and taking advantage of the expertise of other actors in the market. Having said that, partnering and forming strategic alliances in innovation projects appears to be the key ingredient to be successful (Vapola, 2010: 12). Furthermore, one component of the Europe 2020 Strategy is the Digital Agenda. It proposes means to better exploit the potential that information and communication technologies possess in order to be able to foster innovation, economic growth and progress (http://europa.eu). These actions on the European level, suggest that innovation is considered to be crucial for the competitiveness of Europe and simultaneously acknowledging the role that information and communication technology can play in the puzzle.

Traditionally innovation has been considered a process occurring within an organization (Willoughby & Galvin, 2005: 61-62). As knowledge is the key component for innovation, the fast paced technological development requires an amount of knowledge and resources that one company alone cannot possess. No company is large enough to master everything by itself. Consequently, the importance of networks and building strategic alliances are crucial as they give single firm access to more comprehensive resources and knowledge (Powell, Koput & Smith-Doerr, 1996: 118). Thus the direction is towards growing emphasis on external linkages in networks and strategic alliances along with formal and informal linkages with customers and suppliers. These relationships are vital stimulators in innovation process (Willoughby & Galvin, 2005: 57; McAdam & McClelland, 2002). In addition, customer involvement and gained feedback is said to foster firm’s innovative action. Thus, Gnyawali and Park (2009: 311) suggest that the existence of feedback mechanisms and tight linkages can provide important tools for technological innovation.

Simultaneously, the growing involvement of customers in product development is related to the trend of customers requiring more tailored solutions that fit their individual preferences (Prahalad & Krishnan, 2008). Firms are required to put together solutions that fulfill multiple needs in one solution. At the same time, the desired solutions can require expertise from several industries (Bengtsson & Johansson, 2010: 455). This is another factor implying the growing importance of inter-organizational collaboration in order for companies to be able to provide customers with innovative
solutions. The phenomenon of industry convergence has been spotted in the media, and telecommunication, computing and electronics (Bengtsson & Johansson, 2010: 454). Also Prahalad and Krishnan recognize that we have reached the point of confluence of connectivity, digitization, and the convergence of industry and technology boundaries. They further continue that these factors are creating a new dynamic between consumers and the firm (Prahalad & Krishnan, 2008:3).

The described trends concerning the importance to gain access on external resources and the growing requirements of putting together customized solutions combining expertise from different industries, requires new mindset from companies as well. As for the majority of firms it is not possible to master everything or they don’t possess the financial resources to acquire other firms with the missing competencies, collaboration between competing firms is increasing. This trend calls for developing linkages between companies in order to gain access to knowledge possessed by firm’s partners (Willoughby & Galvin, 2005:61). Thus, a notable increase in the formation of large non-equity multi-party alliances focusing on innovative activities has taken place (Vapola, 2010:1).

Given the above background, coopetition offers firms a working strategy to keep up with the growing requirements of the business world. Coopetition brings together companies that are simultaneously competing in some areas but collaborating in others in order to keep up with the development and to achieve competitive advantage (Bengtsson, Eriksson & Wincent, 2010: 194). Instead of mastering everything by itself, firms are paying more attention on the ability to coordinate and bring together different parts of the desired solution in the best possible way.

Given the two conflicting logics of interaction, firms employing coopetitive strategy face the dilemma of finding the right balance between cooperation and competition. While gaining access to complementary resources and expertise is likely to equip companies with capabilities to develop innovations, their value cannot be taken for granted. In fact the value of external linkages is not the amount of knowledge that they are able to provide, but rather the amount of knowledge provided that can be effectively assimilated and applied on the basis of the firm’s own absorptive capacity (Willoughby & Galvin, 2005:61-62). The actors involved in coopetition have to find a way to benefit from the know-how that is brought together and exploit both firm’s internal expertise and the resources gained from the coopetition partners in order to differentiate oneself from others and end up with the largest share of the market.

It has been recognized that in addition to coopetition at the inter-organizational level, coopetition occurs within firms as well. Even though the level of analysis differs; cooperation between competing units appears, whether it takes place between firms or functions within a company (Luo, Slotegraaf, & Pan, 2006: 69). Thus, when managing an inter-organizational coopetition project, attention needs to be paid to both inter-organizational and cross-functional levels of coopetition.

Although the role of involving one’s competitors, outside actors in the innovation project and thus gaining access to more complete resource base cannot be undermined, the activities within the firm need consideration as well. Even though it is usually company’s investment on R&D that is used to measure firm’s internal innovation orientation, expertise from all aspects of organization’s operations is of importance (Willoughby & Galvin, 2005: 60-61). Ernst et al. (2010: 80-82) point out that different
departmental orientations provide complementary information that is valuable for product development and further continue that cross-functional collaboration has been recognized as a key success factor in such project.

During the innovation process a large amount of cooperation inside the company is required. In fact, the way a company manages knowledge exchange is a critical ingredient when generating innovations and competitive advantage both at company and project level (Dougherty, 2004; Koskinen, 2004). Marketing people have the knowledge of customers and market but not concrete possibilities to fulfill their needs. There is a need for constant coordination between company’s departments and open discussion and cross-functional teamwork in order to reach company’s goals. R&D engineers need to communicate with marketers in order to gain knowledge of customers’ requirements and desires and market opportunities and in similar way marketers need to communicate with financial department in order to understand financial limitations (Keaveney, 2008: 1-3). In addition to cooperative efforts, some degree of coordination is required to allocate company’s internal resources in the most beneficial manner. This can cause competitive behavior among the different functions of the company. There can arise competition against firm’s other functions for resources and strategic importance. Furthermore, divergent departmental goals and strategic priorities can cause competitive behavior within the company (Luo, Slotegraaf & Pan, 2006: 72). Consequently, certain degree of coopetition can arise within the company as well. This calls for appropriate management strategy to organize the company-wide expertise in best possible manner.

Moreover, research has shown that cooperation between marketing and R&D departments has a positive impact on overall new product development project performance in all stages of innovation process. (Ernst et al, 2010: 87). The people working in the marketing unit are the key-link between company and customers, as they possess the primary knowledge about target customer population, their preferences and occasions. Furthermore, Marinova suggests that market knowledge is an influential factor for company’s operations. Firm’s ability to utilize the gained market knowledge is said to be crucial in terms of firm’s innovative ability (Marinova, 2004: 1). This requirement culminates into the concept of market orientation which has been described to consist of three types of market information activities; generation of market knowledge, transfer of gained knowledge across company functions and company-wide responsiveness to it (Kohli & Jaworski, 1990). Market information is said to consist of customer data as well as external factors that influence customer’s preferences (Isberg, 2006: 209).

Research has also acknowledged the relationship between intra-firm coopetition and a firm’s market orientation. While both concepts emphasize cooperation across functions, there is an important difference. Market orientation focuses on the cross-functional coordination and dissemination of the market intelligence while trying to reduce the degree of conflict across functions. On the other hand, cross-functional coopetition suggests that the cross-functional conflicts can also have beneficial consequences. In fact, it is stated that the coexistence of cross-functional cooperation and competition provides the firm with the opportunity for effective transfer of customer and market knowledge across the departmental boundaries. While the competitive element implies the interest in knowing more about competing departments’ positions, the cooperative capability to recognize, adopt and utilize the specialized market knowledge in company-
wide level is suggested to have positive influences (Luo, Slotegraaf, & Pan, 2006: 69-70).

Staying alert to rising trends and changing customer preferences and acting in accordance to them can create notable competitive advantage for companies (Prahalad & Krishnan, 2008: 81). Thus, it is suggested that the marketing function should play a more active role and consequently make better use of its market and customer knowledge (Verhoef & Leeflang, 2009: 17,30). With the help of their expertise the marketing function could be more involved in initiating new innovations and further develop the concepts. While an innovation process employs a lot of company’s resources, the marketing function can help to avoid unwanted and costly mistakes and help to carry out the process towards outcome that enables company to gain success and profits from the market. Furthermore, the impact of both firm’s market orientation and marketing competencies on innovation has been acknowledged to be beneficial in the development of innovations in the high-technology industries (De Luca, Verona & Vicari, 2010: 299).

As pointed out above, the development has been towards customers wanting several solutions in one package. Instead of firms creating value and then exchanging it with their customers, the view has been replaced by a personalized experience and co-creation view of value (Prahalad & Krishnan, 2008:3). This shift of customers being more involved in the process emphasized marketing function's contributions in the innovation project, as it tends to have the best contact with customers. At the same time, it is not enough to possess the specialized market knowledge, but company needs to have the ability to disseminate the market intelligence across departmental boundaries before the knowledge can have strategic value for the company (Luo, Slotegraaf, & Pan, 2006: 67). Given the need to access external resources in order to be able to best fulfill the customer needs, the company’s own absorptive capacity plays a crucial role when it comes to exploiting the knowledge gained from the inter-organizational coopetitive interaction.

1.1 Research Problem

The importance of innovations for society and organizations in general was discussed in the introduction. A notable amount of research has been done concerning innovations both in inter-organizational and cross-functional level. Furthermore, it has been established that marketing function has positive contributions to innovation projects throughout the process. However, in terms of marketing literature, coopetition at cross-functional level has been largely ignored (Luo, Slotegraaf, & Pan, 2006:76) and Rindfleisch and Moorman (2001) stress that surprisingly little systematic research has focused on inter-firm coopetition in the marketing literature. Given the lack of conducted research in the described levels employing a marketing perspective, there is a need for further research.

Moreover, Hauser, Tellis and Griffin (2006: 694-696) argue that firms should pay additional attention on how it organizes innovation. As innovations are increasingly managed across boundaries involving several actors, there is a need to study the best organizational forms for inter-organizational development projects. They further point
out that the relationship between how organizations act across boundaries and integrate marketing concepts into product development projects is understudied.

Furthermore, in the introduction, it was pointed out that knowledge is a key component for innovation. In line, the recent development has pressured companies to form external linkages in order to gain access to more complete resource base that in turn is required to fulfill more complete set of customer needs. Furthermore, in order to develop personalized solutions that respond to customer needs, customers represent a valuable source of market information. In fact, Alin et al. (2011: 58) bring up the growing need to understand how the knowledge exchange can be organized within and across companies in order to generate innovations. Given the described background we have formed our main research question:

*How can market knowledge be utilized to create competitive advantage in the interface of inter- and intra-organizational coopetition?*

### 1.2 Purpose of the Study

In the search of the best means to respond to the growing requirements that companies today face, coopetition offers one alternative. With the help of coopetition, company can combine its resources with other actors and efficiently develop solutions that fulfill the more complete set of customer needs. Given the growing emphasis on providing customized solutions that fit the specific customer needs, the importance of detailed and up-to-date market information cannot be undermined. In this study we aim to investigate how firms can utilize market information and turn it into a source of competitive advantage. More specifically, we will study the implications that coopetition entails for market knowledge utilization both within and across firms. As there is a set of activities needed before knowledge can be of strategic value, the subsequent steps of the process will be studied. Attention will be paid to gathering the market information, disseminating it across boarders and finally utilizing it in a way that transforms the knowledge into a valuable asset for the company.

In this study, both inter- and intra-organizational coopetition will be included. Research has suggested that the competitive element of coopetition can vary depending on whether it takes place within company or at inter-organizational level. It is likely that conflict and rivalry are not as intense in the intra-organizational coopetition (Luo, Slotegraaf, & Pan, 2006). Thus, it will be of interest to see if the context in which coopetition takes place affects the market knowledge utilization process.

Coopetition has been described to be especially applicable strategy in the high-technology industries. Thus, we are going to conduct an in-depth study of an SME present in the information security branch. In fact, it is a branch that is gaining growing degree of societal importance. To return to the Europe 2020 Strategy, The Digital Agenda represents one part of the strategy implying the importance of presenting appropriate measures to fight against the information security related threats caused by cyber attacks (http://europa.eu). Furthermore, as it is suggested that coopetition offers SMEs with crucial means to stay competitive, the chosen case company belong to the given category. In fact, when it comes to coopetition, the focus has been mostly on large
companies while SMEs have not been studied to that extent (Gnyawali & Park, 2009: 309). Given the above-presented background, we believe that our research will give valuable insights on research topic that currently lacks attention.
2. Literature Review

2.1 Structure of the Theoretical Chapter

The starting point of the theoretical framework is the reasons that drive companies to adopt coopetitive strategy in their operations. Attention will also be paid to the factors that make coopetition appealing especially in the high-technology industries. Further on, coopetition will be discussed by employing both inter-organizational and intra-organizational perspectives. Moreover, the theoretical part will consider marketing function’s role within an organization and furthermore the changing dynamics between market orientation and having a separate marketing unit. Finally, we will go deeper into the matter of market knowledge and how it can be utilized both within an organization and across organizational boundaries.

The purpose of the figure 2.1 is to clarify the focus of our research. While the theoretical framework consists of several interrelated parts, keeping the figure in mind should help the reader to organize the information. The idea is that the first parts of the literature review build the needed foundation for being able to study our actual research question.

2.2 Background – Cooperation vs. Competition

The importance of innovations for company’s performance was brought up in the introduction chapter. As innovations can act as a means to create competitive advantage
for the firm, it is crucial to comprehend how companies can foster innovation. However, there are conflicting views of the type of interaction that best stimulates innovation (Bengtsson & Johansson, 2010: 456).

To start with, today’s economy forces companies to reinvent their strategies in order to stay competitive. Collaboration is one of these alternative strategies and it is defined as working together for a common interest or as voluntary cooperation between firms that involves exchange, sharing of resources, or joint development of products, technologies or services (Osarenkhoe, 2010: 204).

As knowledge is considered to be a key component for innovation, the fast paced technological development requires an amount of knowledge and resources that one company alone cannot possess. For that reason networks and building strategic alliances is crucial as it gives single firm access to greater resources and knowledge that at the same time drive innovation (Powell et al., 1996). Also Vapola suggested in her research that partnering and forming strategic alliances in innovation projects appears to be the key ingredient in order to be successful (Vapola, 2010: 12).

When it comes to successful cooperation, Osarenkhoe emphasizes the importance of trust while the lack of it can become an obstacle for success. In addition to trust, commitment, voluntary and mutual agreement in a formal or informal contract aiming towards achieving common goals are cornerstones for cooperation. The main motive for cooperation tends to be adopting collective strategies for value creation. Furthermore, it can be justified for the purpose of learning and sharing organizational expertise (Osarenkhoe, 2010: 205). To continue, in terms of exchanging existing knowledge and learning from each other, already established relations with other actors can be of help as they are more likely to possess higher level of trust, knowledge of one another and the way of working. In the best scenario, the trust will contribute to fresh innovative actions (Bengtsson & Johansson, 2010: 459).

However, there is a risk for the opposite to happen. The close relations with other actors might restrict learning and renewal. If the parties have been involved in a close collaboration under longer period of time, there is a tendency to continue the cooperation even though it would not any longer be productive. Instead, firms should start looking for new partners that possess competence, resources and fresh point of view that are needed for further development. Furthermore, the drawbacks of too strong cooperation are mentioned to include over-embeddedness and lock-in effects (Bengtsson & Johansson, 2010: 459).

As pointed out above, cooperation doesn’t always lead to desired benefits. Given the background of lacking effectiveness of too harmonious cooperation, it is reasonable to suggest that competition could stimulate firms to work in a more goal-oriented manner towards creating innovative solutions (Bengtsson & Johansson, 2010: 456). Competition has been traditionally defined as a dynamic situation occurring when several actors in one specific area struggle for scarce resources, and/or produce and market similar products or services that satisfy the same customer need (Osarenkhoe, 2010: 203). Osarenkhoe (2010: 203) introduces in his article several well-known scientists’ views of competition. One of them is the idea of Schumpeter stating that competition can be associated with internal industrial efficiency, the development of new technology, new sources of supply and types of organization.
However, as the importance of access to resources outside company’s own boundaries was highlighted in terms of cooperation, it seems appropriate to view competition from an external perspective as well. Given this, Copeland’s view on competition that is presented by Osarenkhoe (2010: 204) shifts the focus from individual companies towards external, more dependent view. He states that “a competitor that gets ahead in an industry can do so by developing business connections that give him preferential treatment in terms of financing, purchase, access to information, in the award of private contracts and even in the administration of a public office” (Osarenkhoe, 2010: 204).

Bengtsson and Kock (2000) refer to Porter who argues competition to act as a driver in a given branch. The presence of several local competitors forces companies to improve and renew their operations. The closeness between companies enables them to observe one another and offer an opportunity to imitate and oversee each other. The more intense the competition, the more firms are pressed to build up more effective solutions and improve their operations (Bengtsson & Kock, 2000: 413).

However, as well as too harmonious interaction within a network of actors, too intense competition can influence the development negatively. Tough price competition of the market shares can delimit innovativeness and cause some degree of inertia (Bengtsson & Sölvell, 2004: 235). On the other end, passive competition can have a staggering effect. All in all, either too intense or passive competition is not regarded as beneficial if becoming permanent state of development (Bengtsson & Johansson, 2010: 456).

Considering the above mentioned challenged, Gnyawali and Park argue that being successful in today’s business world requires firms to adopt cooperative and competitive strategies simultaneously (Gnyawali & Park, 2009: 312). Given this, the strategy that involves both cooperative and competitive elements is called coopetition. The concept of coopetition brings together companies that are simultaneously competing in some areas while collaborating in others in order to keep up with the development and achieve competitive advantage (Bengtsson, Eriksson & Wincent, 2010: 194).

To aggregate the two described logics of interaction to coopetition context, it can be claimed that cooperation is important for utilizing the company’s limited resources in the most efficient way. Consequently, coopetition can be regarded as an effective way of handling both cooperation and competition between actors. The benefits of cooperation can be described as the decreased cost for developing new products as they are divided among the cooperating companies, the possibility for shorter lead times and the notion that each company can contribute with its core competence. To add competitive logic to the arrangement, through competition, the competitors are forced to further develop their products and carrying out their activities in the most efficient way (Bengtsson & Kock, 2000: 424).

2.3 Defining Coopetition

To move on in our theoretical framework, we continue to further elaborate coopetition. Due to the fact that coopetition is an emerging field of research, a lack of conceptual
clarity still remains. Consequently, comparing results between different studies is problematic. In spite of this shortcoming, two main approaches to coopetition can be identified; coopetition as a context or as a process (Bengtsson et al, 2010: 195, 198).

However, before taking a further stance on the definition of coopetition, a preliminary discussion of the elements present in coopetition is needed. As has been pointed out, coopetition involves both cooperative and competitive interaction. Brandenburger and Nalebuff describe coopetition as a phenomenon where competing firms first cooperate with each other to be able to create value and bigger market for every participant. Later on the value that was created together with other participants will be competed over (Ritala & Hurmelinna-Nevala, 2009: 819).

Osarenkhoe (2010: 201) adds that coopetition strategy enhances the firm’s internal resources and simultaneously also the market shares of competing actors. Consequently, coopetition offers the advantage of combining the need to innovate in new areas due to competition while at the same time providing access to new resources as a result of cooperation.

To further coordinate the above standpoints, we return to Gnyawali’s pie metaphor. In line with Brandenburger and Nalebuff, he describes coopetition as cooperation when it comes to creating a pie and competition when it comes to dividing it up (Gnyawali et al, 2007: 259). Moreover, when dividing coopetition into two, Ritala and Hurmelinna-Laukkanen categorize the activities under value creation and value appropriation (2009: 819). Ritala and Hurmelinna-Laukkanen explain value as end-customers’ willingness to pay for the innovation. They further continue that by value creation they mean the total sum of value that is created in the course of innovation activities. The value is generated collectively by combining the assets of different stakeholders. Value appropriation on the other hand is the individual share of value that a company can capture. It is not enough to find ways to create innovations but at the same time a company has to secure its profits. The firm-specific factors have a crucial role when determining who gets the most value. To put it in brief, in coopetition, innovation can be created jointly but the appropriation of its value will be competed over (Ritala & Hurmelinna-Laukkanen, 2009: 821-822).

Given the duality of the two distinct logics of interaction, employing a coopetitive strategy can appear paradoxical (Bengtsson & Kock, 2000: 412; Gnyawali, 2007: 259). As Gnyawali, also Ritala and Hurmelinna-Laukkanen emphasize that understanding the logics of value creation and value appropriation are prerequisites for a company to benefit and gain competitive advantage from inter-organizational coopetition (Ritala and Hurmelinna-Laukkanen, 2009: 819, 821). Thus, learning to manage this duality is the key to success (Gnyawali, 2007, p. 259). It is suggested that separating these two parts of the relationship is crucial in order to be able to manage the complexity and benefit from such relationship. The distinction between cooperative and competitive interaction in coopetitive relationship is described to consist of hostility due to conflicting interests and on the other side friendliness due to common interests (Bengtsson & Kock, 2000: 411-412).

To return to the dispute of the nature of coopetition, we will employ the process view in our research. This decision was made due to the notion above. By applying the process view, it helps us to differentiate the two phases that require different actions from the
company. In addition, it has been remarked that the process approach is becoming increasingly popular. This is due to the fact that it describes coopetition to develop through mutual interaction between two or more entities. Contrary to context approach, the cooperative and competitive parts of coopetition are divided between activities not between actors (Bengtsson et al., 2010: 200). In other words, the two sets of interaction occur between the same set of actors, meaning that an actor simultaneously cooperates and competes with the counterparts in the competitive arrangement. Given this, a company can simultaneously collaborate with another organization in R&D activities while compete in activities related to e.g. marketing. It is further argued that employing process definition allows more precise study of the coopetitive interaction, inherent tensions, and dynamics within the relationship (Bengtsson et al., 2010: 200).

2.4 Drivers behind Coopetition

Before starting to map the specific reasons that make coopetition so appealing strategy for firm’s innovation activities, it is justifiable to first describe the changes in business environment that have made firm’s external linkages of great importance. Prahalad and Krishnan suggest that the fundamental change in business environment can be seen in two areas. One area deals with the notion that no firm is large enough or has enough resources to remain competitive by relying only on internal resources and expertise. There is a need to access resources in the possession of other firms. At the same time they emphasize that firms do not need to own all the resources, as having access to external resources is enough. The other area is related to the focus on the individual by offering them personalized experiences (Prahalad & Krishnan, 2008: 4, 11). In fact, it can be drawn that Prahalad and Krishnan encourage firms to employ coopetitive strategy when they suggest that actions should be taken towards employing the resources of many to satisfy the needs of one (Prahalad & Krishnan, 2008: 6). On other words, these changes drive companies to exploit the benefits that access to broader resource base offers. The gathered resources will be utilized when trying to respond to the increasingly strict customer requirements in terms of personalized experience and a high degree of customization.

There are a number of studies that have recognized the above-mentioned trends. In fact, Bessant and Tidd’s view is rather similar to Prahalad and Krishnan’s. They state that smart firms have always recognized the importance of connections and linkages. It deals with getting close to customers in order to understand their needs. Simultaneously, firms need to work with suppliers to deliver innovative solutions, and engage in collaborations with competitors to build up innovation systems (Bessant & Tidd, 2007: 83). Bessant and Tidd further continue that in the era of global operations, fast paced technological development and a growing number of people with high mobile skills, building and managing networks and connections become the key requirement for innovation. Even the major R&D players have realized that they cannot cover all the knowledge bases that are needed and thus they are looking to form extensive links and relations with other players around the world (Bessant & Tidd, 2007: 83). Furthermore, when it comes to companies belonging into the SME category, the importance of gaining access to external resources is critical for their competitiveness (Gnyawali & Park, 2009).
Solutions required by customers need to cover broader set of needs, it can be stated that heterogeneity of resources acts as a driver for companies to collaborate with their competitors. As the customers are demanding more complete solutions made of complex systems, companies involved in the coopetitive projects have their specific competence areas in which they can give a valuable input. Thus, each of the actors possesses unique resources that can offer competitive advantage. However, sometimes these resources are best utilized in combination with other competitors’ resources (Bengtsson & Kock, 2000: 424).

In line, Brandenburger and Nalebuff suggest that the central idea behind collaborating with competitors is that of complements. At a practical level, this means that having access to competitors’ resources can increase the value of single firm’s offering. Instead of acting alone and relying only on its own resource base, customers perceive firm’s end solution worth more thanks to the additional resources the company had access to (Brandenburger & Nalebuff, 1996). The need to access complementary resources is argued to act as key driver in inter-organizational coopetition. Richardson (1972) suggests that there are two types of resources: similar and complementary. He argues that ‘similar’ resources deal with reducing cost and risks through economies of scale while ‘complementary’ resources cope with managing technological convergence. Richardson’s idea of similar and complementary resources is still actual and can be related to coopetition. In fact, M’Chirgui (2005: 466) notes that alliances among competitors can facilitate gaining access to such resources.

An additional reason behind firms relying on inter-organizational collaboration to access broader resource base is also due to a trend of overlapping industries (Bengtsson & Johansson, 2010: 454). Furthermore, Ritala and Hurmelinna-Laukkanen (2009:819) explain in their article that the growing number of collaborating competitors is due to the fast pace and growing cost of innovation. They point out that this cooperation is associated with activities such as firms sharing the risks involved in R&D, standardizing their existing solutions and even bringing new ones to the markets.

Especially in terms of the high technology industries, cooperating with competitors is noticed to be especially appealing. Gnyawali and Park (2009) point out three factors behind this development that are closely linked with the above described reasons. First factor deals with short product life cycles. Due to the faster pace of technological development, speed to market has become more essential to new product success (Lynn & Akgün, 1998). It is suggested that a firm’s profitability is dependent on its ability to create and commercialize new technologies in a quick and efficient manner (Gnyawali et al, 2007).

The second factor is related to the phenomenon of technological convergence. Instead of one product handling one or two tasks, devices are now expected to manage a wide array of functions. Technological convergence has various effects including the need to combine more complex and sophisticated technological tasks. In addition, technological convergence offers companies the possibility to set industry standards (Gnyawali et al, 2007). The phenomenon has gained attention in several researches. Prahalad and Krishnan recognize that we have reached the point of confluence of connectivity, digitization, and the convergence of industry and technology boundaries (Prahalad & Krishnan, 2008:3). Industries where the phenomenon has been spotted include media, telecommunication, computing and electronics to give few examples (Bengtsson &
It is suggested that industry convergence requires new mindsets from companies as well. Industry specific sources of competitive advantage are not any longer sufficient as putting together one product might require expertise from other industries as well (Bengtsson & Johansson, 2010: 455).

A third factor deals with high R&D costs (Gnyawali & Park, 2009). It is noted that when it comes to high technology sector, the R&D spending of global companies is increasing rapidly. Forming coopetitive relationships offers firms the possibility to combine R&D expenses and expertise (Zineldin, 2004). As the high degree of uncertainty characterizes the high technology industries, sharing risks and costs is crucial (Gnyawali, 2007).

To conclude, the changes in the business environment force companies to consider how they can obtain sufficient resources to respond to the mounting expectations of providing more comprehensive and complex solutions to its customers (Prahalad & Krishnan, 2008). Thus, an increasing number of companies get involved in cooperation with another organization through outsourcing, common product development projects and other joint ventures (Lavie, Lechner & Singh, 2007: 578). To meet the challenge of fast paced development, requirements of technological convergence and high costs related to developing innovations, coopetition can be used as a strategy for dynamic development and competitive advantage (Bengtsson, Eriksson & Wincent, 2010: 194).

### 2.5 Coopetition Process

#### 2.5.1 Cooperative Interaction – Value Creation

Above we determined to discuss coopetition by employing the process view. Thus, in the following we will go through the aspects that call for attention during both cooperative and competitive phases of coopetition. Accordingly, there is a set of separate factors that can be recognized in terms of their influence in the value creation potential. To start with, knowledge exchange is a premise for value creation. When firms possess a common area of knowledge it influences the learning and adoption potential. According to Grant and Baden-Fuller (2004) possessing adequate amount of common industry specific knowledge is a prerequisite for successful knowledge integration and subsequent effective innovation.

Similarly, it can be stated that the common area of knowledge is directly related to higher level of absorptive capacity. According to Cohen and Levinthal (1990) firm’s absorptive capacity is associated with the prior related knowledge the firm possesses as well as the diversity of the background. It is stated that competitors, as they operate in the same field of business, are able to benefit from the common knowledge base. Thus, they possess greater potential in terms of value creation (Ritala & Hurmelinna-Laukkonen, 2009: 823).

Coopetition also provides firms with the advantage of network effects. When competitors share and combine their knowledge bases there are more companies pushing in a selected direction. Consequently, together they can better influence the industry in question. These positive network externalities support the creation of bigger markets faster, offer more value for customers through improved compatibility and...
provide more alternative solutions. Despite the prospect of network effects, it needs to be kept in mind that all industries don’t possess the potential network-externalities. Therefore, coopetition might not be as beneficial strategy in low technology industries (Ritala & Hurmelinna-Laukkanen, 2009: 823-824).

On top of the above benefits that coopetition offers, value creation also entails the risk aspect. As firms are sharing knowledge with each other, there is a chance that knowledge flows are not symmetric and a company gains less value than it gives. Another risk factor includes losing some of the company’s core knowledge that should have been kept secret in case it is unintentionally leaked to other parties involved in the coopetition (Ritala & Hurmelinna-Laukkanen, 2009: 824).

Moreover, sharing resources can lead to opportunistic behavior in which self-interested partners might exploit the weaker partner. Cooperation can enable the competitor first to monitor and then imitate other firm’s core competencies and in this way hamper competitor’s operations. Becoming dependent on the dominating partner might lead to power imbalance and in turn affect the firm negatively (Osarenkhoe, 2010: 218).

Gnyawali et al recognize the same threats; it may not always be easy to establish whether the created value is based on innovation and efficiency, not on squeezing value from other stakeholders. They further continue that firms need to pay adequate attention at the organizational level in designing appropriate processes. These processes are supposed to support the right type and level of information sharing. While they facilitate meeting the cooperation goals, they at the same time prevent the loss of competitively sensitive information (Gnyawali et al, 2007).

2.5.2 Competitive Interaction – Value Appropriation

To proceed, value appropriation will be discussed. It entails an interesting insight. That is to say that when it comes to value appropriation, a company is competing against both, the companies it collaborates with and the companies outside the coopetition project. It can be assumed that while the companies that collaborated with one another are likely to be in better position compared to the ones excluded from the arrangement, they will all be involved in a bargaining game in which the created value is divided. Thus, a company’s ability to differentiate itself from other actors becomes eminent. Some companies are capable of better differentiating themselves in the market and on the other hand firms can have different perceptions of the value they wish to appropriate (Ritala & Hurmelinna-Laukkanen, 2009: 824-825).

While the common knowledge bases and high level of absorptive capacity benefit companies during value creation, they might act as obstacles for efficient value appropriation. The market can quickly become crowded and the similar features in companies’ offerings can in turn lessen the competitive edge for each participant of coopetition. This leads to competitive pressure as at least some market areas are overlapping and consequently the independent actors might make unexpected decisions if profitable opportunities occur (Ritala & Hurmelinna-Laukkanen, 2009: 825).

The risk of opportunistic behavior was already touched upon in the value creation part but given the complexity of efficient value appropriation; the importance of establishing
mechanisms that allow safe knowledge exchange needs to be highlighted again. Consequently, with the help of patents and contracts firms are better able to prevent unwanted imitation and knowledge theft. Thus, paying extra attention on protection is essential for successful value appropriation (Ritala & Hurmelinna-Laukkanen, 2009: 825-826).

The distinction between the two phases of coopetition can be made in terms of the proximity of business activities to firm’s customers. According to Blomqvist et al (2005), firms tend to compete in activities close to customers and cooperate in activities far from customers (Osarenkhoe, 2010: 204). Gnyawali et al (2007) agree with the above by stating that cooperation in value creation may take place in the input stages of the value chain or exploration phase of knowledge management. Competition in value appropriation, on the other hand, might occur in output stages of the value chain or the exploitation phase of knowledge management.

From the strategic point of view, there are more concrete implications on the distinction of the two phases in coopetition. It is suggested that R&D activities can be carried out in cooperation with a competitor while when it comes to launching a new product: competitors choose to compete to distinguish the products from one another (Bengtsson & Kock, 2000: 424). Furthermore, Osarenkhoe gives examples of activities that are related to both value creation and value appropriation phases. He states that firms cooperate with each other in various ways such as standard-setting and market development but compete in others like value-added business practices, price, service and quality (Osarenkhoe, 2010: 205).

2.5.3 Managing Inter-organizational Coopetition

Employing a coopetitive strategy entails finding a way to manage the inevitable conflicts that different goals bring about. Given that, the way the rising conflicts are managed becomes pertinent (Gnyawali et al, 2007). It has been recognized in research (Bengtsson, Eriksson & Wincent, 2010: 199) that coopetition can cause tension at various levels ranging from individual level to tension taking place at the intra-organizational as well as inter-organizational levels. While the individual level of analysis is brought forth in research, in our study the attention will be on the intra- and inter-organizational context as we aim to study the interface of these two. As the simultaneous competitive and cooperative interaction has implications on the above-mentioned levels, this forms a complicated co-action between the actors. Acting as a competitor at one point and as a cooperation partner at another point is not without its problems. As a matter of a fact, the set of different roles that actors can end up playing in the coopetition context, can be further classified as acting as a customer, supplier and rival at the same time (Day and Montgomery, 1999; Bengtsson and Johansson, 2010: 460). Given the inherent tension present in coopetitive relationships, the importance of successfully managing this tension stands out again (Bengtsson & Kock, 2000; Bengtsson & Johansson, 2010; Gnyawali et al., 2007; Ritala & Hurmelinna-Laukkanen, 2009).

Managing coopetition poses challenge for the company’s management. Accordingly, it needs to be kept in mind that it is not enough to possess coopetitive mindset. To successfully manage the coopetitive strategy is the key. Coopetition as a strategic model
supports the exchange of tacit and non-tacit knowledge, but at the same time there might be gaps when channeling the informational flows. Thus collective approach to coordination is crucial in order to efficiently manage coopetition. Abandoning an individual approach in favor of collective more open approach can have two complementary implications. Firstly, distributed knowledge within the participants and secondly the possibility of creating knowledge and know-how (Osarenkhoe, 2010: 219).

As stated above, some firms are better equipped for coopetition. Gnyawali and Park claim that firms that pursue proactive strategy, govern superior resource base, and have the managers who are able to handle the paradoxical circumstances associated with coopetition are more likely to both engage in coopetitive activities and be successful in them (Gnyawali & Park, 2009). Furthermore, De Clercq et al (2011: 693) argue, “when the structural and relational boundary conditions are correctly established, managers can focus on “pie-expanding” efforts to benefit the entire firm, rather than fight for the resources”. This implies that a balance between collaboration and competition is needed to establish the best possible mode of action for coopetitive interaction.

2.6 Intra-organizational Perspective

Innovation can be seen as a process consisting of different activities that require the input of several departments inside an organization. At the same time the external linkages and the access to resources’ of other actors support the process. Willoughby and Galvin (2005: 71) state that technological innovation is not a random process, but is rather a complex interactive process that is affected by a range of both internal and external influences.

Previously innovations were largely created within organizations. However, as noted above, the fast paced development, emerging requirements related to company’s resources have put increasing emphasis on inter-organizational collaboration. The direction is towards growing emphasis on external linkages of networks and strategic alliances along with formal and informal linkages with customers and suppliers are vital part of the innovation process as important elements in stimulating the process (Willoughby & Galvin, 2005: 57, 61-62; McAdam & McClelland, 2002).

It is suggested that building links across the boundaries inside an organization and to the external agencies play important part in the innovation process. Being successful in innovation game requires broad set of connections and the ability to find, form and deploy creative relationships are of the essence. Bessant and Tidd further continue that innovation is not only about the R&D side but that market knowledge around customer needs and wishes plays important role for innovation as well (Bessant & Tidd, 2007: 90, 435).

Bessant and Tidd bring along an additional dimension when stating that innovation appears to be dependent upon two key ingredients – resources such as people, equipment, knowledge and money and the capabilities in the organization to manage them. They argue that it is the latter one that is harder to get a handle on but it is the critical one that either makes or breaks the process (Bessant & Tidd, 2007:10).
As Bessant and Tidd noted, having the access to knowledge is not enough. The firm’s ability to acquire, assimilate and exploit knowledge is dependent on the absorptive capacity of the firm. Firms’ existing knowledge base affects the firm’s ability to search and recognize the value of new knowledge as well as assimilate this new knowledge into the firm’s operations. Therefore, the value of any external linkages is not the amount of knowledge that they are able to provide, but rather the amount of knowledge that can be effectively assimilated and applied on the basis of the firm’s own absorptive capacity (Willoughby & Galvin, 2005: 61-62).

To elaborate these two views, unless the company possesses strong knowledge internally, it doesn’t either have the ability to efficiently use the externally generated knowledge. Thus, the company doesn’t have the capabilities that were described to be crucial for the innovation process. Given this, there is a need to pay attention to both internal and external approaches when it comes to managing innovation (Willoughby & Galvin, 2005: 61-62) and further on, these factors should be especially considered in terms of coopetition.

As coopetition involves the competitive element, it is necessary to consider firm’s internal capabilities. Given that the ultimate purpose of coopetition is to capture the largest possible share of the market after collectively creating value, the firm specific factors are crucial. In terms of the internal orientation, Willoughby and Calvin claim that it is characterized by focus on increasing knowledge intensity of the firm. They even argue that the greater a firm’s knowledge base is, the better is also its absorptive capacity. This implies that a strong internal expertise forms strong basis for being successful in inter-organizational context. In addition, even though it is usually a company’s investment on R&D that is used to measure firm’s internal innovation orientation, expertise throughout organization’s operations is of importance (Willoughby & Galvin, 2005: 60-62). Ernst et al. (2010: 80-82) point out that different departmental orientations provide complementary information that is valuable for the new product development and further continue that cross-functional collaboration has been recognized as a key success factor in such projects.

### 2.6.1 Cross-Functional Cooperation and Competition

A set of varying knowledge that different departments possess is needed when striving to generate innovations. Accordingly, it is proposed that innovation process is increasingly maintained across department boundaries with the help of numerous participants. Cross-functional cooperation requires interaction from many internal stakeholders in order to find best organizational forms for innovation projects (Hauser, Tellis & Griffin, 2006: 694-696).

Also Luo et al (2010: 250) emphasize the importance of cross-functional collaboration throughout the product development process. The wide range of development tasks need to be coordinated with various business functions, including R&D, marketing, manufacturing, and purchasing (Krishnan & Ulrich, 2001; Peterson et al., 2005). However, in new product development the coordination between different functions is not without its problems. The fact that functions are specialized in different tasks, have differing goals, responsibilities, routines, and culture brings with the challenge (Luo et. al. 2010: 252). To tackle the challenges in cross-functional collaboration, De Clercq et
al (2011:681) suggest that firms should pay attention to informal interactions (Tsai & Ghoshal, 1998), development of trust between functional departments (Bosch-Sijtsema & Postman, 2009; Bstieler, 2006) and the presence of shared goals across the organization (Xie, Song & Stringfellow, 2003).

Despite the benefits that cross-functional collaboration offers, Eisenhardt and Galunic (2000: 96) suggest that often cooperation and competition coexists in organizations. Management doesn’t actively pursue competitive behavior but it doesn’t discourage it either. According to Bouston et al (2001: 19-20) business units within an organization don’t only compete for financial resources but the list includes also information, power, support and legitimacy. Depending on the organization, the degree of competition varies.

Birkinshaw and Lingblad (2005: 676) define cross-functional competition as “the extent of overlap between the charters of two or more business units in a single organization”. They continue that it can have both positive and negative consequences for the company. The benefits of cross-functional competition are suggested to entail shorter time to market, enhance the array of strategic options available and broaden the coverage of different market segments (Birkinshaw & Lingblad, 2005: 674, 676; Kalnins, 2004; Sorenson, 2000). The negative influences on the other hand include duplication and waste of a company’s resources and the possibility that it leads to non-collaborative behavior between different operational units (Birkinshaw & Lingblad, 2005: 676).

Birkinshaw and Lingblad (2005: 684) also point out that while in some conditions overlapping unit charters can be justifiable, it is important to understand when it is reasonable to support competition and when it should be discouraged. Thus, the management has to stay alert to intervene if the competition gets destructive in order to retain an appropriate level of coherence within the organization. Accordingly, it is management’s responsibility to structure the firm and its processes in a manner that enables efficient resource allocation (Birkinshaw & Lingblad, 2005:675). In similar manner, Bouston et al (2001: 21) mention that while certain level of competition can be beneficial for firm’s performance, cooperative structures between units are suggested to be more beneficial than the competitive ones.

### 2.6.2 Cross-functional Coopetition

Above we brought forth the collaborative and competitive elements within an organization. In fact, the cross-functional interaction across firm’s functional units has been mostly described either as cooperative or competitive. On the one hand, several researchers have viewed inter-departmental interaction from cooperation perspective, with focus on the value that cross-functional coordination and communication bring about. On the other hand, other researchers have focused on the competition aspect in terms of the rivalry between functions (Luo, Slotegraaf, & Pan, 2006: 67).

While the functional units compete with each other to achieve diverging goals and strategic priorities, at the same time, they also have to collaborate in order to pursue firm’s common interests. Thus, it is important to gain an understanding of how these conflicting types of interaction affect company performance. By employing a
coopetitive view, it addresses the need to study complex cross-functional structures as well as coordinate diverse and competitive knowledge across the departmental boundaries within the company (Luo, Slotegraaf, & Pan, 2006: 68).

It has been pointed out that taking advantage of the diverse knowledge that different functional units possess and succeeding to transfer the knowledge across departmental boundaries is a critical component for firm’s performance. Furthermore, it has been acknowledged in the marketing literature, that company’s market knowledge has to be disseminated across functional boarders before it can act as a strategic asset. Thus, a firm’s ability to transfer the market knowledge across functions can act as a source of competitive advantage (Luo, Slotegraaf, & Pan, 2006: 67, Maltz & Kohli, 1996).

At the same time, it has been noted that knowledge transfer across the departmental boarders can be complicated and difficult to achieve. Despite the organized efforts to share knowledge, individuals tend to guard and selectively share information (Gilmour, 2003). Subsequently, barriers to disseminate market knowledge have been studied. The factors that can impede knowledge transfer are suggested to include lack of absorptive capacity, arduous relationship and causal ambiguity (Carilile, 2002). These factors will be explained in more detailed manner later on. Furthermore, there are situations where intensive competition between departments causes reluctance to share information to competing functions that would increase the value of their knowledge. Given the paradox between cooperative and competitive interaction, it is worthwhile to consider whether cross-functional coopetition can enable company to achieve competitive advantage (Luo, Slotegraaf, & Pan, 2006: 67).

To relate the concept of cross-functional coopetition to that taking place at inter-organizational level, despite the collaboration between competitive elements, there is a difference. As the level of analysis differs, the competitive element of coopetition is presumably different depending on whether it takes place inside firm’s boundaries or at inter-organizational level. It is likely that conflict and rivalry are not as extreme within company as between companies. Furthermore, characteristics such as anticipated future interaction and relationship are suggested to play a role in inter-organizational context while they are expected to be absent in cross-functional coopetition. The research has also recognized the similarities between cross-functional coopetition and market orientation, which will be discussed later, as the both stress the importance of cooperation across functions. However, while market orientation aims to reduce inter-departmental conflicts, cross-functional coopetition suggests that conflicts can also have positive implications (Luo, Slotegraaf, & Pan, 2006: 69).

In fact, the joint occurrence of intra-departmental collaboration and competition can create synergy that in turn improves firm’s market learning as customer and market knowledge is transferred across departmental boundaries. While the competitive element implies the interest in knowing more about competing departments’ positions, the cooperative capability to recognize, adopt and utilize the specialized market knowledge in company-wide level is suggested to have positive influences (Luo, Slotegraaf, & Pan, 2006: 69-70). In addition, cross-functional coopetition is also suggested to improve firm’s market learning as it enables departments to enhance their knowledge stocks in proactive and innovative manner (Luo, Slotegraaf, & Pan, 2006: 70).

Luo, Slotegraaf, & Pan (2006: 76) further suggest that a combination of the concepts of
cooperative intensity and cooperative ability can enable to solve the problem of “fail-to-use” when it comes to valuable market knowledge in cross-functional coopetition context. Furthermore, the coexistence of cross-functional collaborative ability and competition brings with it the capability to spot and adopt the tacit market knowledge while the co-occurrence of cross-functional cooperative intensity and competition offers the needed channels for efficient knowledge transfer across departmental boundaries.

In terms of performed research, market learning is suggested to play a major mediating role in terms of the extent to which cross-functional coopetition affects company performance. Thus, it is suggested that market knowledge and inter-departmental learning play major role when taking advantage of the cooperative ability and intensity among rival units in terms of improved company performance (Luo, Slotegraaf, & Pan, 2006: 76). We will proceed by portraying the changing dynamics between company-wide market orientation and traditional marketing unit and their importance in innovation and coopetition.

### 2.6.3 Market Orientation

The basic concept of market orientation can be described as company-wide attitude and atmosphere, where all the actions made, are made focusing the customer’s advantage and needs. Marketing orientation is based on knowledge of customer, competitor and overall market situation and it demonstrates delivery of superior value to customer. Market orientation requires adequate understanding throughout the organization of customer needs, competitors’ actions and plans and future trends and it enables company to develop and identify capabilities for long-term performance (Gök & Hagioglu: 2010: 291-292) as will be discussed below.

Kohli and Jaworski (1990: 4) have divided market orientation to three dimensions which companies are recommended to take into consideration in their processes. First of all, they define market intelligence as the base for market orientation. It stands for deeper, non-verbalized needs and preferences of customers and analysis of possible external influences to business and market, such as government laws and regulations, technology, competitor’s actions and other environmental forces coming outside of company. Scanning of these environmental activities is crucial. The concept of market intelligence constitutes to sensing customer’s future needs and how competitor’s actions may affect them. According Kohli and Jaworski, company needs to stay one step ahead of its customers and competitors, as it requires time to develop new products. They also pointed out the importance of retailers, as companies need to maintain relationship with them, as they are the ones who actually sell and promote company’s products. Market intelligence can be developed using primary data from market or secondary sources and it is not only marketing department’s responsibility to obtain it. R&D department can for instance exploit the information from scientific conferences and executives can utilize knowledge from professional magazines. Market intelligence doesn’t only consist of investigating the customer needs but it also involves analysis and interpretation of forces, which may influence the market or customer preferences.

Market intelligence is a useless part of company’s market orientation if it is not extended throughout the organization. Consequently, communication and dissemination is required between departments and individuals, even throughout the whole
organization, in order to respond effectively to market and customer needs. The information doesn’t have to flow from the marketing department to other parts of the organization. Instead it can be disseminated to the opposite direction as well, from other departments to marketing department, depending on where it has been generated. It is indicated that informal discussions is a very powerful tool to disseminate market intelligence and to keep employees tuned about customer’s current needs. Horizontal marketing intelligence communication occurs both within and between departments and coordinate their participation towards organizational goals (Kohli & Jaworski, 1990: 5-6).

However, there will not be any concrete benefit of this process for firm’s operations if the gathered and disseminated market intelligence is not accomplished in company’s actions. The responsiveness stage of market orientation completes the whole process when responsive activities such as defining target markets, designing products and services according customer needs, distribution and effective promotion activities are selected. Therefore all departments within a company need to adopt market oriented strategy in order to response to market necessities (Kohli & Jaworski, 1990: 6).

Carlile argues in his article (2004: 558-560) for another definition about market intelligence transferring and processing in organization. Knowledge is transferred across information-processing boundaries between sender and receiver in organization and common lexicon explains how to process and transform this knowledge into a usable form. When issue discussed is new, there is a risk of misunderstanding and conversationalists need to be aware of additional effort needed in order to explain topic in right and intelligible manner.

Sometimes there are situations where common lexicon is not enough to explain differences and dependencies in domain-specific or novel topic and it is unclear and ambiguous for conversationalist. As a solution they can apply interpretive differences and shared meanings in order to translate information. Cross-functional collaboration and use of shared methodologies is emphasized to use in order to cross this translating knowledge boundary. Some individuals can also be used as translators when they are able to flow vague knowledge across the functional boundaries (Carlile, 2004: 558-559).

Tacit and explicit knowledge is critical for organizations and Carlile states it as a challenge to move it across company boundaries even though that stated to be very important part of market orientation and its adaption in organization. He suggests that using common meanings is necessary in order to translate this knowledge in an executable manner. In some situations, some negotiation is needed to generate general knowledge. Different interest and domain- knowledge create barriers for common meaning development and actors need to negotiate and share knowledge to reach satisfying solution (2004: 559).

Knowledge transforming can be challenging when actors have different interests and expectations about the final result. In this circumstance common- and domain- specific knowledge need to be transformed and shared effectively beyond department boundaries. When actors’ interests are in collision, knowledge generated in other department can cause negative effects and consequences in another department. In order to transform current knowledge available and usable for everyone, actors need to learn
knowledge from another department also which further on requires excessive bother as a cost which instead negatively impacts their willingness to do so (Carlile, 2004: 559). Actors need to be able to create new forms of knowledge, study its consequences and transform their domain- specific knowledge into a knowledge mixture and to applicable conformation.

When a company exploits this constant collection of information from market, sharing accumulated information within company and assimilate and utilize it in its processes, market-oriented organization is able to create and develop learning organization which encourages it to continuously improve firm’s processes and systems and become more distinctive in competitive market (Kumar et al, 2011: 17- 18).

Moreover, Tikkanen and Vassinen (2010: 37) also argue that there is a positive relationship between results of marketing and inner cooperation within company. This fact supports the general knowledge about the importance of marketing as a value increasing function over department borders and its contribution to coopetition. Market orientation is structural decision, which has to be considered in company’s strategy and in all its business processes (Tikkanen & Vassinen, 2010:76). Therefore we elaborate more detailed marketing function’s role in organization and its role in innovation and coopetition processes.

2.6.4 Marketing’s Role within an Organization

In the coming sections attention will be first paid on marketing function’s role within an organization and its participation to company’s business processes. After that we will elaborate marketing function’s role in creating innovations and discuss marketing in relation to coopetition. Finally, we will consider the process that is involved when market knowledge is transformed into a form of strategic importance and the challenges that it involves.

The term marketing can be described in as many ways as there are describers, but too often it is seen just as one- way advertising from a company to its customers and cooperation partners. Tikkanen and Vassinen (2010:14) determine marketing followingly: Marketing’s main task is to advance company’s own interests. It creates and develops relationships with customers and cooperation partners and satisfies their needs and preferences with help of imagination, magnitude and exchange economy. Instead, American Marketing Association released 2008 their new definition for marketing ”Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large” (www.marketingpower.com). The famous scientist Peter Drucker has said in 1950’s that the main target of business is the creation of customer and to see all the business activities behalf of customer’s needs. This is still consistent with the perception today (Tikkanen & Vassinen, 2010: 112- 113)

Since the 1990’s marketing function’s role has changed from an individual function to one that reflects more company’s values and processes in which implementation all company’s functions participate. Modern marketing practice and theory have demonstrated marketing as leading philosophy, named market orientation, for entire
organization (Gök & Hagioglu: 2010: 291- 292). Market orientation, as we described above, is a major determinant and an important component when it comes to success in the market.

Rapid changes and developments in external and internal environments have still changed future forms of marketing department and implementation of marketing processes. Globalization, fierce competition, technology and complexity of customer demand have changed marketing concepts and marketing related activities in practice. Those activities have become more diverse and are often carried out by other functional areas in companies or even by several individual companies. It is not surprising anymore if for instance day-to-day brand management, pricing or product distribution are carried out by someone else than traditional marketing department. (Gök & Hacioglu, 2010: 292- 295) Diversity of organizational functions participating in marketing activities and integration of other activities with marketing is perceived essential in order to produce better outcomes (Jimenez-Zarco, Martinez-Ruiz & Izquierdo-Yusta, 2009: 44- 45).

On the other hand, practical and theoretical arguments support individual marketing department. Too widespread marketing activities are difficult to coordinate, especially if the marketing department falls to bottom of company hierarchy. As a result the assembled customer information may get lost or became too scattered (Verhoef & Leeflang, 2009:29).

Marketing is suggested to be present everywhere. Moreover, without successful marketing and connection and communication with customers there is no business. Meanwhile the marketing department’s role as a key-link between customers and company has decreased, firms have turned to be more market oriented which in turn has positive influence to overall business performance. In the article Understanding the Marketing Department’s Influence Within the Firm (2009: 27-29) Verhoef and Leefland discuss the importance of marketing department and its positive influence to firm’s market orientation and performance. Consequently, market oriented companies tend to have strong marketing departments indicating a clear relation between these two.

Linking marketing together with company’s strategies helps to create customers and to raise shareholder value. Marketing strategies aim to create and build brands and images that customers are interested in (Raiaigopal 2011: 182-183). Engelen states in his article (2011:231) that in companies with product differentiation strategy marketing function’s role is very important while companies with cost-leadership strategy should draw more attention to R&D and manufacturing departments. Strategic marketing determinates customers who form company’s market, in the center of whole business strategy and starting point for business activities. This market-driven strategy provides company-wide perspective and enables more effective integration of activities and processes which impact to customer value and to their interest about company. Strategic marketing includes attributes like implementation company-wide market-oriented attitude, capability to fulfill customer needs, superior performance in all processes and ability to match customer value requirements to company’s capabilities. Concurrently, globalization, technological diversity and uncertainty, internet and ethical behavior and social responsiveness have challenged traditional business processes and set their limitations to performance (Cravens & Piercy, 2009: 3-4, 18-22). Studies have shown that influential marketing is related also to turbulence and unpredictable changes in the
market, competitive strategies and business field (Verhoef & Leeflang, 2009:15). Cooper	ition, as a company’s strategy in innovation and competition in the market, is the result of this.

Nowadays, the marketing department’s role is concentrated to internal and external management, knowledge generation and management like advertising, segmentation and positioning and as well to customer relationship marketing (CRM), marketing productivity and performance management (Gök & Hacioglu, 2010: 292-295; Verhoef & Leeflang, 2009:26). The larger the company is, the more complex is its inner structure. While every department has its own strategy, it is still the company’s overall market orientation attitude that guides them towards success in market.

This research we will concentrate more on the detailed generation of market knowledge and distribution of it throughout the organization. Before all the information from market can be shared it has to be processed to usable form according to receiver’s needs. Furthermore, we want to examine the possibilities and standards of activities of this process for companies in order to use market knowledge in the best possible way, especially in innovative coopetition procedure.

2.6.5 The Marketing Function’s Role in Innovation Process

After having discussed both inter- and intra-organizational coopetition in general and having formulated the important role of market orientation and marketing function, we will pay attention in marketing function’s role in practice. Moreover, as coopetition is often employed in order to develop innovative solutions, we will start by mapping marketing’s role in innovation and further elaborate its role in relation to coopetition.

In order to make innovative solutions in companies, cross-functional collaboration is emphasized. Thus, we are to describe the role and contributions of marketing function during the innovation process. When it comes to new product development, it can be divided to different development stages. Consequently, integration of marketing and R&D during the process is crucial for new product’s success. It is argued that marketing plays essential role in the innovation process as it can give suggestions for new product development straight from the market, as it has close connections to it, by translating customer needs into new products (Verhoef & Leeflang, 2009:17). In fact, Malhotra et al (2004: 9) describe marketing as the most significant interface between firm and its customers. Especially during new product development projects, managing information flows between the market and the firm is crucial.

There are two viewpoints to innovation process; R&D department links innovation closely to technological change, development and R&D activities while marketing stands for discovering and fulfilling the needs and wants of potential customers. In that sense, it can be claimed that the degree of market orientation, which involves detecting customers’ trains of thought, responding to them and competitors’ actions, is linked to innovativeness. Recent literature asserts a point of view according to which, R&D represents technology push-effect and marketing respectively pulls the concept forward. Both of these functions are major determinants during innovation processes, and if well received by customers, will impact to business performance (Viaene & Januszewska, 2008: 80; Hauser, Tellis and Griffin, 2006: 694-696). In a similar manner, De Luca et al (2010:315) describe the liaison between R&D and marketing by suggesting that the
coordination of the complementary areas of expertise requires formal mechanisms in order to integrate the customer knowledge within scientific knowledge during the innovation process.

Marketing departments hold a wide range of information relevant for NPD process. It is suggested that the responsibilities of marketing include among others market trend analysis, market research results, market segmentation, opportunity assessment, product positioning and communication with customers while R&D is responsible for generating new technology by applying technological knowledge to new products (Ernst, Hoyer & Rubsaamen, 2010: 81). As the marketing function has particularly close relationship with customers and market, the knowledge marketing function has about the customers is broader, deeper as well as more tactical and specific of nature. However, processing the gained information can be challenging, as translating it into appropriate form is not without its problems. This view suggests that marketing knowledge generation is inter-organizational, cross-functional processes where company integrates all essential information to its process and future performance in order to develop competitive advantage (DeLuca & Atuahene-Gima, 2004:96-97)

The strategic information that marketing possesses is essential as marketing department investigates the broader picture of new product process, its market and its implications to overall business at the same time providing crucial information about customer needs (Ernst, Hoyer & Rubsaamen, 2010: 81-82). In line, De Luca and Atuahene-Gima (2004:96) state that it is not marketing knowledge itself that enhances product development rather than how all this knowledge available is integrated with other functional units to the product development process. Knowledge of technology and other environmental features is important as well but only if it enhances the understanding of customer.

Ernst et al (2010:82) divide new product development process into three phases; concept development, product development and implementation. They further explain that concept development includes generating and refining new product ideas, performing market analysis and preparing the product concept. Product development on the other hand deals with the actual technical product development, testing prototypes and test marketing. Finally, during the implementation phase product is launched and training and after-sales support provided.

As we discussed the coopetition process in the previous part, the above viewpoint to new product development process can be seen to be in line with that of coopetition. In fact, value creation can be placed in same category with concept and product development. Accordingly, value appropriation is related to implementation.

To proceed with marketing function’s role, as it has been pointed out above, during the early stages of new product development marketing provides valuable customer information and usable ideas about customers’ preferences. The implementation stage is described to be especially challenging, as it is the phase that is directly related to the share of the market company succeeds to capture. Ernst et al (2010:88-89) point out that marketing department is responsible for the actual planning and preparation of product launch. They state that even great functions of new product are futile if launch process fails and thus product doesn’t reach target customers and get share of the market.
Given the importance of successful launch, Easingwood and Harrington (2002: 659-661) further describe the activities related to launch stage. Entry signaling for new product marketing starts with market preparation where awareness of product is built and important relationships with retailers and other cooperation partners are formed. New products, especially in technology industry, are more likely to get adopted in the market if marketing strategy is compatible and if products are clearly targeted to certain market segment in early stage of product launching. Some new technologies are also so specialized and some provide so wide range of applications that determination of positioning strategy and target segments is crucial. Stabilizing the position in market and triggering positive purchase intention is of course the main goal of new product launch. It all still depends on objectives and state of launch and awareness of it. As is stated before, stabilization varies whether it is question of radical or incremental innovation. For completely new products, which don’t have high awareness in the market, execution tends to focus on convincing customers about the benefits of product. On the other extreme implementation of product that is known, the launch focuses more on establishing the brand name and competitive advantage.

To conclude the implementation stage, the importance of marketing and R&D cooperation is again emphasized. When it comes to technological industry, the new product features have to first be taught to salespeople that in turn can then educate clients and offer better support for them (Ernst et al, 2010:88-89).

As Song, Montoy-Weiss and Schmidt suggest (1997: 36-45) new product is more likely to succeed when firm employs stage-specific and function-specific standards of activities of cross-functional integration and do not strive to integrate all its functions to all NPD stages. Accordingly, cooperation is critical from early stages of NPD processes and implementation of managerial contribution is important. They create strategic direction and provide policies and procedures which foster inter- and cross-functional cooperation in NPD process. Yet, Ernst et al. (2010:82) point out that cooperation between different functions doesn’t have equally strong impact to NPD performance during all NPD stages and concurrently importance of each function to innovation projects highly depends on the nature of tasks and activities.

To proceed, Hauser, Tellis and Griffin (2006: 694-696) argue that there is a need for firms to pay additional attention on how it organizes innovation. As innovations are increasingly managed across boundaries involving several actors, there is a need for study the best organizational forms for inter-organizational development projects. They further point out that the relationship between how organizations act across boundaries and integrate marketing concepts into a product development projects lacks research.

2.6.6 Marketing in the Interface of Intra- and Inter-organizational Coopetition

It is suggested that in terms of coopetition marketing is usually related to the competitive phase while companies usually cooperate in R&D (Bengtsson et al, 2010: 200). Malhotra et al (2004: 13) are of same opinion and state that even though marketing has implications during all new product development stages, the importance of it to commercialization is emphasized (Malhotra, 2004: 13).
As marketing activities are often associated with launch and commercialization, accordingly, it can be suggested that the role of marketing in coopetition projects is crucial. Malhotra et al (2004:9) state that as technological development is important for economic growth, it is particularly the commercialization stage that changes the way people live and that consequently generates economic welfare. They further explain that marketing communications and feedback are cornerstones for success during the commercialization stage. When it comes to the success of high technology products, marketing department’s input is essential.

Although it can be suggested that marketing will play important role in the last stage of coopetitive innovation project, what remains unclear are the contributions of marketing function during the earlier phases. As Verhoef and Leeflang (2009: 17,30) pointed out, marketing function should play a more active role and accordingly make better use of its market and customer knowledge. It competes for company’s resources and attention with other department but with the help of their expertise of clients, marketing function could be more involved in initiating new innovations and further developing the concepts in spite of how it is valued in organization. Verhoef and Leeflang (2009: 29) propose that by employing more innovative and analytical approach, marketing could increase its share in new product concepts, which in turn would lead to greater contribution of marketing to business growth.

In fact, when it comes to marketing’s role in coopetition, the emphasis has generally been on its contributions in the competitive end. However, it has been stated that there is a need for cooperative theory to match those of competition and conflict. Thus, it is suggested that research efforts should be directed to establishing more productive and encouraging view on finding ways to encourage collaboration (Osarenkhoe, 2010: 202).

As the market and customer knowledge that marketing function possesses is proven to be important in the earlier phases of intra-organizational innovation process, it could be assumed that marketing function could contribute during the value creation phase in inter-organizational context as well. There is however an interesting insight, in terms of marketing’s contributions during the value creation; how to share the knowledge it has without losing some of its competitive edge in terms of differentiation capabilities during the value appropriation stage. The question is directly related to the paradox of managing two contradicting logics that coopetition involves. Hurmelinna-Laukkanen (2011: 313) suggests that even though cooperation, networking and knowledge sharing can be seen as prerequisites for R&D, innovation and knowledge creation, at the same time there is also a need to control the knowledge assets and flows to successfully create innovations. Accordingly, both knowledge sharing and knowledge protection play important role for firms’ innovation performance (Hurmelinna-Laukkanen, 2011: 313). Even though, cooperation is needed, firm needs to protect its assets in order to be able to capture its share of the value that has been created during the innovation process.

Above we described marketing function’s role in innovation and coopetition processes and emphasized that marketing is the function with deeper understanding of the customer needs and market characteristics. In order to take advantage of it, company has to have ability to transform the information and knowledge to understandable form and distribute it across the departmental boarders. Thus, in the following part, the challenges of the knowledge transfer will be discussed and attention will be paid on the knowledge characteristics that can have implications on the success of the knowledge utilization.
2.6.7 Knowledge Barriers and Bridges

Knowledge has been described as an important component in innovation generation. More specifically, it has been stated that most innovations in fact happen at the boundaries between units with different functions possessing field-specific knowledge, implying the importance of working across boundaries (Leonard, 1995). Research has acknowledged that dialogue crossing specialization boundaries supports new knowledge creation by combining knowledge coming from different sources (Hargadon & Sutton, 1997; Orlikowski, 2002; Alin et al, 2011). At the same time it is suggested that different departments possess their own “thought worlds” that entail differences in their alignments that in turn can complicate cross-functional collaboration (Dougherty, 1992: 179, Alin et al, 2011: 60).

Given the need for company-wide knowledge sharing, the so-called knowledge boundaries represent a major obstacle for efficient knowledge generation. In fact, it has been stated that knowledge is “both a source and a barrier to innovation” (Carlile, 2002: 442). While the characteristics of knowledge that foster innovative problem solving within a unit, in fact complicate the knowledge creation across functions. At the same time, the knowledge boundaries are a necessity when taking into consideration the statement that innovations are generated in the interfaces of different functions and thus the different types of specialized knowledge are crucial components of innovations (Carlile, 2002: 442).

While the specialization boundaries are drawn between company’s different units with different specializations and differing knowledge bases (Carlile, 2004 and 2002), Alin et al (2011: 58) bring up an even more concrete knowledge boundary. Organizational boundary separates two organizations from one another (Santos & Eisenhardt, 2005). Despite the tangible borders between organizations, Nonaka (1994: 17) points out that knowledge creation is not limited to single organization but it takes place in the inter-organizational level as well. Furthermore, the interacting communities can also entail customers, suppliers and competitors.

2.6.7.1 Barriers

Research has identified major barriers in terms of internal knowledge transfer to be knowledge-related factors. These include “recipient’s lack of absorptive capacity, causal ambiguity and an arduous relationship between the source and the recipient”. The same barriers can be considered to apply in external context as well, however, when it comes to internal knowledge transfers they are likely to be faster and less complicated than external ones as confidentiality and legal obstacles don’t hinder the process to the same extent (Szulanski, 1996: 27).

To start with, the recipient’s lack of absorptive capacity can act as an obstacle for efficient knowledge transfer as the recipient is unable to exploit the outside sources of knowledge. In fact, absorptive capacity can be divided into two categories that are interrelated. Potential absorptive capacity deals with identifying and acquiring knowledge from external environment while realized absorptive capacity enables a company to convert the gained knowledge into new insights. Neither one of the
categories is enough by itself but both are required to enhance company’s innovative performance and knowledge creation (Zahra & George, 2002; Zhang et al, 2010: 76). Thus, possessing a sufficient level of common knowledge is necessary to be able to value, adopt and utilize new knowledge to commercial ends (Cohen & Levinthal, 1990: 128; Szulanski, 1996: 31).

In addition, causal ambiguity has been identified as another factor that can represent a barrier when trying to transfer knowledge across boundaries. It has been argued that the complexity in the replication of a capability is likely to be tracked to ambiguity concerning the factors of production and how they interact during the process. Furthermore, when the exact reasons for success or failure in repeating a capability in a new setting cannot be defined, ambiguity appears and makes it impossible to draw up a straightforward list of the factors of production (Szulanski, 1996: 30-31). In addition, causal ambiguity can also originate from insufficient understanding of the characteristics of the new context where knowledge is to be used (Szulanski, 1996: 31).

Final obstacle to knowledge transfer includes arduous relationship between the source unit and the recipient unit. In terms of disseminating knowledge across boundaries, when knowledge has tacit components that require several individual exchanges, the ease of communication is a crucial factor. Thus, if the relationship between the source and the recipient unit is considered to be laborious and hard, it poses an obstacle for efficient knowledge transfer (Szulanski, 1996: 32).

Moreover, Dougherty (1992: 181-182) presents a set of factors that can prevent company’s knowledge development – organizational routines and departments’ differing “thought worlds”. In fact, there can be seen similarities between them and the barriers described above. Firstly, too strong emphasis on routine operations can imply that it is enough that everyone knows his/her own job and that there is no need to be aware of others’ jobs. In addition, routines represent a tool to avoid conflicts and for that reason it is difficult to change them as members of the organization are unwilling to do that.

Another factor that can be seen as a barrier to knowledge creation is different departmental specialization (thought world). Thus, belonging to a certain thought world influences how a person filters information. While certain function best understands certain issues, it is possible that information that is equally important to the big picture will be ignored (Dougherty, 1992: 182).

Dougherty (1992: 196) claims that routines and thought worlds entail certain level of reluctance that firms need to overcome in order to generate new knowledge. Creating innovations requires company-wide shared action that enables employing complementary perspectives that together will create new knowledge. Thus, it is suggested that management encourages knowledge development processes, joint learning and customer interaction.

2.6.7.2 “Bridges”

Contrary to barriers of knowledge transfer, Nonaka (1994: 27-28) presents enabling conditions for knowledge creation – creative chaos, redundancy of information and requisite variety. First of all, external changes can generate “creative chaos” that in turn launches the process of knowledge creation. In situations that company cannot get
through with existing knowledge it provokes the need to create new knowledge. However, there is a fine line between creative and destructive chaos. In order for chaos to be creative, individuals need to reflect on their actions, as it is an essential component of the process.

The second enabling factor that Nonaka suggests to play a role for knowledge creation is “redundancy of information”. This entails that company’s business activities; information and management’s responsibilities consciously overlap. Redundancy as such can have a slightly negative tone dealing with unnecessary replication. However, in this context redundancy indicates that there is more information available than is directly required by individuals. As there is more information freely on hand, it is possible to create numerous new combinations of information that generate new knowledge. In addition, Nonaka (1994: 28-29) suggests that rotation between different functions can improve employees understanding of the company and open new perspectives.

“Requisite variety” represents the final factor that can support company to organize its knowledge creation. It calls for building the needed structural conditions that manage to process the load of information. Thus, creating the required diversity within the firm equal to the degree of diversity that company has to process can improve company’s efficiency (Nonaka, 1994: 29).

Even though companies can support the process of knowledge creation by providing its employees with a context, companies cannot create knowledge without the input of individuals. The starting point of the whole process is individual who first shares his/her knowledge to others, after which the group of individuals discusses the presented knowledge and eventually as a result new combinations of knowledge arise (Bechky, 2003; Carlile, 2002: Alin et al, 2011: 60). Thus, the knowledge creation process is described to start from individual level, continue up to the functional group level, further on to the organizational level and possibly all the way up to the inter-organizational level (Nonaka, 1994: 20).

2.6.8 Influencing Knowledge Features

After presenting the different factors that create barriers or alternatively support knowledge transfer, it is justifiable to discuss the probable conditions that can take place in the departmental boundaries. There are three features of knowledge that receive further attention: difference, dependence and novelty (Carlile & Rebentisch, 2003; Carlile, 2004: 556).

When it comes to difference in knowledge, it refers to the difference in the amount of gathered knowledge and/or the difference in the type of field-specific accumulated knowledge. As the development has led towards putting together more complex products, it requires differences in the amount and type of knowledge. That in turn brings about differences in the levels of experience, tools, terminologies and incentives that are domain-specific. Furthermore, as knowledge requires investment in terms of time and resources to acquire, it is suggested that it should be seen as “at stake”. Thus, this indicates the notable costs that can be associated with giving it up and gathering different knowledge. While the difference in the amount and/or type of field-specific
knowledge escalates between actors, the required efforts to properly share and assess one another’s knowledge increase as well (Carlile, 2002; Carlile 2004: 556).

To proceed, the second feature of knowledge is dependence. If there is no dependence, difference doesn’t have any impact. Dependence is described as a situation where two actors have to take each other into account if they plan to meet their goals (Litwak & Hylton, 1962). Thus, there is a relationship between the activities and the goals of the parties that are dependent on one another. Given that difference in the nature of knowledge exists, managing dependencies requires the ability to draw up a sufficient common knowledge as resources and situations change. Consequently, when it comes to a setting of complex product development, the challenge lies in spotting and making visible the dependencies that have an impact (Carlile 2004: 556-557).

Finally, the third relational feature of knowledge is the novelty of the circumstances. In terms of new product development, new customer needs that in turn generate new requirements for actors in the specific fields of expertise, is apparent source of novelty. This indicates that the most problematic aspect of the knowledge at a boundary is that there is novelty to share and assess from others for each involved actor. In addition, another source of novelty stems from an actor being unfamiliar with the common knowledge that is used to describe the differences and dependencies between field-specific knowledge. Often, when it comes to novelty, there is a lack of common knowledge to properly share and assess. Thus, when novelty is apparent both in terms of capacity of the common knowledge to describe the influential differences and actors’ ability to use it, are of importance. Furthermore, it has been recognized that it tends to be difficult to abandon previous knowledge. Actors can misrecognize something novel as what is already known or consider what is novel as something irrelevant. Thus, the challenge is to identify what is of influence when novel circumstances arise. Furthermore, as novelty increases, more effort is required to properly share and assess knowledge (Carlile 2004: 557).

Below, we have drawn an illustration of the theoretical framework that acts as a foundation for the empirical part of the research:
The above figure illustrates the process of utilizing market knowledge to create competitive advantage in the inter- and intra-organizational coopetition. The figure takes into account the factors that affect the process in complicating manner. In addition, the influencing knowledge features are added in the picture. Before the gained market knowledge can act as a source of competitive advantage, it needs to be successfully transferred, translated and transformed.

**Figure 2.2: Theoretical framework**
3. Methodology

3.1 Choice of Subject

When conducting a master thesis, the choice of subject has to be carefully considered. It is required that authors of the thesis find a topic that has not been previously studied. Given that we have different specializations; one in business development and other in marketing had its implications when searching for a topic that was relevant for both of us. In the end we believe that having slightly different backgrounds was an advantage as we our views complemented one another.

Given that the recent development has put growing emphasis on gaining access to external resources and providing tailored solutions to fit the individual customer’s preferences coopetition can offer a means to keep up with the fast paced development and achieve competitive advantage (Bengtsson, Eriksson & Wincent, 2010: 194). As coopetition is a rather new research discipline it felt intriguing for us to include coopetition in our study. We started the thesis with a focus on marketing function’s role in coopetition. However, along the way we gained insights on the role of market knowledge and company’s ability to utilize it in order to create competitive advantage. In the end, the choice of subject was not done only taking into consideration our educational backgrounds and interests but also having in mind the revealed potential of the final research question.

3.2 Research Philosophies - Ontological and Epistemological Assumptions

When getting started with our research, an illustration of a ‘research onion’ provided by Saunders et al (2009) acted as a guide in the process of selecting suitable research philosophy, approach and strategy for conducting scientific research. Instead of first focusing on the details concerning research design and technique, they guide researcher to start with more fundamental issues. Thus, researcher is advised to peel off layers of the “onion” and finally end up in the center to select suitable data collection and data analysis alternatives that are in line with the decisions that were made earlier during the process (Saunders et al, 2009: 107-108).

When it comes to the choice of research philosophy it is necessary to first explain what it means. Research philosophy is related to development of knowledge and the nature of that knowledge. It contains important assumptions about the way one views the world. These assumptions, in turn, underpin the research strategy and the methods that will be used as a part of the chosen strategy (Saunders et al, 2009: 107-108).

Ontology deals with the nature of reality or being. According to Bryman (2008:18) the central issue concerning the ontological position deals with “whether social entities can be considered as objective entities that have reality external to social actors, or whether they should be thought as social constructions built up from the perceptions and actions of social actors”. Our ontological position is that of subjectivism – it states that “social
phenomena are created from the perceptions and consequent actions of those social actors concerned with their existence” (Saunders et al, 2009: 110-111). Morgan and Smircich (1980: 494) further continue that, “the social world is a continuous process, that is created anew in each encounter of everyday life”. For that reason it is necessary to study the details of the situation in order to understand the reality behind.

When it comes to our research, we can view coopetition as a social phenomenon that is under constant revision as it is a dynamic process employing two conflicting logics of interaction. Furthermore, it is the individuals involved in coopetitive interaction who through their actions and perceptions impact phenomenon being studied. Rather, the social order is in continuous change as the individuals by their actions pursue to utilize the available market knowledge in the given environment, influence it in each encounter. In line, we believe that subjectivist position suits best to our study as we explore the perceptions of people involved in coopetition.

When it comes to epistemology, it deals with what constitutes acceptable knowledge in a field of study (Saunders et al, 2009: 112). According to Bryman (2008: 12) one of the most central issues encompasses whether the social world can and ought to be studied in accordance with the same principles and procedures as the natural sciences. The epistemological position that acknowledges the importance to imitate natural sciences is known as positivism. Saunders et al (2009: 112-113) continue that a researcher employing a positivist position is likely to concentrate on collecting and analyzing ‘facts’ that can be seen, measured and modified. On the other end, interpretivism is the contrasting epistemology to positivism. An interpretivist researcher has a critical stance on whether one can study the social world with the help of scientific model (Bryman, 2008: 15). Thus, he is likely to doubt if data that is presented in statistical form deserves more authority than those that are presented in a narrative (Saunders et al, 2009: 113).

According to Saunders et al (2009: 115) interpretivists argue that rich insights into the complex issues can be lost if the complexity is reduced entirely to a series of law-like generalizations. To proceed, employing interpretivist view implies that it is necessary to understand differences between humans in our role as social actors. Crucial point in interpretivism is that it requires the researcher to employ empathetic stance. The challenge lies in entering the social world of our research subjects and understanding their world from their point of view. In addition, it is argued that the interpretivist view is highly applicable in business and management research, especially in the fields as organizational behavior and marketing. It is further pointed out that business situations are not only complex but also unique. They are a function of a particular set of circumstances and individuals coming together at a specific time (Saunders et al, 2009: 115-116).

These notions of interpretivist philosophy hold in terms of our research. Again, it is the individuals and their perceptions of the complexity of coopetition projects that are in focus. Coopetition, whether taking place at inter- or intra-organizational level is a process in constant flux. Furthermore, when taking advantage of the gained market knowledge is added in the picture, the question deals with how interviewed individuals perceive the roles he is given and how does he interpret them in practice.
3.3 Research Approach

Saunders et al (2009: 124) formulate the fundamental question in terms of research approach to deal with “the extent to which the theory is clear from the beginning of the research”. While a deductive approach is most suitable for testing existing theories, inductive research approach moves from facts to theory (Kovacs & Spens, 2005: 132-133). The nature of our research project implied that neither deductive nor inductive research approach alone could be selected. Abduction represents the third alternative – it combines both deduction and induction as the approach moves back and forth between theory and data (Suddaby, 2006). Thus, by employing an abductive approach we could take advantage of both systemic character of the theoretical models and empirical world without having to rely solely on one of the two (Dubois & Gadde, 2002: 556). It is stated that the ongoing dialogue between theory and empirical observations, enables the researcher to expand his understanding of both aspects (Dubois & Gadde, 2002: 555).

In the beginning our intention was to study marketing function’s role in coopetition. However, the focus of our research project was reformulated after the first interviews. The findings made us consider if the research question with more potential was different from the one formed in the beginning. Instead of focusing on marketing function’s role, the interviews gave interesting insights concerning the value of gained market information for product development purposes. The changed focus implied that we also had to redirect the formation of the theoretical framework to include aspects that dealt with the process of utilizing market knowledge and the factors that influence it. The dialogue between theory and empirical observations continued as additional interviews were conducted with emphasis on issues concerning market knowledge utilization.

Dubois and Gadde (2002: 555) bring out that empirical observations can result in spotting unanticipated issues that can be further studied by using appropriate data collection methods. In similar manner, the evolving theoretical framework can redirect the search of empirical material. Thus, finding suitable theories to match the observations is typical for abduction and it is often referred as “theory matching” or “systematic combining” (Dubois & Gadde, 2002; Kovacs & Spens, 2005: 138). Abduction can be seen as systematized creativity or intuition in order to develop new knowledge (Kovacs & Spens, 2005: 136). It is considered to be suitable approach when the objective is to discover new things, explore a phenomenon, identify rising themes or explain patterns (Saunders et al, 2012: 665). At the same time, it is rather a question of refining or developing existing theories than inventing new ones (Dubois and Gadde (2002: 559). We believe that after conducting the research we will in the end generate new knowledge of the chosen topic.

Given the above, we are of opinion that the set objectives of our study are best met with abductive approach. Coopetition as such is a rather new research discipline, implying that there are not yet established theories that could be tested in large sample studies. In fact, it is stated that it is common for case studies to use abductive reasoning (Kovacs & Spens, 2005: 139). In line, we have chosen to conduct a single case study in which coopetition provides us with the context where the utilization of market knowledge will be studied.
3.4 Research Strategy

As we move on to select the research strategy, the choices that we have made so far have their implications on this particular choice as well. When it comes to research strategy, the choice is made between qualitative and quantitative strategies. According to David and Sutton there are four distinctions at place when it comes to qualitative and quantitative approaches. To start with, the distinction can be made between meanings and numbers, induction and deduction, subjectivity and objectivism, and finally between depth validity and generalizability (David & Sutton, 2011: 82). Above we have established our research to employ subjectivist position and abductive approach. Further on, as the choice of our research topic doesn’t encourage large-scale study that would entail focusing on numbers and figures, we are to focus more on the aspect of meanings drawn from studying interaction in specific context. Thus, given that we’ll concentrate to study the specific surroundings, issues concerning with depth validity are closely related to our research instead of drawing up assumptions that are of generalizable nature.

Moreover, in the beginning of our research project, we had to assess what kind of information would be most valuable for us in order to response to our research question and what kind of research strategy would best fulfill our knowledge needs. When the research problem is defined to best understand and explore the phenomenon and concept of problem (Creswell, 2003: 74), we had to examine what kind of results we wanted to have. With a lack of knowledge concerning our research question we need to explore the topic when variables and theory base are not well established, we found qualitative research approach to be more appropriate. Creswell cites Morse (Creswell, 2003: 75) in his book when describing qualitative research: “Qualitative research problems characteristics are lack of theoretical knowledge and previous researches done of topic, realization that available theories are inappropriate, inaccurate, incorrect or biased. There is a need to explore and describe the phenomena and develop theory for inscrutable subject and phenomenon’s nature may not be suitable for quantitative research methods”. Qualitative research stands for theory generation instead of testing it, it interprets and in-depth analyses research responses and focuses on particular words rather than quantity of responses (Bryman & Bell, 2007:27). The characteristics described above are relevant for our research. The lack of established theories in the field of coopetition and the need to explore knowledge exchange within and across companies are facts that support our choice of applying qualitative research strategy.

Qualitative research design gains preliminary perception about research problem and its opportunities. It aims to discover and identify new ideas and thoughts and understand perceptions of respondents. Qualitative research method wants to develop reliable and valid scale of measurements in order to investigate specific factors, which influence to research results. Sample sizes are relatively small and researchers value even little specific information over generalized information. This research method is timely and economical, but on the other hand provides richness of data. On the other hand there are difficulties to generalize results to wider population, to establish reliability and validity and small differences can be challenging to observe (Shiu, Hair, Bush & Ortinau, 2009: 171-174). Given this, qualitative research is associated with prioritizing depth validity instead of generalizability (David & Sutton, 2011: 86). Ultimately, keeping in mind that conducting quantitative large-scale studies of coopetition at this stage of development is
not recommended it can be established that qualitative research strategy, provides us with the more appropriate tools to answer our research question.

3.5 Conducting the Literature Review

As we got started with our research project and gathering material for the literature review, we relied on the resources provided by the Umeå University Library as well as the databases of the university libraries in Vaasa and Seinäjoki that we had access to. However, as the main source of information was gained through Umeå University Library, we searched literature from Album as well as Business Source Premier and certain scientific publications that were related to our research topic. When performing the information search we paid attention to the trustworthiness of the resources and prioritized sources that had been peer-reviewed. In addition, our supervisor gave us valuable tips concerning research performed in the field of coopetition and thus, provided us with additional material that could have otherwise been left unexplored. On top of the employed actions to ensure the quality and credibility of the used sources, the previous educational experience of the authors provided us with appropriate means of critically evaluating the sources of information.

3.6 Research Design and Technique

Case study is a research design that can focus on one specific ‘unit’ such as individual, group, organization or area. What distinguishes case studies from experiments is that they are not conducted in controlled conditions. Case studies provide in-depth information (Saunders et al, 2009: 165-166, 607). There is a range of research methods that can be used in case study. Such include for example interviews and questionnaires, focus groups, observation and document.

According to Yin (2009: 2) “case study can seek to explain an individual, outcome, event or community situation; it may seek to explore or describe”. Explanatory case studies tend to be quantitative and deductive while exploratory and descriptive studies are more inductive and qualitative of nature. Depending on the nature of case study, the methods of design, data collection and sampling will be selected accordingly (Saunders et al, 2009: 166).

When it comes to defining a ‘case’ it is not as simple as one might think. In terms of social life, there are no isolated units and this leads to observation that cases can be selected at smaller or larger levels of both size and scale. In terms of the scale dimension, a case can be human individual, family, group, organization or locality. However, size wise a case can cover a short period, narrow space, and small number of individuals or groups. Accordingly, boundaries of a case might vary in scale and size and lead to tensions (Saunders et al, 2009: 168).

Saunders et al (2009: 168) argue, “A case study is expected to catch the complexity of a single case”. Emphasis in our study will be on internal validity and the internal character of the individual case. David and Sutton (2011: 169) explain that case studies study real life events in their natural settings. Goal is to practice sound research while
capturing both a phenomenon and its context. One of the strengths of performing a case study is its usefulness when phenomenon and context are not readily separable. Another strength is that case study enables us to address how and why questions about the real life events, using broad variety of empirical tools (Yin, 2004: xii).

In terms of our research, it has been suggested by more experienced researchers in the field of coopetition that as the phenomenon is rather new, there are not yet appropriate and well-developed measures to perform large scale studies and statistical analysis on coopetition. On the contrary, it is suggested that researchers should conduct in-depth case studies to be able to better understand the phenomenon and thus develop measures for larger sample studies (Gnyawali & Park, 2009: 325). Given that we study how market knowledge is utilized in a coopetitive environment, we believe that case study will provide us with appropriate knowledge.

When it comes to theory building, it is stated in the literature that a single-case doesn’t provide as strong base for theory building than studying multiple cases. At the same time, a single-case study can describe the existence of certain phenomenon. In addition, studying a single-case makes the theoretical sampling more straightforward (Eisenhardt & Graebner, 2007: 27; Yin, 1994). However, it is stated by Siggelkow (2007: 20-21) that a single case can however provide a powerful example. He further continues that case studies can be used to serve as a motivation, inspiration or illustration. When it comes to our research, we are of opinion that even though our research question’s importance can be justified due to the lack of performed research, according to Siggelkow (2009: 21), a real life situation can motivate a research question in more appealing manner. Similarly, our study will provide new insights concerning the specific case setting and provide preliminary information that can act as motivators for future studies.

Furthermore, according to Siggelkow (2009: 20) it can be desirable to choose specific case because it is unique and thus allows researchers to gain insights that another company could not provide. In terms of selecting the specific case, there were certain characteristics that supported our choice. To be able to build a cohesive thesis, we felt it was important that the selected company would possess characteristics that have been included in the literature review. Thus, the first requirement was that the company had to be involved in coopetitive interaction and to operate in high technology industry. In order to further argue for the purposefulness of the selected case, the constantly growing importance of information security in people’s lives gives good reason to study company acting in the given branch. Finally, as the case company belongs to the SME category, it has been pointed out in literature that the SME’s role in coopetition has not been widely studied (Gnyawali & Park, 2009). Together these factors can advocate the choice of our case company.

The purpose of our study is to introduce a research question that lacks knowledge and moreover motivate further research. Thus, instead of focusing on generalizability, we aim to carry out single “experiment” and admit that further experiments have to be made concerning the same phenomenon in different circumstances to enable establishing any scientific facts (Yin, 2009: 15). Yin continues that although single-cases cannot prove a theory, they can falsify them as one single counterexample is enough (Siggelkow, 2009: 21).
To perform the case study, we conducted interviews and made a thorough secondary data research to support the interviewees’ responses. The use of interviews has been supported as an efficient way to gather rich empirical data (Eisenhardt & Graebner, 2007: 28). Thus, we believe that due to the nature of our topic and research problem, interviews will assist us in gaining valuable research results. Interview guide (see Appendix) will serve as our guideline to provide the needed structure for the interviews. More specifically, unstructured and semi-structured methods were used as they enabled us to state more detailed questions about some subjects and approximate questions about other themes depending on respondent’s position in the organization. In a nutshell, this way of data collection allows us to address specific issues and gather more information about them, still leaving enough space for respondent’s own perceptions and reflections (Bryman & Bell, 2007: 479-480, Shiu et.al, 2009: 207-210).

Before conducting actual interviews, we familiarized ourselves with the given topic and built the theoretical framework of our study. Consequently, the aspects that were involved in our literature review reflected the themes that were undergone in the interviews. We started with questions that helped us to gather comprehensive background information concerning the case company, the specific project to be studied, actors involved in the project and finally the interviewees, their positions and responsibilities in the given project. During the first interviews the stated questions were related to the drivers behind coopetition, inter-organizational coopetition, firm-level factors with focus on marketing function’s contributions. As the research question was modified after these interviews, also the focus of questions changed in the following interviews. Dealt issues included intra-organizational coopetition, market orientation, process of utilizing market knowledge and the influencing factors. We aimed to commence by asking more general questions that let the interviewees freely formulate their answers. We pursued to stay alert in case of unexpected issues emerged and grasp them to find out more. In case there remained matters that were not addressed in the interviewees’ responses, we formulated more specific questions to cover the intended issues (Yin, 2009).

Table 3.1: Methodological choices.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research philosophy</td>
<td>Subjectivism</td>
</tr>
<tr>
<td></td>
<td>Interpretivism</td>
</tr>
<tr>
<td>Research approach</td>
<td>Abductive</td>
</tr>
<tr>
<td>Research strategy</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Research design</td>
<td>Single-case study</td>
</tr>
</tbody>
</table>
3.7 Respondent Selection

In line with the theoretical framework, we selected a case company from high-technology industry, more specifically information security that is an industry constantly gaining more societal importance. The significance of information security has been emphasized in the European Commission’s communications in the form of Digital Agenda for Europe and it has gained notable attention in the literature as well (http://europa.eu; Bulgurcu et al., 2010; Khansa and Liginlal, 2009). In addition to its societal importance, information security industry is characterized with fast paced development implying the applicability of coopetitive strategy. In terms of company characteristics the firm belongs to the SME category, which has not been widely studied in terms of coopetition research (Gnyawali & Park, 2009). While the chosen case company is small enough to easily get a grasp of, it is large enough to hold a number of different business functions. This entails that we are able to study both inter- and intra-organizational coopetition. In terms of inter-organizational coopetition, the partner companies are larger well-known companies. Thus, it offered us a chance to observe the dynamics of coopetition between actors that belong to different size categories.

While the chosen company fulfilled the general criteria described above, it possesses characteristics that makes it unique and in our perception of interest to study. The company employs proactive approach to information security, which functionality over the traditional reactive approach has been brought forth (Johnston & Hale, 2009). In line, case company’s technology has been recognized in the best practices research and the technology leadership is one feature that makes the company a desirable research object. It was mentioned earlier that the focus of study was changed after the first interviews. In fact, we found that the chosen company wasn’t only strongly technology oriented but possessed a notable customer focus. Given the reformulated research question that included the utilization of market knowledge to create competitive advantage, case company’s underlying market orientation provided us with an interesting setting to conduct our research in.

Due to the limited number of conducted interviews, we decided to gather secondary data from a number of different sources to support the gained responses. In addition to conducting secondary data search relying on internet search engines, a list of published articles and publications related to Case Company and its solutions could be found from its website. The sources found led us even further to additional sources. However, as Case Company operates in information security business and they were guaranteed with the opportunity to remain anonymous we haven’t explicitly listed the sources of secondary data but they are presented as a part of the empirical findings. We believe that by combining secondary sources with the conducted interviews, we could enhance the confidence of the research findings. The secondary data search was performed in order to reach the benefits of triangulation. In the end, having performed the secondary data search, we could see that the interview responses and material found from a number of different sources were consistent.

Before any actual interviewees could be conducted we had to find interviewees with adequate experience and perspective. Consequently, we selected four specialists with different areas of expertise as our respondents. First one works as the chief technology officer (CTO) and has been working for Case Company since it was founded. As a part of the group of directors he possessed the needed knowledge concerning company
strategy as well as the marketing activities, thus, making him attractive respondent. The second interviewee on the other hand is an account executive having the knowledge concerning the sales communication with customers. In addition, contrary to the CTO he had been at the time of first interview been working for the company less than two years and had fresh insights on the company. At the same time he possesses a rather long work history in the high-technology industry, thus, we considered his knowledge and experience to complement that of CTO’s in desirable manner.

During the first interviews with CTO and Account executive, they told about the remarkable growth that had taken place during the recent years and the subsequent role that the company acquisition in 2011 had played in the growth process. The acquired company’s expertise was considered to complement that of Case Company’s so well that the former competitor now operates as an independent business unit within Case Company. Consequently, we found it worthwhile to also interview employees from Business Unit to gain understanding of how the market knowledge is utilized within the company but between different business units.

Consequently, the third respondent has been working as a business development manager in Case Company’s Business Unit during the past three years. His job description is rather multifaceted with focus on sales and marketing activities. The fourth interviewee’s position is solution analyst. With the background of five years working history in Business Unit and focus on technical aspects, we considered him to be suitable complement to the group of respondents. Finally, with the knowledge gained from the presented interviewees we believe that we gained accurate and reliable information.

The data collection took place on three different occasions. The first set of interviews was conducted on January 2012; following interviews were carried out one year later (January 2013) and the final ones in July 2013. To collect the primary data we performed two interviews in the company’s headquarters on January 2012. To enhance our understanding of the company we received company’s annual report and in addition we thoroughly explored company’s web pages in search of complementary information.

As the research question was refined along the process, additional interviews were performed in the end of January 2013 by telephone to get complementary information about the research topic from selected respondents. The first interviews gave an insight to inter-organizational coopetition in general and more specifically marketing function’s role during the project. A notable observation from the interviews dealt with the importance of market knowledge and the matter was brought forth repeatedly during the interviews. For that reason, we decided to investigate the matter more closely. Thus, the complementary interviews were conducted to pay attention to utilizing the market knowledge in coopetition, both from inter-organizational and intra-organizational perspectives. Moreover, two follow-up interviews were conducted by email during July 2013 with company’s account executive and CTO that had been interviewed already in January 2012. As the interviewees were already familiar with the topic, email interview was considered to be an appropriate choice. It was preferred from the interviewees’ behalf as it provided them with the flexibility in terms of time. In addition to the conducted the interviews, a thorough search for secondary data to support the empirical findings was performed. The secondary data was found from a number of sources. They include for example best practices research published by independent analyst and
consultancy firms, reports by Finnish government agency for technology and innovation, articles in white papers and newspapers, The table below lists the conducted interviews:

Table 3.2: List of interviews

<table>
<thead>
<tr>
<th>Interviewee’s title</th>
<th>Date and mode of interview</th>
<th>Interview code</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief technology officer (CTO)</td>
<td>January 2012 Face-to-face</td>
<td>Interview 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>July 2013 Email</td>
<td>Interview 5</td>
<td></td>
</tr>
<tr>
<td>Account executive</td>
<td>January 2012 Face-to-face</td>
<td>Interview 2</td>
<td>Continuous contact with the respondent – acted as a contact person and answered in complementary questions along the process.</td>
</tr>
<tr>
<td></td>
<td>July 2013 Email</td>
<td>Interview 6</td>
<td></td>
</tr>
<tr>
<td>Business development manager</td>
<td>January 2013 Telephone</td>
<td>Interview 3</td>
<td></td>
</tr>
<tr>
<td>Solution analyst</td>
<td>January 2013 Telephone</td>
<td>Interview 4</td>
<td></td>
</tr>
</tbody>
</table>

3.8 Research Analysis

When starting to design the interviews, the preliminary theoretical framework acted as a guideline. It helped us to shape the plan for data collection in terms of topics to be addressed. In addition, the theoretical framework supported us to organize the case study but at the same time define some alternative explanations that lacked research, to be addressed (Yin, 2009: 130-131). While unexpected issues arose during the first interviews, the focus of the study was reformulated.

In terms of analytic technique, Yin (2009: 136) brings up pattern matching. It is described as a desirable technique as it allows researcher to compare an empirically based pattern with the predicted one. However, as our research employs abductive approach, systematic combining was used (Dubois & Gadde, 2002). That led us to rebuild the theoretical framework after the first set of interviews was performed. Thus, in our case, after performing the interviews we searched for theories that would explain the answers. The following interviews were done based on the rebuilt theoretical framework. Consequently, we were able to compare the risen empirical patterns with the ones described in the theoretical part. That leads us back to pattern matching, as Yin
further continues that if the patterns match, it helps researchers to strengthen the internal validity of the study.

Furthermore, in order to organize the information that we gained from the interviews, we categorized it under following headings to reflect the illustration (Figure 2.2) of the formed theoretical framework.

- Drivers for coopetition
- Inter-organizational perspective on coopetition
- Intra-organizational perspective on coopetition

- Utilizing market knowledge is being dealt with as a subsection of both inter- and intra-organizational coopetition parts.

In the end, the findings of the study enable us to answer our research question and build a new model based on the gained results.

### 3.9 Quality Criteria and Limitations

When it comes to qualitative research, the quality criteria differs from those of quantitative research. The trustworthiness of qualitative research can be divided into four aspects; credibility, transferability, dependability and confirmability. In addition to trustworthiness, authenticity deserves attention. As quantitative research focuses on reassuring issues such as validity, reliability and generalizability, some degree of parallelism can be found with quality criteria associated with qualitative research. (Bryman, 2008: 34). Further on, we will go through the criteria in more thorough manner.

In terms of credibility, Bryman (2008: 34) is of opinion that it parallels with internal validity that is whether the results are believable. It is stated that in order to ensure adequate degree of credibility, research has to be carried out in a reasonable way and results have to be presented to the studied members of the given social world to ensure that the gained information is understood in the way respondent has meant to (Bryman & Bell, 2007: 397-398). To confirm this, we sent the document of interview results to company representatives in order for them to confirm that the findings are written as they intended them. This minimized the risk of potential misunderstandings to end up in the findings of the study.

To move on with transferability, Bryman (2008: 34) it is related to external validity; whether the findings can be applied to other contexts. Further on, research findings have to have inclusive description of investigated context. In affordance with the descriptions, readers can make judgments concerning the transferability of the research results to other environment (Bryman & Bell, 2007:397-398). In our case, we provided the readers with information of the given industry the case company operates in, the company characteristics and knowledge concerning the actors involved in the coopetitive interaction. This was to provide the readers with appropriate means to judge the applicability of the results to other contexts.
An aspect that can be considered to parallel with reliability is for qualitative research dependability that is whether the research results are likely to apply at other points of time (Bryman, 2008: 34). To ensure adequate degree of dependability, Bryman and Bell (2007: 378-379) suggest that complete records should be kept accessible throughout the research project and that coequals should have possibility to evaluate the research process. During the thesis writing process, our thesis supervisor has acted as an auditor as well as the student colleagues have provided us with their comments in the work-in-progress seminars.

Bryman (2008: 34) continues that in terms of confirmability it parallels with objectivity. It deals with whether the research is objective and if the researcher’s personal opinions and interests have influenced the research results or the way they are presented in the end (Bryman & Bell, 2007: 398). While conducting the interviews we proceeded in a way to first ask broader open-ended questions to let the interviewees freely formulate the answers and after that asked more specific questions that required more attention. After the interviews, we transcribed the interviews to have precise notes of the responses. Furthermore, the constructed theoretical framework provided us with objective information of research performed to date to help us to get started. At the same time, we were adaptive in case differences to expected results occurred.

Finally, we have to consider the authenticity of our research. Authenticity can be further divided into specific aspects. Firstly, fairness implies that collected data must represent different viewpoints of members from the investigated settings. In our case, we interviewed four employees working in case company in different work task to have complementary point of views. With one of the persons we had continuous contact with and interviewed in three different occasions. Moreover, ontological authenticity entails that the performed research has to help researchers to better understand the investigated social environment. When conducting our research, the performed interviews provided us with fresh viewpoint of the reality behind the presented theories. Furthermore, issues related to authenticity include educative, catalytic and tactical authenticity. However, we found the two already above presented factors to be more influential for our research (Bryman & Bell, 2007: 398-399).

In terms of the limitations of the study, given the rather sensitive nature of our research topic, finding a case company willing to share the needed information was not without its problems. Despite our considerable efforts we didn’t succeed to find several case companies. Finally, with the help of contacts provided by our supervisor, we succeeded to find case company that was well suited for our research topic. Thus, this is why we settled with one single case company. This has clear implications on the generalizability aspect. Thus, our research findings don’t have the power of larger scale study but they rather provide preliminary insights of one given case. However, at the same time we felt that gaining in-depth information concerning one case was appropriate concerning the nature and objectives of our research. Further on, it can be drawn that the gained results are specific to an SME category company and don’t apply in larger organizations as it is justifiable to expect that more formal structures are needed in larger organizations to support knowledge exchange.
3.10 Ethical Considerations

When carrying out our research project, we wanted to pay appropriate attention to ethical issues. Given the highly competitive branch case company operates and the sensitive nature of the research topic, the importance of conducting the research in accordance with ethical principles could not be undermined. Thus, we relied on the ethical principles Diener and Crandall (1978) have identified. They tell the researcher to ensure that there is no harm to participants, invasion of privacy, lack of informed consent and that deception is not involved.

To start with, when we first contacted the prospect case company, we informed them about the topic and the purpose of our research to see whether they were interested to participate. The company willingly accepted our invitation. In this manner we aimed to reach the informed consent of participants.

Further on, before conducting the interviews, we gave the respondents an opportunity to familiarize themselves with the introduction chapter of the thesis and have a closer look on the interview themes in order to be prepared to answer questions concerning the particular topics. In addition, we emphasized that our goal is not to find out about the technical features or product characteristics but to focus on the functional aspects of the competitive project and the related interaction instead. As the case company is present in information security branch and competition is a strategic choice on their behalf, we agreed not to publish the company name to ensure anonymity and confidentiality. Instead, it was settled with the interviewees that only an applicable amount of background information concerning the industry, company characteristics and positions of the respondents would be released. Thus, these actions helped us to guarantee that participating into our research would not cause any harm to the company and the interviewees.

As we began the interviews, the interviewees gave us permission to record the interviews. This enabled us to concentrate fully on the interviews; to first pose the intended questions, listen to the answer and further on ask the needed follow-up questions. Furthermore, to avoid any invasion of privacy, the respondents were free to not to answer any question they considered to confidential during the interviews.

Finally, after conducting the interviews, we first transcribed the interviews and wrote down a preliminary document concerning the research findings. Next we sent the document to interviewees in order for them to check that the document was consistent with the interviews and had no defects or misunderstandings concerning the case information. In addition, they had chance to tell if there was any information that they didn’t want to announce in public. Thereby, we wanted to make sure to avoid any feeling of deception.
4. Empirical Findings

4.1 Case Company Introduction

To begin with, it was agreed with the interviewees that due to the confidential nature of the research topic to keep the company name confidential. Thus, in the upcoming parts we will refer to the company as Case Company. We will however present general knowledge concerning the company in order to make the gained information applicable for further research purposes.

Case company operates in the information security branch. It possesses wide product portfolio and has succeeded to build up versatile customer base that comprehends wide array of different industries including software, networking, and defense industry. It has a history of ten years that are characterized with constant growth; roughly said, the amount of employees has doubled each year. Currently Case Company employs approximately 80 persons and has a turnover around 9 million euros.

Case Company can be described as a born global as it has aimed to international markets from the very beginning. There are offices around the world including Europe, North America and Asia. The focus of operations has been strongly on the American market but Case Company has also experienced rapid growth in Asia.

Along the way, Case Company has received external capital to further build up the company operations and hired CEO with strong international expertise. During the recent years, Case Company acquired another company present in the same industry. Due to the long common history and complementing point of views, transition has been rather smooth and Case Company can now provide its customers with more complete expertise. The acquired company currently operates as Case Company’s business unit and will be referred to as Business Unit in the empirical part. The acquisition brought in 20 new employees to Case Company, both to R&D and sales.

Case Company has a strong emphasis on technology and it is the technology leader out of its direct competitors. It works actively to develop new solutions and employs a proactive approach to stay in the forefront of the development. Instead of trying to deal with the rising symptoms of a bigger problem, Case Company aims to find the sources of the problem and build the security with more encompassing approach. The multifaceted product portfolio enables customization to fit each customer’s individual needs. In line, customer input is described as a key factor in product development. Furthermore, also larger companies have noticed Case Company’s expertise and its list of customers include a number of Forbes listed companies.

When it comes to the coopetition projects Case Company has been involved in, in our research we address coopetitive interaction Case Company has had with larger organizations. The coopetition partner has provided Case Company with more efficient sales channels while partner has gained the right to re-brand specific program of Case Company to run under partner company’s brand. As our thesis entails both inter- and intra-organizational coopetition, also coopetition that takes place within Case Company is studied. While Case Company belongs to SME category, a wide array of functions operates within the company. Adding the company acquisition into the picture, we
believe that Case Company provides an applicable context to also include intra-organizational coopetition.

4.2 Coopetition Drivers

4.2.1 Industry Background

Before we begin to display the results gained from the interviews concerning the drivers for engaging in coopetitive relationships, there is a need to first briefly describe the branch Case Company operates in. When discussing information security it includes “protecting information and information systems from unauthorized access, use, disclosure, disruption, modification, perusal, inspection, recording or destruction“ (http://www.law.cornell.edu).

It is stated in the literature that in today’s world the information security related risks are a major challenge for multiple companies. Firms within the modern business landscape with high degree of inter-connectedness experience attacks on a continuous basis. It is even mentioned in the media that the amount of information security related incidents is increasing. While cyber attacks have more than doubled during the recent years, their cost to business has increased by 40-50%. Thus, ensuring information security belongs to the top management priorities (Bulgurcu et al, 2010: 524). Khansa and Liginlal (2009: 13) state that these threats have resulted in legislation and a number of regulatory frameworks that require companies to put into practice the needed safeguards that secure the confidentiality, integrity and availability of information. However, it is argued that employing a reactive approach to information security doesn’t provide sufficient means to ensure the company’s information security, and can thus have serious consequences (Johnston & Hale, 2009: 126). According to the secondary sources used, the biggest problem with traditional reactive solution is claimed to include the time lag between first identifying the problem, updating the used solution and consequent action. Thus it is not only about the financial loss but rather the protection of business reputation. It is even being stated, “No one wants to be considered as the easy target at the next hack fest”. This indicates the importance of finding reliable, up-to-date information security solutions.

In line with the above, the interviewees portray several scenarios that illustrate the growing importance of information technology in people’s lives. The growing degree of societal interconnectedness and the complex, software-based infrastructure, assures that there will not be any lack of entities and systems in need of protection. The possible threats can in case of occurring cause the technology to crash and have severe implications. Consequently, the interviewees find information security to play a key role in preventing such threats from occurring. That’s why they see the societal significance of the information security branch and Case Company to be notable. In fact, there are concrete examples of the implications that company’s failure in information security related issues could bring about. In Scandinavia, a merger between two large banks took place few years ago. During the implementation of their online banking services, the resulting technology systems were plagued with notable number of problems and system outages. As a direct result, around 20,000 customers moved their accounts elsewhere. The importance of reliability and credibility cannot clearly be undermined.
Furthermore, the interviewees state that the awareness of information security related threats has risen. In comparison to situation before, they don’t necessarily need to any longer educate customers about the existence of threats related to information security but that increasing amount of people is aware of them. At the same time it needs to be remembered that a significant number of new malware is found every day, which implicates the significance of proactive means to tackle the information security risks that companies face.

Even if new malware is found on a continuous basis that requires actions from companies providing information security solutions, illustrating the product life cycles in the given industry can be problematic. Some protocols might have been used for 20 years. As the protocols are tested, they are consequently updated and new features are introduced but the actual protocol’s life cycle can be rather long. Case Company stated that they have certain portfolio of basic features for their products, which are used as a base in most of their software. The features of this line are updated in accordance with current needs and desires as well as the occurring technological development. In order to stay competitive and updated in its processes, Case Company needs to do wide cooperation near the customer’s processes and preferences and modernize its processes constantly; otherwise, someone else does it.

### 4.2.2 Drivers for Coopetition

To focus on the reasons that have driven Case Company to get involved in coopetitive interaction, one major reason has to do with Case Company’s size and its limited resources. In terms of competition, Case Company has three to four direct competitors globally. At the same time the interviewees state that there are however several actors that can be considered as Case Company’s indirect competitors.

When it comes to coopetition projects, the interviewees state that the projects Case Company has gotten involved in have been motivated mainly with potential benefits related to sales channels.

“In the coopetition projects we are involved in, there is a larger actor with remarkable amount of salesmen around the world... Instead of trying to reach the prospect customers by ourselves, we gain access to powerful sales channel and partnership.”

( Interview 1)

Furthermore, interviewees state that gaining access to partner’s customer interface entails another notable benefit that coopetition can bring about in the form of valuable customer feedback for product development.

“Customers are really valuable... In terms of product development, the starting point is direct contact with the customer... When we get involved in coopetition, we try to gain access to partner’s customer interface and it applies the other way around as well.”

( Interview 2)

Thus, the possibility to increase awareness of Case Company and growing sales that access to partner’s contact interface and sales channel bring about, form the main reasons that drive Case Company to employ coopetitive relationship.
As it was pointed out when introducing Case Company, it is a technology leader in its area of expertise. This makes Case Company eligible partner in the coopetition context. The interviewees state that the goal is that both parties profit from the cooperation.

“The goal is that both win; we get more efficient sales channel and the partner gains a differentiation factor from its competitors.” (Interview 2)

The interviewees bring up an example of competing companies that basically are similar in terms of their product portfolios and price; in such situations partnering with another actor can offer the needed extra from customer’s perspective.

“Our product/feature can be the differentiation factor that partner company needs. While the required investment can be from partner’s point of view marginal in terms of money, but major enough to distinguish itself from its competitors. For us, on the other hand, what is small for them can be big business for us.” (Interview 1)

The same works the other way around, at some point it can be partner’s product or product feature that is crucial for Case Company to make a deal. Thus, customer gets its needs fulfilled while the companies can offer more complete array of features in their solutions without committing resources to developing the required solution completely alone.

“Customers might ask us for certain product/feature but we might not consider it to be beneficial to start developing it if partner already has the product/feature in its product portfolio. Or then we have something in our portfolio that our partner doesn’t. This creates a golden triangle when both parties have something that the other lacks and together can provide the customer with desired solution.” (Interview 2)

So far, coopetition has not generated any actual products. However, Case Company’s brand name has been removed from its product so that the partner company can rebrand it. Case Company’s product then runs under partner’s brand name.

“Small actor gets the support of well-known brand behind it.” (Interview 1)

Interviewees state that for a company with less than 100 employees, it is not always possible to distribute its products to customers relying solely on its own resources, not to mention to do it cost efficiently.

“As a smaller actor we try to achieve economies of scale with the help of coopetition. We have a comprehensive product portfolio but we don’t have the resources to cost-effectively reach new customers. Thus, in terms of partnerships we look after direct customer contacts or brand conspicuousness and appreciation.” (Interview 2)

Despite Case Company’s leadership in terms of technology, when it comes to issues related to information security, interviewees acknowledge the impact of reputable, well-known brand. Due to the significance of properly handling customer’s information security related matters, the interviewees regard brand conspicuousness to be even more influential factor than in other fields of business.
“Information security is challenging field in terms of achieving the required conspicuousness. As a smaller actor your brand doesn’t possess the same prestige than large, renowned actors. Customers tend to rely more on well-known actor’s word with respect to information security branch. In other branches the conspicuousness is not necessarily that significant factor.” (Interview 1)

Thus, Case Company needs the support that renowned brands of larger organizations offer. The interviewees state that when thinking of brand building and achieving a point where customers would associate Case Company directly to information security, re-branding its products for partner’s use doesn’t directly serve that purpose.

“One threat in such a project is that when the product has been re-branded under partner’s brand, we in fact build partner’s brand and not our own.” (Interview 2)

However, on the other hand the anonymity that re-branding offers can be considered as a benefit in case the partner company doesn’t perform well. Thus, Case Company’s name will not be associated with the unsatisfactory performance.

In terms of technological aspects, the interviewees tell that due to Case Company’s different approach to security solutions, it doesn’t consider that its competitors could have considerable technological advantage to offer. They emphasize that the desired benefits come from increasing the company’s customer base and sales in cost-efficient manner.

At the same time, the interviewees acknowledge the synergy effects that partnering with another actor brings about.

"We bought a company in 2011, the deal had great synergy potential. No competitor standings and their expertise completed ours excellently. During several years we were collaborating closely in terms of same projects and customers. Basically we were acting as we belonged to the same company and started to think if we should make it official and buy the company. Both operate in information security but from completely different angles. Thus, expertise and product portfolio completed one another. Acquisition made the process whole and enabled us to better serve customers.” (Interview 2)

The strong focus on customer needs comes up several times.

“There is no coopetition unless the customer can gain something from it. The starting point is always customer’s benefit.” (Interview 2)

The prevailing trend of growing degree of customization can also be seen in Case Company’s operations. While everything originates from individual customers’ needs and how to fulfill them in the best possible way, it is important to find several customers for the specific product.

“Once you have the product ready, it is really cost-effective to duplicate it. The goal is to find as many customers as possible for one product... Otherwise there is a growing amount of products with one customer and in the long-term that is not profitable.” (Interview 1)
Currently Case Company stands in a place where its versatile product portfolio enables it to develop customized solutions to customers without the need to employ resources in developing new ones. Finding one suitable field to offer specific product has often resulted in additional segments where the product has been as applicable. Thus, while fulfilling customer needs with tailored solutions is essential, cost efficiency is an important factor that receives appropriate attention in Case Company’s operations.

“We have about 200 products and before we develop a new one, we need to find other customers for the product as well.” (Interview 1)

“Once we know that the solution will have several customers, we know that that the expenses can be covered.” (Interview 2)

Even if Case Company’s focus is on further improving the existing solutions instead of dedicating the resources on developing new products it is important to continuously to stay aware of the future trends.

“The coverage of future techniques and markets can be reached when operating with larger actors that tend to be the industry leaders. That entails constantly working with future techniques and receiving market data notably earlier than it is visible to consumers. That brings along maybe the most important competitive advantage.” (Interview 1)

Thus, the generated market knowledge concerning future trends and customer needs is essential when pursuing to foresee the future big trends and consequently appoint company’s resources on product development.

“It requires broad cooperation, following the market, meeting analysts, constant product development near customers.” (Interview 6)

In addition, the secondary data provided us with evidence of Case Company’s large client organizations and their ongoing projects. This indicates the importance of working with larger actors, which in turn can entail the benefit of staying in the forefront of competition.

4.3 Inter-Organizational Perspective on Coopetition

In the previous part we went through the reasons that had driven Case Company to get involved in coopetition. In this section we continue to go deeper into inter-organizational coopetition; the challenges that managing coopetition entails as well as the practical issues that need to be taken into consideration in order to ensure the expected benefits.

It has been mentioned already above that customer value is the prerequisite for Case Company to get involved in coopetitive relationship. Often the starting point for coopetitive project with another company has been a risen demand from the customer end. If one company cannot fulfill a specific customer need with its current product portfolio, its partner can already have the solution in its assortment. In such situations, it is not worthwhile to start developing the solution by oneself but rather employ
coopetitive strategy. Thus, while the cooperation emerges due to customer’s requirement, the aim is that it benefits all the involved parties.

In terms of coopetition projects that Case Company has gotten involved in, the main motivation has been the possibility to increase its sales. As the conspicuousness of the brand plays influential role in information security branch, it is challenging for a smaller company to build the required credibility with its limited resources.

“For us it is more challenging to get to the point to be considered as one alternative among others because of the notable amount of resources in terms of marketing and sales that are required to get there.” (Interview 2)

When Case Company’s product portfolio can complement the partner’s one to solve a customer problem, Case Company gets its product/feature included in partner’s sales channel. Thus, for Case Company, the benefit comes from rising sales. It is the support that a smaller actor gains from well-established brand with efficient sales channel that is the key motivator for Case Company. Along with the possibility to increase its sales, Case Company seeks to gain access to partner’s customer interface. It was brought up that direct customer contact is the prerequisite for product development. Consequently, Case Company values highly any piece of information coming from the customer end, no matter how little it might seem at first glance.

4.3.1 Managing Inter-Organizational Coopetition

4.3.1.1 Contract Management

When it comes to getting involved in coopetition project with external partner, companies have to protect themselves from harmful events. Consequently, the importance of carefully formed contract is brought up:

“There are so many factors that affect company’s operations: its owners, internal politics, competition in the market... Thus, carefully formulated contracts have to be in place.” (Interview 1)

With the help of paying the appropriate attention on drawing up a precisely defined contract, Case Company can diminish the risk of coopetition related threats to materialize. Consequently, Case Company can avoid suffering from opportunism that unnecessary trust and absence of clauses can bring about.

“One has to take into consideration to protect one’s technology. In addition, the brand conspicuousness can suffer if partner doesn’t perform as agreed and that can affect one’s own brand negatively. Another threat deals with wasting resources on the partnership while it doesn’t bring back the spent money.” (Interview 2)

In order to protect company’s core expertise, clauses that restrict the coopetition partner from introducing similar features to market in a given time period, are used. In case, one of the parties violates the terms of agreement, certain amount of sanctions is to be paid.
“The knowledge inside people’s heads is hard to copy and it is an asset to cherish. When that knowledge is transferred into software, it can be protected with specific clauses in the contracts but of course it is not 100 per cent sure.” (Interview 1)

When getting started with the contract negotiations, the party that is more dependent on starting the collaboration has to usually give in more in order to get the other party interested in committing resources to the project.

According to the interviewees, in the contract one has to clearly establish the time period the contract applies, how it can be cancelled and above all how the functionality of the cooperation can be measured. As Case Company is small in terms of size, employing its limited resources on a relationship which maintenance requires major investments in relation to the potential incomes, entails a notable risk. Thus, Case Company takes into consideration the specific clientele and thoroughly estimates the efforts that are required in terms of product development and resource commitment. If opportunity costs are higher than the expected income, it is not worthwhile for Case Company to take part.

The established indicators to measure participants’ performance serve more than one purpose. First of all, according to the interviewees there have to be set goals that parties will be committed to push the project forward. At the same time, if the objectives for the cooperation are not fulfilled, it is justifiable to cancel the contract.

When conflicts arise between the coopetition partners, cancelling the contract is not necessarily the first option to be applied. Using common sense and acting in a well-intended manner often works. In case of contract violations, finding out what has happened, what has been established in the contract with respect to the specific clause and negotiating around it comes before taking any decisive action.

In some cases the customers have been so satisfied that when the contract period has expired that have wanted to continue Case Company’s product which has resulted in long-term customer relationship.

“It has happened in the past that in the end of the contract period with our coopetition partner customers have been so satisfied with our products that they have transferred themselves to our customers.” (Interview 2)

### 4.3.1.2 Utilizing Market Knowledge

The importance of customer information for product development has been emphasized already in the previous sections. The possibility to gain access to partner’s customer interface forms together with increasing sales the benefits that Case Company seeks when getting involved in coopetition.

However, in coopetition projects where Case Company’s product has been re-branded under Partner Company’s name, the customer feedback has a long and complicated way to go until it reaches Case Company.

“In the previous projects, cooperation has occurred specifically in terms of R&D when our product has been re-branded for the partner’s usage. Thus, the contact interfaces
have been limited to the conversation between R&D units. Another interface has been sales organizations.” (Interview 2)

The starting point in the process is end-customer’s conversation with partner’s salesman who in turn chooses if he/she forwards the received feedback all the way back to Case Company’s representative. Thus, Case Company cannot count on getting the customer information that then could be utilized in its product development.

While gaining access to partner’s customer interface is high on the priority list when employing coopetitive strategy, protecting it from outsiders is at the same time a priority for involved parties. Interviewees admit that protecting the customer interface is extremely challenging but at the same time worth the efforts due to its importance for the company. However, sometimes the other party possesses the key expertise and has to be granted with access to customer.

“It requires balancing and ability to sense situation in order to know where the line goes and in which situations partner’s expertise is needed to convince the customer and maintain the credibility.” (Interview 2)

Even though companies at first hand attempt to preserve customer related information inside its own walls, if retaining its credibility and expertise in front of the customer requires letting the partner company to get involved, adjustments are done. In those situations, lies the possibility of gaining valuable customer feedback that can be used in Case Company’s advantage.

4.3.1.3 Practical Challenges in Inter-Organizational Coopetition

Case Company’s coopetition partners have been larger companies and according to the interviews that brings about certain challenges.

“There is a difference in dynamics. In larger companies bureaucracy plays bigger role. Decision-making is slower and colder. Opportunism might occur and one looks more at the figures.” (Interview 2)

“If you’re competitors and supposed to collaborate, it can be difficult to get into the cooperation mode. One thinks that after all we’re competing and if I’m helping the partner it is away from us. Thus, building a confidential relationship is hard. When you have different owners, it is challenging to throw oneself in good cooperation.” (Interview 3)

According to the interviewees when working with larger companies, individuals’ roles gain more importance. If the interpersonal chemistry between the people involved in coopetition is working, the smooth interaction will be endangered if the employees change. Relationships in which the actors share a long history, clauses from the contract are not brought up unless problems arise. However, in the other end, email communication can entail citations from the contract in order to double-check certain issues and avoid contract violations.

“The information is rather forwarded between individuals than functions or organizations.” (Interview 4)
The interviewees admit that one of the greatest challenges with respect to coopetition is managing the big picture.

“It is a complicated puzzle to think. Company’s goals come from the board of directors who in turn listen to the stockowners. They give performance goals for the company, generally in the form of figures. Further on, there are different units inside the company with goals of their own and the same applies to individuals as well. If you then add the partner organization into the picture, it is a real political minefield. Especially, in terms of a larger organization.” (Interview 2)

While Case Company carefully considers the advantages and risks coopetition brings about case by case, they admit that in order coopetition to be productive, Case Company needs to pay further attention to more clearly defining the specific aspects in which the coopetitive strategy will be applied. This would, according to the interviewees ensure that benefits outweighed the related costs.

“At this point I would say that we have invested more than what we have gained. But in case there are customer needs that can be clearly defined and in which coopetition solution fits best, we will take part. It is though a complicated game to master.” (Interview 2)

4.4 Intra-Orga

Intra-Organizational Perspective on Coopetition

In the inter-organizational context, issues such as contract management and information protection as well as the challenge of managing the big picture gained notable attention. However, in order to answer the research question we needed to investigate the intra-organizational side of the same coin as well. Thus, the intra-organizational part of data collection will include aspects such as coopetition (or competition vs. cooperation) within Case Company, marketing function’s/market orientation’s role in Case Company and finally utilization of market information.

4.4.1 Intra-Orga

Intra-Organizational Coopetition

In the inter-organizational context the competition aspect of coopetition could be clearly established. Thus, we considered it to be worthwhile to find out if some form of competition takes place between Case Company’s business units. Due to the company acquisition in 2011, we thought it would be interesting to see whether Business Unit is old role as Case Company’s competitor still had some implications on cross-functional interaction.

“I recently read a study conducted in the US claiming that two out of three company acquisitions fail because one cannot get the merging companies to function and remains then stuck between two companies. With respect to that, I think that the merger of Case Company and Business Unit has been successful... One cannot see the old competitor standings any longer. We are a business unit inside Case Company and we have our own goal concerning the profit/result. The more open we are towards Case Company,
the more they can do for us and consequently the better we do. In that sense, if we didn’t share information with Case Company, it would only harm us.” (Interview 3)

“No knowledge is gained or given if the parties are not mutually active towards one another.” (Interview 6)

In line with the above comments, in the interviews it became apparent that Case Company encourages openness between functions and the idea that cross-functional collaboration benefits all parties. In addition, the strong customer focus could be discovered as an underlying driver for company-wide cooperation.

“Of course one has to make one’s voice heard. I would say there is not actual internal competition; customer’s voice is the loudest. It doesn’t matter who it is, regardless the business unit in question, we talk about customers and how to solve the case in best possible way. If you need help, you just need to ask.” (Interview 2)

”Usually the person who has knowledge concerning certain issue has to stand up and say “this is how it is done...” or alternatively for example as a project leader one might remember that someone else has previously worked with similar issues and ask him/her for help... Basically, the employed logic is that if I help someone with his/her project that benefits my project as well... I have to give credit to the management team for encouraging the staff to actively and openly communicate.” (Interview 4)

In Case Company each function has an important input to give in order to create value for customers. Cooperation is crucial component in this puzzle and business units’ tasks are closely intertwined. Again, the process starts from rising customer need.

“Sales personnel cannot possibly know what customer wants. The more you try to guess on behalf of the customer, the more it goes wrong. The sooner you ask the customer the better... In the practical level customer needs guide product development. It is worthwhile for the company to develop products that customers indicate they need.” (Interview 3)

“Our operations are very customer-oriented. We don’t necessarily try to come up with anything new; rather we receive silent information during the conversations and meetings with customers and through other customer channels... Often we receive a request from customer and notice that our product portfolio as such can fulfill customer’s request.” (Interview 1)

Even though the customer needs often can be met with Case Company’s existing product portfolio, there are cases in which it has to invest resources in developing new solutions. While Case Company aims to satisfy customers’ rising needs, at the same time, it considers cost-efficiency to be an important aspect in its operations and thus tries to find as many customers as possible for the same product.

“The purpose is not to respond to every customer wish that is brought up but if certain matter pops up repeatedly it will begin to guide our product development... It is customer’s willingness to pay for the solution that is the prerequisite... One can measure the customer need quite easily in terms of money.” (Interview 4)
“We get requests from larger customers concerning certain features or products. Often we start to implement it and notice that there is a clear demand for that particular feature. At this point also smaller companies that earlier could not buy the solution as we didn’t have it yet, will gain access. Thus, the accumulated knowledge we have concerning the demand launches the process once we get more expensive order. Consequently, we can cover the expenses once we know that the solution will have several customers.”  (Interview 2)

“The customer request is being evaluated – how much alterations are needed to implement the request. At the same time, we estimate whether the desired features will offer extra value to other customers as well.”(Interview 6)

“The ideal situation is that amount of work is small but the extra value it brings to customer is large.” (Interview 5)

4.4.1.1 Intra-Organizational Cooperation between Business Units

In Case Company the dialogue between sales and R&D is important, sales personnel gains valuable customer information and forwards it to R&D that in turn communicates whether they already have the solution ready in the portfolio. The same works the other way around, people working with product development/R&D are in contact with sales to find out whether new customer needs have arisen. In Business Unit the distribution of work is even more blurred.

“In Business Unit the same persons do both R&D and sales to a large extent. In practice the persons are in contact with customer either concerning sales or the delivery... It is not only the salesmen that receive the information but rather the persons that are in contact with the customers. In addition to sales personnel we have a group of project delivery persons. Thus, they receive at least as much information as the sales personnel when they deliver the solutions to customers. In fact, project delivery persons spend even more time with customers.” (Interview 3)

“Product development doesn’t necessarily recognize the ways in which customers use the product as they often differ from the originally intended purpose. In this case the persons working in the customer interface have critical role.” (Interview 4)

Above it was emphasized that Case Company aims to find several customers for each solution. This is where marketing steps in.

“When we have a product with existing customers, we try to look after new customers in different branches for the product... It is marketing’s task to formulate the message that this product suits to given consumption in the specific market segment... As Case Company has a strong technology focus; marketing’s task is to formulate the technical jargon into a language that everyone understands... Basically marketing tries to make people talk about us; make the media and analytics in the market aware of us, awake conversation and activate customers to be in contact with us.” (Interview 2)

The importance of company conspicuousness in the information security branch gained attention in the inter-organizational context. Interviewees stated that notable amount of resources in terms of sales and marketing is needed to establish brand conspicuousness.
Thus, relying on larger partner’s sales channels can represent solution for Case Company in some cases. In addition, business development manager brought up the same matter even though occurring in the intra-organizational context.

“The merger with Case Company has enabled us to reach larger customers. When comparing a company of 10 employees with one employing almost one hundred, the larger company is considered more reliable. Thus, belonging to a larger company brings credibility to us. Getting in contact with larger customers entails different customer requests and thus guides the product development... It is natural that smaller companies execute smaller projects while larger actors are relied to deliver larger ones. Earlier the problem was that even though we had the expertise, our customers didn’t have the resources... Now, thanks to the company merger, the amount of sales personnel has quadrupled as well as the network that brings forth market information. In geographical terms, our markets are five times as big as before.” (Interview 3)

The role of larger customers in product development appears to be crucial. Account executive emphasized that when working together with larger customers, Case Company gets to work with future techniques and that creates competitive advantage for the company. The same could be noted also in business development manager’s comment; while larger customers requests might be similar with the ones of smaller actors; they have actual resources to pay for the needed product development project. Thus, the value of working in close collaboration with larger customers cannot be undermined.

4.4.1.2 Internal Communication in Case Company

In terms of cross-functional communication, it was pointed out above that the management team aims to encourage active and open communication between the business units. At the same time the interviewees speculate if the internal communication ever can be sufficient.

“I would say it works well. But I bet the internal communication could work better in every company. No matter how you do it, there is always an area with less attention. However, we try to encourage it. For instance, we have an active coffee table conversation culture. Many times such conversations that don’t have an actual goal tend to be more productive than official meetings with set goals.” (Interview 2)

“I would say it works rather well. There always tends to be at least some communication problems between different business units... However, if something is being done in the company, everyone receives the information. There is a memo concerning the weekly company meeting, if one cannot attend, he can update himself by reading the memo. ” (Interview 3)

“Thanks to the straight-forward communication in Case Company, there usually are not problems.” (Interview 5)

Case Company has grown steadily during the recent years and the company merger with Business Unit increased the number of employees substantially at once. Interviewees are of opinion that the growing size of the company has to be taken into consideration when organizing internal communication.
“In terms of Business Unit, we don’t have different functions within the unit but each of the programmers does other things as well. While it is a conscious solution that we don’t have the organizational boxes, it is a fact that this model doesn’t work any longer if the company continues growing. As long as we can avoid these boxes, we do it.” (Interview 3)

“Of course one has to do changes. Add a hint of bureaucracy. You cannot act in the same way, than you did as a smaller company. Though the spirit of a small company remains and we act quickly and sometimes forget that we have grown. One has to be bit more strict and have tighter grasp on how things are being done.” (Interview 2)

“Maybe it is a universal truth that when the company size grows the communication weakens and gets more difficult. Nevertheless, I would not see that a problem in terms of Case Company.” (Interview 5)

4.4.2 The Role of Marketing Function and Market Orientation within Case Company

4.4.2.1 Marketing Function’s Role and Responsibilities

In its operations, Case Company has chosen product differentiation strategy. This decision entails some challenges for example in terms of the competition in the market. Thus, the importance of effective marketing function cannot be undermined in order to maintain the competitive ability. In information security branch the combination of high quality solutions, company’s good reputation and last but not least consumer’s awareness of the company bring with the challenge.

“In this given branch it is not reasonable to compete with prices when it directly influences the product quality. Other companies operating in information security technology field have different approach to information security and thus these companies don’t directly compete with us.” (Interview 1)

Case Company’s biggest competitors are large global brands. This implies that they have notably more resources to invest in product development and marketing. Even though Case Company cannot compete with the amount of resources, it has its own advantages in comparison to its competitors.

“When comparing our technological quality to others in the market our products are preeminent... However, customers are still the ones who decide what kind of information security solutions they want to acquire. That’s where we need to step it up to have more publicity and stand out in a positive way.” (Interview 2)

In terms of marketing function’s contribution to company’s overall performance and projects, their mission is to develop convincing story about company’s products for potential customers. Case Company is primarily technology-oriented company with numerous talented employees. However, the technical features tell nothing to people
without technical expertise. Therefore it is essential to translate the technological jargon into understandable form.

“Story telling process begins by defining the customer and his/her real needs or the desired features of product. First of all, it is important to communicate the message in a way that potential customers both can understand it and find it interesting.” (Interview 2)

As mentioned above, Case Company’s approach to information security solutions is of proactive nature in contrast to its competitors. Thus, clarifying the advantages of the differing approach to prospect customers can sometimes be challenging.

“Employees working in the marketing function don’t necessarily have any technical background. In order to tell customers about Case Company’s products they have to first understand the technical features by themselves. Consequently, the story that they tell to customer will be different from the one that a person with technical background would tell. It is marketing function’s task to explain it all in plain.” (Interview 1)

Above a brief overview on the cooperation between different business units within Case Company was presented. Marketing function follows attentively what happens in market, its competitors’ actions and the future trends in general. Due to the limited resources in terms of sales and marketing, they have to cooperate closely. Salesmen are in contact to present customers or potential new ones and discuss the emerging needs with them. In addition, marketing and sales functions also actively serve R&D department and closely collaborate with it by forwarding all the gained information from the market.

“They (salesmen and marketing staff) have essential, real-time knowledge of customers’ interests and needs and they receive the direct feedback from customers in order to make improvements to current products or ideas for new innovations.” (Interview 5)

“Usually it is the salesman or account executive who receives the feedback. After that it proceeds towards product management. Also support team can receive customer feedback which it forwards to product management.” (Interview 6)

However, also others besides sales and marketing staff gain feedback and market information.

“The members of project delivery team assemble the products and educate customers concerning new products and features often spent days with customers. Thus, they learn a lot of customer’s business and operations. Those informal conversations represent a crucial way to get feedback and new ideas to product development.” (Interview 3)

### 4.4.2.2 Marketing Activities

As Case Company operates in business-to-business market; it influences planning and executing marketing activities.

Case Company’s marketing communication doesn’t exist in public media or newspapers; instead it is concentrated on materials and messages, which are directly
sent to potential customers. In addition, trade fairs and events also offer a great opportunity to meet professionals in the given branch. The marketing department’s most important task is to spread awareness of Case Company to potential customers and activate them. They have a contact database of potential customers and partners and the list is continuously growing when the general awareness of the company increases.

“Our marketing tools include Lead Generation-campaigns (generation of clients special interest about company’s products or services, www.marketing.about.com), regular newsletters and emails to customers, press releases, white papers (marketing tool which presents products and services, www.whitepaper.talentum.com) and fundamental and versatile product testing projects and further on informing about the results. Sometimes these test results end up in public newspapers and professional magazines and company gets good publicity because of article or interview, although this often happens in international media.” (Interview 2)

“Social media, such as Facebook and Twitter are also growing marketing channels, which are considered to be effective. In spite of the growing importance of the influence of social media, also the annually organized customer fair is very important for us. Number of invited customers and professionals from comprehensive assembly of businesses get together in order to discuss information security related issues and to listen to experts’ speeches about it.” (Interview 1)

The interviewees also mention that benchmarking is important when Company’s customers compare products. Furthermore, Case Company has its own product-testing group that carries out tests and further spreads the results. This is considered to be one of Case Company’s most efficient marketing tools.

Also Case Company appears in publications of well-known consulting companies and is mentioned in the best practices research. The consulting companies state in their publications that the research methodology has involved market participant interviews, end-user surveys and interviews and extensive secondary research. For that reason we considered the found data to be reliable and trustworthy.

Case Company’s marketing activities are well planned and they don’t do marketing without carefully targeting it. Emerging customer demand is the driving factor behind product development. At the same time it is important to ensure that there are several customers for the created products. Opportunity costs are too high if the product development requires a lot of resources while the demand is not large enough to cover the expenses. In that sense, Case Company’s strategy is to find the maximum amount of customers for one single product and if necessary, they rather do some improvements to the product in accordance with customer’s needs instead of developing totally new product for a single customer.

Case Company possesses a rather wide product portfolio and often the desired solution can be found from its assortment, customer just is not aware of it. This is where marketing function is needed.

“It is marketing department’s task to communicate it forward and build up a marketing message, which increases the awareness and tells that the particular product is applicable. We also actively seek for new customers for existing products using new
marketing channels and modifying current marketing communication strategies. These strategies are significantly important when chasing for new clients, otherwise we have a wide range of products with only few customers, which in the long run is not profitable.“ (Interview 2)

4.4.2.3 Market Orientation

Due to the limited resources that Case Company can invest in marketing and sales activities, they have found an alternative to compensate its limitations. Case Company has managed to successfully implement market orientation in its operations and interviewees consider it to be the driver behind Case Company’s success.

“When I started to work in Case Company I could notice the strong “customer breathing” atmosphere in the company from the day one. It is extraordinary in comparison to other organizations I’ve been working for. It is very common that employees talk about customers and their problems and the potential solutions together when having their morning coffee. Everyone gets help when needed, one just need to ask.” (Interview 2)

Even though Case Company considers itself to be a technology-oriented company, customer wishes receive extra attention and consideration during the whole process.

“You should not get too attracted to the technology of the products but think about the products from customer’s and end-user’s perspective. This entails good usability, that unfortunately is often considered solely as the privilege of the consumer markets and thus is left aside in the b-to-b solutions.” (Interview 5)

During the search of secondary data we found results that revealed that Case Company has been successful in its efforts to develop customer friendly solutions. It is even stated that one of Case Company’s notable strengths is that a non-technically oriented person can easily turn out to be a security expert with the right tools.

Interviewees emphasized the importance of open and active communication between Case Company’s business units and the customer-oriented atmosphere in which customer is in the center of everybody’s attention.

“Case Company’s salesmen pursue confidential and open relationships with customers. Discussions with customers are the most efficient way to get information and new ideas for product development.” (Interview 6)

The employees are encouraged to apply market orientation also into practice.

“In our industry we need to constantly solve problems and generate new things to beat the bad guys.” (Interview 4)

In the following part further attention will be paid on the process of utilizing the gained customer information.
4.4.3 Utilizing the Market Knowledge within Case Company

In the inter-organizational context, the information flow concerning market/customer knowledge occurred as a complicated process with intermediates and certain level of uncertainty. However, when we explored the intra-organizational context the knowledge transfer was considerably more straightforward. The interviewees emphasized the importance of direct customer contact already in the inter-organizational part while stating that it cannot necessarily be guaranteed. Meanwhile, we were able to map the process of utilizing the gained market knowledge when it comes to internal surroundings.

“The first step is talking with the customers. During the second phase customer knowledge is being stored in company’s information systems. Consequently, there are themes that arise from the gathered data that are considered to be important during the third stage. Forth step includes a group of persons to get together and discuss whether the matters that came up are worth developing. We use a chat channel for this purpose. Everyone is included and there are ongoing discussions whether certain things are relevant to be presented to the superiors. Then the assigned group considers if the ideas can be productized. In the following phase offer is formed and tossed back and forth between the parties. In the end, this results either in a deal or the offer is turned down... In fact, the market information that we gain from our competitors (inter-organizational coopetition) is processed in the same way.” (Interview 3)

Interviewees stressed in several occasions that everything starts from the arising customer wish. Consequently, the best way to find out what the customer wants is to talk with him/her. At the same time, Case Company also employs alternate methods to survey customer needs in addition to direct conversations.

“There are differences in customers’ ways to express themselves; some are more direct, some are shyer. They tend to think that it is not their job to help the salesmen but salesmen should know on their behalf. The more experienced the buyer, the more direct he/she tends to be... Salesmen’s goal is to form relationships in which the communication flows openly. If the relationship is fresh and the parties don’t know one another well, the less openly one tends to talk. On the other hand, long customer-seller relationship with established trust enables efficient and open communication.” (Interview 2)

“It is also important to understand the strategy of Case Company and nature of information security business. Our task is to protect our customers’ processes and their business and in order to do so we have to have certain priorities in our activities, whether it is information sharing and understanding or cooperation in product development” (Interview 6)

“Customer inquiries represent alternative but I don’t consider them to be that valuable. Customers don’t have time to fill them and it is not their responsibility to support supplier’s product development. Mostly the information comes from the informal conversations... However, we also have formal development discussions with customers twice a year concerning their wishes, perceptions.” (Interview 3)
While interviewees consider the conversations with customers to be the most effective way to map the customer needs, they point out that it is necessary to store the information.

“When meeting customers it is crucial to listen and take notes of what is being said in order to store the customer wishes and suggestions.” (Interview 2)

“We use information systems. Conversations come and go. That’s why they are being documented in a customer relationship management – program. The conversations are stored in order for us to be able to return to them. If you have interviewed someone six months ago, you have nothing left.” (Interview 3)

“We have company’s own intranet. The information can be easily found there.” (Interview 5)

It was stated earlier that the purpose is not to fulfill each customer wish but Case Company has to consider which of the requests are profitable to be implemented.

“There might be numerous interviews but you don’t have the possibility to go through all of them in detailed manner. Certain gut feeling helps to assess the relevant and pick up the recurrent signals from the mass... Also with the help of the chat channel one can easily share feedback... It is more efficient communication channel than email. Email takes more time. With the help of the chat channel I’m updated concerning the most recent issues in fifteen minutes.” (Interview 3)

Furthermore, it was brought up several times during the interviews that Case Company employs collective problem solving to arising customer wishes. The best result is reached when persons with different specializations combine their expertise.

“Regardless the business unit in question, we talk about customers and how to solve the case in best possible way. If you need help, you just need to ask.” (Interview 2)

An essential part of the process of utilizing the gained market information is to choose which ideas will be turned into actual products.

“In some companies it is the official management team that gathers on a weekly basis to consider the customer wishes and if they could be turned into actual products. We have a similar but less formal... The whole company takes part and we go through matters that have arisen during the past week... Also others besides the management gets their voices heard in the weekly meetings. We consider the potential of emerged ideas and determine which ones will be productized.” (Interview 3)

“We have meetings that gather together the whole staff in order to keep everyone updated.” (Interview 4)

Once the decision which ideas will be implemented has been made, customer receives an offer.

“In my opinion, to optimize the process, one should not spend too much time talking inside the company but instead take it to the customer end as soon as possible. Thus, it
is a matter of wasted resources if we start developing something without customer’s confirmation and then it turns out that she/he is not interested in paying for it... Offer is a good tool to determine if a customer is willing to pay for the solution with given price. Basically that helps to differentiate whether it is a question of a solution that customer would like or one that he/she is actually willing to pay for.” (Interview 3)

The importance of not spending too much time developing solutions within the company comes up during the interviews and supporting comments were found from the secondary data search. Rather, customer feedback during the development process is considered as an efficient tool that benefits Case Company.

“The problem is that technology is being under development for too long before it is presented to customers. One should strive to get under the customer’s radar as soon as possible to get valuable feedback. Only in this way you will know if the product works and if needed one can still make the needed adjustments to the product. Perfect is often the worst enemy of excellent.” (Interview 5)

### 4.3.1 The Challenges in Market Knowledge Utilization

While Case Company considers customer information valuable; it admits that all customer wishes are not worth fulfilling from the economical point of view. Thus, recognizing the relevant market information entails a challenge for Case Company.

“The customer information is mostly oral. It then needs to be stored, otherwise it disappears. Then the relevant information has to be picked up from the mass... It is basically up to the person reviewing the data to recognize what is important. Some people are more talented to spot the relevant information and forward it while some people don’t necessarily notice the essential piece of information from the mass. It depends on the person’s expertise and skills.” (Interview 3)

“It is a question of experience but also one has to have the wit to realize what is important information that benefits the company... However, being senior in the company can entail that despite the experience you’re not that quick-witted any longer.” (Interview 2)

“The experience of the personnel is one factor that can be helpful. In addition, understanding the company strategy and company’s product development strategy can be of help. Sometimes the “gut feeling” is enough, while sometimes it needs to be backed up with numbers.” (Interview 6)

One factor that poses a challenge for people responsible for recognizing the relevant customer information is the novelty of the information.

“When the information is totally new for us, it may require that it needs to come up in several occasions before it is taken seriously... The value of information tends to grow when it is repetitive.” (Interview 3)

As Case Company pursues cost-efficiency in its operations; the needed push to start a new product development project, sometimes requires the interest of larger customer
with the needed resources. Thus, the arising customer requests have to be recurrent and the resources that customer is willing to invest, large enough to cover the expenses.

“The accumulated knowledge we have concerning the demand launches the process once we get more expensive order. At this point also the smaller companies that earlier could not buy the solution as we didn’t have it yet, will gain access.” (Interview 4)

“More important from our customer’s perspective is that this enables us to offer them solutions which have been too expensive to develop before when customers have been smaller in size. It is kind of physical constant that small companies operate with other small ones and bigger operators with companies closer to their size. In this way coopetition has offered us new opportunities and possibilities to contact to new customers bigger in size.” (Interview 3)

Interviewees emphasize that it is necessary to store the gained customer information in written form in order to be able to utilize it later on. This also applies in situations in which an employee changes place of employment; documenting information is essential to avoid loss of important information. At the same time, the company culture that aims to encourage openness and active communication between different business units is another tool to ensure that valuable customer information doesn’t disappear and that it is available to everyone in the company. Additional benefit of close collaboration between different business units entails that everyone is aware of what is happening in the company. This also facilitates employees’ understanding of other units’ responsibilities.

“In Business Unit the same persons do both research and development and sales to a large extent... It is a conscious choice that we don’t have the organizational boxes... This is done to avoid the problems that are caused when people don’t know or understand what others in the company are doing.” (Interview 3)

“General problem is that employees don’t know what happens elsewhere in company. We want to avoid that “stay quiet and concentrate on your work- attitude” and instead encourage everybody to share information, opinions and experiences and to be active. That is extremely important.” (Interview 5)

“The good ideas can be lost when there are too strictly defined functional boarders. If certain matter doesn’t belong to someone’s job description, the matter is not necessarily forwarded to a person in charge of it. Information needs to first find the right target to receive the needed attention... That’s why we try to avoid unnecessary boundaries. (Interview 6)"

In the interviews it became apparent that the degree of competition between different business units is low, while company wide collaboration is being encouraged. Thus, this implies that there is a positive dependence between the business units.

“Of course sales people can have some degree of competition for the customers because of the provisions they get. This is related to company’s indicators. In some cases one might think that if I’m helping someone, it is away from me. Basically, the employed logic is that if I help someone with his/her project that benefits my project as well.” (Interview 4)
“Even though there is competition over the resources, if the goals are similar it is possible to collaborate. It is up to the persons to recognize the common goal.” (Interview 6)

To round up, Case Company has paid attention to building up an environment that encourages collective efforts to solve customer problems and established structural conditions that support efficient knowledge exchange.
5. Discussion & Analysis

The discussion and analysis will follow a similar structure as the part presenting empirical findings. First the drivers behind coopetition and their relation to previous research will be discussed. The second part analyzes both inter- and intra-organizational coopetition and the benefits and challenges that applying coopetitive strategy entails for company. The two first parts build a foundation to further move on the part that forms the core of the research question; how can market knowledge be utilized in inter- and intra-organizational coopetition. Consequently, the third part begins with an analysis of the relationship between firm’s market orientation and marketing department. Furthermore, the analysis will proceed on discussing the process of utilizing market knowledge in both inter- and intra-organizational coopetition. Illustrations are drawn to clarify the findings. Finally, the factors that either complicate or support knowledge utilization will gain attention. In order to make it easier for the reader to follow the discussion and analysis chapter, we have placed tables that summarize the results in the end of each part of the analysis. These tables will act as a link between the findings of the study and the final model that is developed based on the results in the end of our thesis.

5.1 Coopetition Drivers

The reasons behind companies’ decisions for employing coopetitive strategy were discussed in Literature Review’s section 2.3. Prahalad and Krishnan (2008) bring up ongoing changes in the business environment that force companies to combine their resources, as no company is large enough or has the needed resources to manage alone. Thus, access to external resources has become a key ingredient to stay competitive. In addition, growing focus on customer and being able to offer personalized solutions has gained more emphasis as well. After having carried out the interviews, these trends concerning firm’s insufficient resources and growing need to provide more comprehensive and customized solutions could be clearly identified in Case Company’s operations.

Case Company’s strong customer focus stands out from the interviews and it is claimed that the prerequisite for getting involved in coopetition is that customer benefits from it. In addition, the company merger in 2011 was done to supplement Case Company’s expertise and ability to fulfill the emerging customer needs.

Case Company possesses wide product portfolio, which enables it to offer personalized solutions to its customers without having to develop entirely new solutions. Often the strong technological knowhow and Case Company’s comprehensive product portfolio has offered the missing piece of expertise for the partner organization. While fulfilling customer needs is central in Case Company’s operations, it pays considerable attention on whether it is profitable to employ its resources on given customer projects.

In the information security branch, conspicuousness is a decisive factor. This is due to the significance of information security related issues for companies and thus relying on a well-established actor is easier than selecting an actor that is comparably unknown. Thus, the resource aspect is not only meaningful in terms of developing new products
but the interviewees emphasize that the desired benefits of coopetition come from increasing company’s customer base and sales in cost-efficient manner.

The already established sales channels that the larger actors possess together with gaining access to partner’s customer interface are the key benefits Case Company is striving for when employing coopetitive strategy. In this respect, the need of having access to additional resources can be noticed in Case Company’s operations.

Furthermore, in terms of high technology industry, research has identified three factors including fast paced development, requirements of technological convergence and high costs related to developing innovations to be factors that act as drivers for coopetition (Bengtsson, Eriksson & Wincent, 2010; Gnyawali & Park, 2009). When conducting the interviews, we explored the relative importance of each factor for Case Company’s coopetitive actions.

In terms of fast paced development, the interviewees state that illustrating product life cycles is rather complicated in the given industry. While some protocols may have been used for 20 years, updates and new features are being introduced on a continuous basis even though the protocols’ life cycle as such can be rather long. The fast pace became clear when it was mentioned that countless amount of new malware is found every day that requires constant actions from companies working with information security. Thus, the interviewees consider that employing proactive means to build information security solutions best serves the customers.

Projects characterized by coopetition that Case Company has taken part in; have included partnering with larger actors. Thus, working with the industry leaders enables Case Company to stay in the forefront of development and gain valuable information from the market. In an industry, characterized with the need of constantly upgrading the offered solutions direct customer contact and received feedback is often in key role when further developing Case Company’s products.

In terms of the technological convergence, it has been noted in the literature that as solutions need to cover broader set of needs, industry specific expertise might not be sufficient any longer. Thus expertise from other industries is needed and company’s competences can be best utilized in combination with other companies’ resources.

While Case Company possesses multifaceted product portfolio that enables customization to fit customers’ individual needs, there are situations when it lacks the crucial feature. Thus, the partner can have the needed feature in its assortment and Case Company doesn’t need to employ additional resources to provide its customer with the desired solution. The interviewees also stress that, as Case Company’s solutions are applicable in a number of different industries, there sometimes arise situations where it is needed to join the forces with another actor to be able to provide the customer with desired solution.

To proceed, the high R&D costs are suggested to act as one driving factor behind employing coopetitive strategy. As it was mentioned above, it saves company’s resources when it doesn’t need to develop each product by itself. However, Case Company doesn’t employ coopetitive strategy primarily because it wants to share the costs related to R&D with another actor. Interviewees state that the motivation behind
coopetition for Case Company is not developing new products, as its approach for providing information security related solutions is exceptional in comparison to other actors. Thus, R&D collaboration with another actor would be rather challenging. However, when Case Company’s and partner’s solutions complement one another they will be combined in a manner which customer asks for. Consequently, both actors save on R&D spending.

Thus, it can be noted that the drivers behind coopetition are closely intertwined. When it comes to Case Company’s operations, it is a question of being able to provide customer with complete solutions in as cost-efficient manner as possible. As conspicuousness is notable factor in information security industry, partnering with larger actor provides the means to reach customers without investing notable resources in marketing. This allows Case Company to focus on what it considers to be its greatest asset – the technology.

Table 5.1: Coopetition drivers

<table>
<thead>
<tr>
<th>Coopetition Drivers</th>
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<tr>
<td>Customer request is the prerequisite;</td>
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<tr>
<td>Ability to provide personalized solutions to customers in cost-efficient manner.</td>
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<tr>
<td>Possibility to increase sales;</td>
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<tr>
<td>Case Company receives the support of well-known brand behind when its solution is</td>
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<tr>
<td>included in Partner’s sales channel.</td>
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<tr>
<td>Possibility to gain access to Partner’s customer interface;</td>
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<tr>
<td>Valuable feedback to product development.</td>
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5.2 Inter- and Intra-Organizational Coopetition

In this section we will deal with the challenge of managing coopetition. Both inter- and intra-organizational perspectives will be discussed and analyzed. While the focus of the study is to investigate how market knowledge can be utilized in the interface of inter- and intra-organizational coopetition, we need to start with gaining sufficient perception on the context in which the knowledge will be utilized. Only then we have built the foundation to go deeper into the actual research topic.

5.2.1 The Inter-Organizational Perspective

In the theoretical chapter it was explained that in coopetition companies are together striving towards creating mutual benefits while simultaneously trying to capture private benefits of their own. Thus, a company has to learn to manage the duality of the two distinct logics of interaction in order to benefit from coopetition (Gnyawali et al, 2007:
However, finding a balance between collaboration and competition doesn’t come without its challenges.

The answers from the interviews showed that it can be problematic to get into the cooperation mode with one’s competitor. Thus, the presence of the conflicting logics that cooperation and competition represent is very apparent for Case Company in the inter-organizational coopetition. The main benefits Case Company looks after in coopetitive projects deal with reaching new customers in cost-efficient manner, gaining access to partner’s customer interface and consequently receiving valuable customer information to benefit its product development.

5.2.1.1 Cooperative Interaction

To start with, the cooperative element that coopetition entails is said to provide firms with the advantage of network effects. In the interviews, it becomes clear that conspicuousness is especially important factor in the information security industry. Thus, from Case Company’s point of view, partnering with larger organization allows it to reach new customers in cost-efficient manner. In this respect, coopetition provides Case Company with a possibility to positive network effect, as it doesn’t need to invest resources in trying to establish the required credibility that well-established larger brands already have.

Furthermore, when it comes to cooperative efforts, knowledge exchange is said to be the starting point. That appears to be problematic for Case Company. As it was brought up in the interviews, getting oneself into coopetition mode is challenging when the parties in the end are competing with one another. Thus, the coopetition projects Case Company has participated in have not involved mutually developing new products. It has been a question of letting the partner company to re-brand some of Case Company’s products/features under its brand name.

Moreover, possessing adequate amount of common knowledge was described as one factor that enables companies to benefit from the shared knowledge. However, in terms of Case Company and its coopetition partners, the common industry didn’t necessarily provide parties with adequate degree of common knowledge base to reciprocal product development. The respondents explained this to be due to the different approach Case Company has on information security. Thus, they were of opinion that integrating the product development of coopetition partners would not provide a cost-efficient alternative. Rather the related costs would outweigh the benefits.

Despite the different approaches parties employ, there are areas in which the complementary product portfolios of the companies act as tools for value creation. As brought up already when analyzing the drivers behind coopetition, utilizing company’s resources in the most cost-efficient way can be sometimes achieved by using partner company’s already existing product or product feature instead of investing resources in developing the feature by oneself.

While Case Company is not interested in sharing knowledge in terms of its product development, it seeks the benefits that knowledge sharing concerning customer feedback would bring about. It was mentioned already earlier that Case Company pursues to gain access to partner’s customer interface in order to gain customer
feedback that could be utilized in its product development. While the interviewees consider gaining access to partner’s customer interface to be prominent, they admit that protecting one’s customer interface is of primary importance – for both parties. However, the interviewees admit that acting in accordance with customer’s best in mind sometimes requires adjustments for both parties. If saving one’s face in front of the customer calls for the expertise of the partner company, one has to grant the partner access to one’s customer interface and thereby solve the customer problem. These situations in which Case Company gains direct access to customer interface lies one of the most significant benefits of coopetition. The received feedback can be further utilized for Case Company’s product development purposes.

5.2.1.2 Competitive Interaction

As the competitive element is clearly prominent in Case Company’s coopetition projects with external partners, the interviewees consider knowledge protection in the form of carefully composed contracts to be crucial. In line with the empirical findings, previous research (Ritala & Hurmelinna-Laukkanen, 2009) has discussed the importance of patents and contracts in order to prevent unwanted imitation and knowledge theft. Thus, the literature helps to justify the made efforts to establish mechanisms that enable safe knowledge exchange and protect Case Company’s assets.

For a smaller firm like Case Company, employing its limited resources on a project that requires major investments entails a notable risk. Thus, it is vital from Case Company’s point of view to thoroughly estimate the efforts that are required in terms of resource commitment. Once Case Company has made the decision to get involved in coopetitive interaction; the signed contract will act as a guideline during the project. The contract should establish the accepted policies and indicators to measure the functionality of the contract. According to the interviewees, the set goals are necessary in order to the parties to be committed in pushing the project forward. On the other hand, if the objectives of coopetition are not fulfilled, it is justifiable to cancel the contract. In addition to setting the rules for the cooperation, contracts are in place to protect company’s core knowledge and minimize the effects of possible opportunistic behavior.

The risk of opportunistic behavior was already touched upon in the literature review’s value creation part but given the complexity of efficient value appropriation; the importance of establishing mechanisms that allow safe knowledge exchange needs to be highlighted again. Consequently, with the help of patents and contracts firms are better able to prevent unwanted imitation and knowledge theft. Thus, paying extra attention to protection is essential for successful value appropriation (Ritala & Hurmelinna-Laukkanen, 2009: 825-826).

In the theoretical chapter we discussed that in terms of competitive phase of coopetition, some companies are better equipped in differentiating themselves from the competitors in the market. This aspect is particularly important in information security branch. As brought up before, due to the vitality of information security for firms, customers tend to trust on well-established brands. However, as the Case Company is rather young and small company, it has not managed to create a brand with clear association of being the technology leader of information security. To be even considered as an option among the well-known actors is not without problems. Meanwhile, as the brand building takes time and resources, Case Company has found re-branding of its products under
partner’s name an appealing alternative. However, in the long-term, re-branding its products is not necessarily the most suitable option to establish the needed conspicuousness. In the end, succeeding in coopetition has to do with capturing the largest possible slice of the market. While re-branding its product under partner’s brand name can entail larger share of the market, in the long run it might not be appropriate strategy for Case Company. In its efforts to establish the required conspicuousness, Case Company might have to focus on building a stronger brand of its own, not the one of its partner.

5.2.1.3 Challenges of Inter-Organizational Coopetition

We will now deal with the challenges that managing coopetitive strategy involves. During the interviews, managing coopetition was referred to as political minefield due to the numerous actors involved and the differing motives and expectations.

The importance of establishing accepted modes of action when getting involved in coopetition was discussed already in the theoretical part. Furthermore, the interviewees emphasized the importance of carefully formed contracts to act as set rules for the interaction and a form of protection for the parties involved. The challenge of coopetition was clearly articulated in the interviews. It is not only a question of differing goals and interests that the involved companies have, but there might be conflicting goals within the company both between its business units and individuals. This adds up an additional spice for managing the project. In addition to the conflicting goals, there are the common objectives of the parties. Thus, managing the overall picture with overlapping goals and objectives requires strong expertise. Contracts are in place to support the practical implementation of the project as parties can rely on the established policies written in the contracts.

Even though, the role of contracts is described to be important, there are coopetitive relationships in which the individuals’ established relationship decreases the consequent role of contracts. The interviews brought up an interesting insight. While it was stated that getting involved in coopetition with larger organizations makes the picture even more complicated, influencing the dynamics of coopetition by increasing the bureaucracy and colder decision making based on figures, the role of individuals is more concrete. Thus, working personal relations are of help for the coopetition to work efficiently. However, as people change jobs and new persons replace them, the functionality of coopetition can be endangered. It was brought up that in situations where individuals have purely transactional relationship with each other, the emphasis shifts to increasingly relying on the contracts. This notion is in line with the comment brought up in the theoretical part, claiming that knowledge creation starts from individual level (Nonaka, 1994). Further on, the process continues in functional and organizational levels but the starting point is the individual level.

Finally, the interviewees emphasize the importance of paying attention on communication. Previous research (Osarenkhoe 2010) brings forth that there can easily be gaps when channeling the information flows in partner level. Thus, collective approach to coordination is considered essential in order to efficiently manage coopetitive strategy. The implications of more open, collective approach are said to include distributed knowledge within the participants and the possibility for creating knowledge. Interviewees consider the possibility to gain access to partner’s customer
interface to entail huge potential from Case Company’s point of view. However, when it comes to inter-organizational communication, the dominating competitive element sets a notable challenge to the knowledge exchange. The implications of individual approach to coordination could be clearly seen in the inter-organizational context, as knowledge exchange between partners is clearly more complicated than within company. This affects further on knowledge creation that is elaborated in more detailed manner in the coming sections.

To round up, employing coopetitive strategy usually is associated with the limited resources companies possess and thus joining forces in order to succeed better in the market. However, our results let us to suggest that companies should consider the cost-efficiency aspect carefully. Otherwise the opportunity costs can outweigh the actual benefits. It is necessary to take into account the needed investments and resources that coopetition requires and then weigh the respective costs and advantages. Furthermore, the interviewees state that in case deciding to get involved in coopetitive interaction, attention should be paid on clearly defining the specific areas where coopetitive strategy will be applied. This would, according to the interviewees, ensure that the benefits would outweigh the related costs.

5.2.2 The Intra-Organizational Perspective

It could be derived from the discussion concerning inter-organizational coopetition that the competitive element of coopetition is dominant and poses obstacles to market knowledge exchange between the parties. As the research question involves also the intra-organizational aspect of coopetition, we will below discuss the characteristics of coopetition within company’s own boundaries.

In the theoretical chapter it was stated that there is a difference between competitive elements of coopetition depending on whether it takes place inside firm’s boundaries or at inter-organizational level. In line with the presented findings, conflict and rivalry were found to be more extreme in the inter-organizational context. In terms of intra-organizational coopetition the competitive element could not be observed to be influential. We expected that the company merger that took place in 2011 would have had its implications for the internal competition. As Business Unit is still a rather fresh supplement in Case Company, we assumed that the old competitor standing could have at least some level of influence. However, we found that Case Company rather supports open and active communication between its business units while the competitive element is almost absent.

Even though, the competitive element is not that apparent in the intra-organizational environment, it can be noted that some level of competition within Case Company exists. It was brought up in the literature review that cooperation and competition often coexists in organizations while the degree of competition varies depending on the company. Competition doesn’t only entail rivalry for financial resources but the list also includes information, power and support (Bouston et al, 2001). However, competition doesn’t need to be seen as something negative but rather it can create synergy and improve a firm’s market learning (Luo, Slotegraaf & Pan, 2006).
In terms of Case Company, it was noted in the interviews that one has to make one’s voice heard; if the ideas are not communicated forward one cannot expect that resources would be invested in the idea. In addition, each of the business units has goals of their own. At the same time, interviewees state that despite the function specific goals, finding common ground is not considered to be problematic. While competition exists, the underlying logic in Case Company entails that helping others benefits oneself.

In the theory chapter the similarities between cross-functional coopetition and market orientation were discussed. While both cross-functional coopetition and market orientation stress the importance of cooperation across functions, market orientation aims to reduce inter-departmental conflicts while cross-functional coopetition suggests that conflicts can have positive implications (Luo, Slotegraaf, & Pan, 2006: 69). When studying Case Company, the market orientation is apparent in its operations while only a hint of coopetition can be found. Thus, it could be established that the market orientation weighs more in Case Company’s scale and the competitive element is not remarkable.

To further continue, the importance of intra-organizational collaboration has been emphasized in the literature review. In terms of product development, the wide range of development tasks needs to be coordinated between various business units (Luo et al., 2010; Krishnan & Ulrich, 2001; Peterson et al., 2005). While taking advantage of the diverse knowledge that different functional units possess is a critical component for a firm’s performance, the different tasks, goals and responsibilities of the units bring the challenge of successfully implementing product development projects (Luo et al., 2010).

In the inter-organizational context, the interviewees were of the opinion that the different approach to information security that Case Company employs prevents collaboration in terms of product development. That implies that the common industry specific knowledge is not sufficient. This can also entail a benefit for Case Company. As Case Company employs a unique approach it can act as an advantage in the inter-organizational context when Partner Company lacks the technological expertise and Case Company can provide the customer with product support. When it comes to intra-organizational context, Case Company aims to ensure that its absorptive capacity is at adequate level. Thus, supporting open and active communication between Case Company’s business units enables close collaboration, which in turn influences firm’s absorptive capacity positively.

While the results showed that information exchange in the inter-organizational context was more complicated due to the competitive element and parties’ desire to protect one’s assets, information flows were more straightforward within the company. In Case Company, actions are taken to support company-wide communication. According to the interviewees, active conversations during the coffee breaks involve discussing customer cases and arranging weekly company meetings to ensure that everyone is aware of the current and upcoming projects. In terms of Business Unit, it is even brought up that the employees within the unit are involved in both product development and have direct contact with customers. As a result, the employees are aware of customer needs but at the same time understand the technical element and what is required to put together the desired solutions. This approach enables a solid process without obstacles for knowledge exchange.
Another benefit that the collaborative element in coopetition is said to bring about is network effects. In the inter-organizational environment it entailed reaching new customers in a more cost-efficient manner and potentially gaining valuable customer input for product development. The same phenomenon can be seen in intra-organizational context. Firstly, putting together solutions requires the expertise of each business unit, which implies that together the functional units can achieve more comprehensive company-wide goal. In addition, the company merger has had notable implications from Business Unit is point of view. Belonging to a larger company has given Business Unit the needed credibility to reach larger customers. In the same way Case Company considers it important to get the support of well-known brand behind it in the coopetition projects it is involved. Thus, the notion that conspicuousness is decisive factor in information security industry implies that customers tend to rely on actors that have the credibility that well-established brand name brings about.

While coopetition enables reaching larger customers both in inter- and intra-organizational context, the interviewees state that the possibility to gain close contact with larger customers has notable advantages for Case Company’s product development. With the help of greater resources that larger customer possess, Case Company (and Business Unit) gains the possibility to work with future techniques and that in turn can create competitive advantage for the company.

In the literature review it was brought up that while coopetition as a strategic model supports the exchange of tacit and non-tacit knowledge, there might be gaps when channeling the information flows. Furthermore, the implications of employing collective and individual approach to coordinating the coopetitive interaction were compared. While Case Company relied on collective approach in the intra-organizational context, the approach is more individualistic in the inter-organizational projects. Abandoning individual approach in favor of collective more open approach supports the knowledge distribution within participants, which in turn enables creating knowledge and know-how (Osarenkhoe, 2010). Thus, it is not surprising that the gained results differ. Dominating competitive element and parties’ individual benefits hinder the knowledge exchange and coopetitive interaction doesn’t necessarily create new knowledge. Meanwhile, the close collaboration between Case Company’s functional units supports company-wide knowledge distribution that has positive implications on Case Company’s product development. To conclude, the above observations serve as a foundation of understanding the specific context where the market knowledge utilization is to take place. Consequently, we will further continue the analysis concerning market orientation’s role within Case Company and the issue of market knowledge utilization in the interface of inter- and intra-organizational coopetition that forms the core of the performed research.
Table 5.2: Inter- and intra-organizational coopetition

<table>
<thead>
<tr>
<th>Inter-Organizational Coopetition</th>
<th>Intra-Organizational Coopetition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge exchange is problematic; Parties aim to protect their own assets, especially the customer interfaces.</td>
<td>The emphasis of intra-organizational coopetition is on the collaborative element.</td>
</tr>
<tr>
<td>Parties employ different approaches; The common industry knowledge is not sufficient for common product development purposes.</td>
<td>Well-established structural conditions support company-wide communication.</td>
</tr>
<tr>
<td>Importance of contracts; Protects from opportunistic behavior and the set objectives drive the project forward.</td>
<td>Expertise of each functional unit used to put together solutions; The organizational boxes are consciously avoided to enable efficient collaboration.</td>
</tr>
</tbody>
</table>

5.3 Role of Marketing and Market Orientation

In the previous chapters we have gone through the importance of appropriate activities, a market oriented attitude and atmosphere in the whole organization. Kohli and Jaworski (1990:4) explain market intelligence as the base for market oriented attitude indicating deep understanding of customers’, even non-verbalized, preferences. Furthermore it requires company to analyze the market, its possibilities and competitors’ actions.

Market orientation and market intelligence, as a part of it, is a philosophy that can support entire organization. Gök and Hagioglu (2010: 291-292) define market orientation as aligning firm’s actions to serve customer needs. Thorough understanding of customer needs is required in the whole organization together with insights of future trends in the specific branch. Despite the fact that Case Company is a strongly technology-oriented company, market orientation can be identified as the underlying factor in their operations. It can be seen from the responses that interviewees emphasized the importance of market-oriented attitude.

It has been realized in Case Company that in order to understand customers and to be innovative, internal communication has to be open and information has to be shared across the departmental borders. Thus, open and active company-wide communication is the key word. The company’s weekly meetings together with the used chat channel are the forums in which customer and market information is being shared. At the same time, informal conversations within the company and with customers are highlighted. Kohli & Jaworski’s article (1990: 5-6) supports the fact that important information in company can be generated anywhere in the company and then later on shared with other business units.
These above examples evidence market orientation attitude that enables Case Company to assess what is really important for customers and what the needs they cannot directly indicate are. Jimenez-Zarco et al. (2009: 44-45) accentuate the importance of shared marketing and customer knowledge and diversity of activities related to them. This enables to gather more versatile information but it also sets its challenges to coordinate the whole process. In Case Company they are aware of this but perceive it to be problem for larger and more bureaucratic organizations. In Case Company’s processes it has been considered to be very effective way to gather information for future use about customers and their preferences indicating at the same time company-wide interest on customers and their needs.

Verhoef and Leeflang (2009: 27-29) emphasize the strong correlation between market orientation attitude in the company and powerful marketing department. In Case Company they support each other but the marketing function’s role is not traditional. As Gök and Hacioglu (2010: 292-295) demonstrated earlier globalization, competition and more demanding and complex customer needs have changed the role of marketing. In fact, the marketing activities are spread all over the company in Case Company as well. Case Company operates in highly competitive market where changes are rapid and unpredictable. According to Verhoef and Leeflang (2009:15) influential marketing activities have a contributory role in these cases when they have best knowledge of customers and overall situation in market. The company just needs to be able take advantage of it.

Marketing function’s traditional role is to be the key-link between customer, market and company but in Case Company many of those activities are also integrated with other functions. Due to the rapid growth of business, Case Company should have set boundaries between different departments but those borders are not that clear and even less restricted in Business Unit. Jimenez-Zarco, Martinez-Ruiz and Izquierdo-Yusta (2009: 44-45) argue for diversity of organizational functions in marketing activities and integration of other activities with marketing. According to them it is essential in order to produce better marketing outcomes and this trend seems to be true in Case Company as well. Marketing function gathers information from the market and analyzes it with the help of other employees from other functions. Due to the nature of the business, there also needs to be technical insights in marketing activities and active communication between employees from different functions.

Our interviewees also emphasized the marketing function’s important role in product development. The marketing function is responsible for segmentation and positioning for new products and features. Because of the limited resources it is not worth creating something what company already has or something customers are not willing to buy. Verhoef and Leeflang (2009:29) wrote about too widespread marketing activities and the challenge of coordinating marketing information. If it is too scattered in the company, there is a risk that the information gets lost. In Case Company they have solved the problem as all the gained customer information is documented and analyzed. Open company-wide communication is an important part of their marketing strategy and in this way they can minimize the risk of lost information.

To return to market orientation, it is significant factor behind coopetition and one important reason why Case Company ended up adopting this strategy. Case Company
wants to respond better to customer needs and be the first in the market to satisfy those needs. As a conclusion we can determinate that Case Company’s strong desire to succeed and grow has driven them forward and market oriented attitude has been enabling factor in the process.

*Table 5.3: Market orientation and marketing in Case Company*

<table>
<thead>
<tr>
<th>Market Orientation and Marketing in Case Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Company is strongly technologically oriented company; Marketing function’s role is not traditional but rather the activities are spread around the company.</td>
</tr>
<tr>
<td>Market orientation can be considered as an underlying logic in Case Company’s operations; Strong customer focus.</td>
</tr>
<tr>
<td>Open and active company-wide communication to collectively solve customer cases.</td>
</tr>
</tbody>
</table>

### 5.4 Utilizing Market Knowledge

In the previous parts of the analysis we went through the factors behind coopetition, discussed coopetition in both inter- and intra-organizational context and considered the market orientation’s role in Case Company. These parts act as building blocks for the final part of the analysis dealing with utilizing market knowledge in the interface of inter- and intra-organizational coopetition.

In the performed interviews Case Company’s notable customer focus became apparent. While it was stated that Case Company would not get involved in coopetition if customer didn’t have something to gain from it, the potential benefit of coopetition for Case Company lies in the possibility of gaining access to partner’s customer interface and consequently receiving customer feedback that can be utilized in its product development.

In the following parts, we will illustrate how the market/customer knowledge flows into Case Company and consequently the process it goes through. We will analyze whether the phases concerning transferring, translating and transforming market intelligence could be observed in our research. After that, special attention will be paid to the factors that influence the process of utilizing market knowledge.
5.4.1 Utilizing Market Knowledge in the Inter-Organizational Context

The importance of customers and gained customer feedback for both Case Company and its coopetition partners has been emphasized on several occasions. In that sense, it is not surprising that parties try their best to protect their customer interfaces from outsiders. In terms of inter-organizational coopetition the competitive aspect and protecting one’s assets is in focus. Thus, as the parties appear to employ an individualistic approach to coordinating knowledge, it is understandable that the market intelligence doesn’t flow that freely between the coopetition partners.

While knowledge boundaries pose a challenge for efficient knowledge generation in organizational level, the boundaries are even more concrete in inter-organizational context. It has been brought up above that the competitive element, importance of knowledge protection and the underlying individualistic approach dominate the inter-organizational coopetition projects in which Case Company has been involved in. These notions are apparent also in terms of utilizing market knowledge in the inter-organizational context.

With the help of the answers we received from the interviews, we were able to build an understanding of the process involved in gaining market knowledge in the inter-organizational coopetition. In the coopetition projects in which Case Company has been involved in, its product has been re-branded under Partner Company’s name. Consequently, customer feedback has a long and rather complicated way to go until it reaches Case Company. Below, we have drawn up an illustration to facilitate understanding the alternate scenarios concerning market knowledge utilization.

![Figure 5.1: Utilizing customer information in the inter-organizational context](image-url)
In the above figure we have demonstrated three (1, 2, 3) alternate scenarios of market knowledge flows. Even though gaining access to partner’s customer interface is high on Case Company’s priorities it cannot always be accomplished due to the fact that parties try to protect their customer interfaces from outsiders.

Again, the starting point in the process is customer’s conversation with partner’s salesman. However, it is up to the salesman if he/she decides to forward the feedback to Case Company’s representative. The first scenario (1.) in the figure entails that partner company’s employee forwards customer feedback to Case Company’s salesman. At the same time, Case Company cannot count on that the gained customer feedback reaches its representative and that it can be further utilized in its product development. This scenario is presented in figure’s point three (3.) in which Case Company doesn’t receive the information.

The final scenario (2.) is the most desirable from Case Company’s point of view. This is due to the possibility to gain direct contact with the customer. Although protecting one’s customer interface is of high importance for the parties, there are situations in which the other party possesses the key expertise to solve the risen customer problem. Thus, if it is necessary to allow one’s partner to get involved in order to retain one’s credibility in front of the customer, adjustments are done. Consequently, these situations are invaluable for Case Company. The gained customer feedback that Case Company receives from the direct conversations acts as an important asset in its product development.

Thus, in situations where the customer feedback reaches Case Company, either as a forwarded feedback or direct feedback gained in contact with the end-customers, it is further utilized in product development purposes. The following phases of the process take place in the intra-organizational environment in which the gained information is further processed.

In the theory chapter, the process of utilizing market knowledge was described to consist of three subsequent steps: knowledge transfer, knowledge translation and knowledge transformation. First the information needs to be transferred across information processing boundaries. Further on, the information can be in a form that needs translation to process it from domain specific knowledge into understandable terms with common meaning. Finally, the efforts are directed towards creating new forms of knowledge by transforming the domain specific information into a mixture of knowledge that can act as a source of competitive advantage Carlile (2004: 558-560).

When we start to elaborate the described phases of processing market intelligence into our case study, it can be noticed that all of the phases are not present in the inter-organizational context. In fact, the figure shows that even the first phase dealing with transferring knowledge across boundaries cannot be guaranteed. In case, the partner company’s representative decides not to share the received customer feedback with Case Company there is not anything Case Company can do about it. Allowing Partner Company re-brand some or part of its solutions entails that the relationship between the parties is mainly transactional. This entails that close relationship with trust and possible knowledge sharing is not a part of companies’ objectives.
However, if the partner’s salesman decides to forward the gained feedback, the information is successfully transferred across the organizational boundaries implying that the first phase of the process is present in the inter-organizational context. As Case Company doesn’t gain any direct contact with the end-customer in this scenario it is possible that partner’s representative has already processed the gained information. This implies that the representative has translated knowledge into understandable terms prior to forwarding it.

In the final scenario, Case Company is granted access to customer interface to solve a risen problem. This entails that information is transferred to Case Company by direct customer contact. Due to the dominating competitive element, no knowledge is further processed with the coopetition partner but taking advantage of the gained knowledge will take place within Case Company’s own walls. In fact, the process dealing with gaining market information from the inter-organizational coopetition can be seen as the preliminary phase of turning the knowledge into a form that can benefit Case Company. In the following part, we will go through the process that takes place in the intra-organizational environment in a detailed manner.

### 5.4.2 Utilizing Market Knowledge in the Intra-Organizational Context

Having described the market knowledge utilization process in the inter-organizational context, we will now deal with the process that takes place within the company. In fact, utilizing market knowledge in the intra-organizational context can be seen as a continuum for the process that occurs in the inter-organizational context or alternatively it can be seen as an independent process happening within Case Company. Regardless whether it is a question of purely intra-organizational customer case or one that entails external partners, the process involves same steps.

In terms of inter-organizational coopetition, it could not be guaranteed that customer feedback reaches Case Company. However, in cases that Case Company received the feedback it was either in the form of forwarded customer feedback by partner’s representative or feedback gained from direct customer contact. As it was brought up already above, an arising customer wish is the starting point for product development. Moreover, the best way to find out what customer wants is to talk to him. Hence, the importance of direct customer contact is emphasized.

As mentioned already earlier, a customer contact starts the process. Once the customer information reaches Case Company, the established structures for knowledge exchange are in place to ensure that Case Company can obtain full use of the knowledge. Thus, the process is more straightforward and open for everyone to be a part of it than in the inter-organizational context.

Although Case Company considers the conversations with customers to be the most effective way to map the customer needs, it is only the starting point of the process that in fact involves several important steps. Thus, the gained information needs to be stored. For this purpose, Case Company uses information systems and consequently is able to return to the conversations. Interviewees also stress that the idea is not to fulfill each customer’s wish but Case Company has to consider which of the requests are
worth implementing. This involves picking up recurrent customer wishes from the mass and discussing the most relevant ones with others.

In addition to information systems, a company’s chat channel and weekly meetings ensure that everyone is updated concerning current issues and gets to give input on the idea selection process. Once the decision of implementation has been made, the customer receives an offer. Even though the interviewees consider the process of utilizing the gained customer information rather straightforward and efficient, they are of the opinion that one should not ponder the customer ideas within the company too long. Instead one should take it to the customer end as quickly as possible in order to avoid wasting resources on projects that customer is not in the end interested in.

We will now further elaborate the process of market knowledge utilization in the intra-organizational context. Above, it was mentioned that a customer wish or piece of feedback is the starting point of the process. During the customer contact, the information is transferred across the boundaries and can be further utilized. In fact, a crucial part of the process deals with storing the information so that it can be of use later if it is not considered important at the given moment. By transforming the gained information into written form and storing it into Case Company’s information systems, it can be guaranteed that the information doesn’t disappear and that it is available to other employees as well. Also this step can be considered as knowledge dissemination as it enables the information to be on hand for everyone.

Interviewees mention that Case Company’s chat channel can be helpful in order to get feedback from co-workers. Thus, it can be established together with one’s colleagues if the customer request has the needed potential to be transformed into an actual product or solution. The same kind of translation phase can occur in informal conversations within the company as collectively solving customer cases is strongly encouraged in Case Company.

While efforts are made in order to ensure that the information is available for everyone and that the information is collectively translated into a form that is understandable to persons with different specializations, the final stage deals with transforming the gained knowledge entails company-wide collaboration. As the people working in the customer interface have the best understanding of the customer preferences and wishes, their knowledge combined with others’ technological expertise transforms the knowledge into a concrete form. It is acknowledged in Case Company that combining the expertise of specialists in different areas brings out the best results. For that reason, a collective approach to solving arising customer wishes is used. The same idea of solving the customer problems together can be seen in the company’s weekly meetings. Everyone’s input regardless one’s job description is needed in order to successfully carry out the process. In fact, in Case Company the management has chosen to avoid strictly specialized functions, which concentrate to specific tasks. Open communication and information sharing enables them to create new forms of information. Customer oriented culture in company is also powerful enough that employees are willing to collaborate and help each other.

Sending offer to the prospect customer represents the final step of the knowledge utilization process in Case Company. This activity is considered to belong to transformation of the market knowledge. This is done because an offer can be seen as a
tool to transform the developed solution to represent concrete value for Case Company in case it is being accepted. In order to clarify the above analysis, we have illustrated the process of utilizing market knowledge in intra-organizational coopetition in relation to the three stages (transfer, translate, transform) of market knowledge utilization.

**Utilizing customer information in intra-organizational context**

![Diagram of customer information in intra-organizational context]

*Figure 5.2: Utilizing customer information in the intra-organizational context*

To conclude, it can be drawn that the three steps of processing market knowledge that were described in the literature review could be found from our case. However, in contrast to the intra-organizational coopetition, all the steps were not present in the inter-organizational coopetition. Thus, the activities present in the process of utilizing market knowledge in the inter-organizational coopetition could be rather seen as preliminary steps before the gained knowledge was further utilized within the company. Given that the process was not complete in the inter-organizational context, it will be of interest to move on to discuss the factors that influence the utilization of market knowledge in both contexts.
5.4.3 Influencing Factors

The final part of the analysis deals with factors that have an influence on the process of utilizing market knowledge. The factors that either support or complicate knowledge utilization were identified in the literature review. According to Szulanski (1996) major barriers include lack of absorptive capacity, causal ambiguity and arduous relationship. While assessing the empirical results we noticed that the above-mentioned barriers and knowledge features presented by Carlile (2004) are closely linked. For that reason, the knowledge features of novelty, difference and dependence will be discussed together with the described barriers. More specifically, lack of absorptive capacity is linked to difference, causal ambiguity to novelty and arduous relationship to dependence. By doing this, we can gain a more clear picture of the influencing factors and their inter-relatedness instead of discussing a number of separate factors. In addition to the factors that complicate knowledge utilization, three supporting factors (Nonaka, 1994) were identified in the literature review. While we will briefly discuss them, the focus is on the analysis of the factors with complicating effect on the process.

Below, we will go through each of the described knowledge barrier in adequate way. The issue dealing with lack of absorptive capacity occurs in situations in which the recipient is unable to exploit the outside sources of knowledge, as it is different. Thus, possessing a sufficient level of common knowledge is necessary to be able to utilize the gained knowledge (Cohen & Levinthal, 1990; Szulanski, 1996).

As stated above, the lack of absorptive capacity was named as one reason why collaborating in inter-organizational projects in terms of product development was not
considered to be worthwhile. Case Company’s particular approach to information security was stated to complicate the collaboration, as the common industry specific knowledge would not be sufficient enough. Thus, the related costs would according to the interviewees outweigh the costs.

The situation is different in the intra-organizational context. Case Company’s (including Business Unit’s) management encourages open and active communication and has paid attention to building appropriate structural conditions that support knowledge exchange within the company. Active conversations during coffee breaks, weekly company meetings together with company’s chat channel aim at making everyone aware of current matters and enhance the understanding of company’s overall operations. In addition, Business Unit is employees’ work descriptions entail responsibilities in both product development and direct customer contact. This is to avoid unnecessary organizational boxes and make the knowledge exchange process solid without additional obstacles.

An interesting notion deals with Zahra and George’s (2002) idea that absorptive capacity can be divided into two – the potential and realized absorptive capacity. In fact, there can be seen a relationship with the two components of absorptive capacity and the process of utilizing market information. It is not enough that the information is disseminated across the organizational or functional boarders but it has to be transformed into a usable form before it can act as a source of competitive advantage. In the previous section dealing with processing the gained knowledge; we came to a conclusion that knowledge transformation doesn’t take place in the inter-organizational context. This entails that the use of realized absorptive capacity is restricted to intra-organization environment. It was explained above that Case Company has paid notable attention in facilitating the last steps of knowledge utilization process. However, as potential absorptive capacity is needed to identify and acquire the needed knowledge, this takes us logically to the next factor.

The next knowledge barrier deals with causal ambiguity entailing that there are difficulties to establish the exact reasons for a product’s success or failure making the replication of the capability difficult. In addition, the ambiguity can also originate from insufficient understanding of the characteristics of the new context where knowledge is to be used, implying that novelty is another knowledge feature that can prevent successful knowledge transfer (Rumelt, 1984; Szulanski, 1996).

In terms of novelty as an obstacle for efficient knowledge transfer, interviewees stated that if the received customer knowledge is new and entails unknown aspects, it entails a challenge from Case Company’s point of view. Again, the established structures for efficient knowledge exchange can facilitate recognizing new knowledge as something relevant. Thus, as Case Company’s employees store the conversations with customers in written form, it is possible to spot the recurrent customer signals. In terms of customer requests that are novel to Case Company, if the need arises repeatedly in conversations it is gradually taken seriously. The interviewees were of opinion that it is not necessarily a question of person’s experience to spot the essential information from the mass but rather a matter of personal capabilities and expertise to identify what is important. Sometimes a gut feeling is enough, while there are times when numbers and figures are needed to establish whether an idea has potential. Moreover, the interviewees brought up the importance of acting with larger actors. This was stated to
be a factor that entails working with future techniques and consequently gaining competitive advantage when being able to predict the next big thing in the industry.

In terms of causal ambiguity and inter-organizational context, it can act as a positive factor from Case Company’s point of view. While it was brought up that the parties’ relationship is of transactional nature as it is limited only to letting partner company to rebrand Case Company’s certain product feature or solution. Thus, no common product development efforts take place. Situations in which Case Company’s expertise is needed to solve a customer problem and is granted with access to customer interface, is caused due causal ambiguity from partner’s end. Consequently, the fact that the partner lacks the capabilities to solve the customer problem is Case Company’s advantage, as it receives valuable customer feedback in these situations. At the same time, identifying the essential information entails the same challenges than within the company but at least Case Company has gained information to be identified.

The third and final knowledge barrier includes arduous relationship between the parties. Thus, if the relationship is considered to be laborious and hard, efficient knowledge transfer will be endangered (Szulanski, 1996: 32). Knowledge feature that is related to arduous relationship deals with dependence entailing that two actors have to take each other into account if they plan to meet their goals (Litwak & Hylton, 1962).

In terms of inter-organizational context, dependence between the actors could be observed in two different respects. Firstly, parties got involved in co-opetition because they needed the expertise of one another to fulfill the emerging customer wish. This implies a positive dependence between the parties, as the goal is that both benefit when they can provide the customer with required solution. However, as it was pointed out, in comparison to internal knowledge transfer, the one taking place in the external environment entails obstacles. While parties get involved in co-opetition to be able to together fulfill a particular customer wish, the competitive element dominates the relationship. Parties employ individualistic approach to knowledge coordination, which implies that, the gained information and feedback is not necessarily forwarded. Moreover, from the responses it became clear that protecting one’s assets is considered necessary. Especially, efforts are directed towards protecting customer interface from outsiders. While customer feedback is essential for product development, parties try to keep the information themselves. It was brought up in the interviews that because the parties in the end have different objectives, it is difficult to get oneself into the cooperation mode. Despite the cooperation in terms of offering the customer with more complete solution, the competitive element is the dominant one. Thus, as parties concentrate on protecting their own assets this affects knowledge transfer in deteriorating manner making the relationship of arduous nature.

At the same time, when it comes to dependence’s influence on knowledge exchange within Case Company, there appears to be positive dependency between the business units. It is mentioned in the interviews that the employed logic entails that if I’m helping someone with his/her project that benefits my project as well. Furthermore, in terms of Business Unit, it is stated that the more open they are towards Case Company, the better Case Company can support Business Unit, which in turn positively affects both Business Units and consequently also Case Company’s performance. Thus, it can be drawn together that the collective approach Case Company employs to knowledge coordination implies that the close collaboration between business units enables fluent and efficient market knowledge exchange within the company. There is a certain ease of
working together and willingness to collectively solve the risen customer problems and “beat the bad guys”.

While the focus of the analysis is on the factors that complicate knowledge utilization (Szulanski, 1996; Carlile, 2004), we will also go through the corresponding elements that Nonaka (1994) has claimed to support knowledge creation. These include creative chaos, redundancy of information and requisite variety. To start with creative chaos, it is said that if existing knowledge is not enough, company needs to provoke the need to create new knowledge. Case Company is aware of the continuous need to stay alert in order to stay in the forefront of the competition. It is active in different forums, consciously encourages active informal conversations where creative ideas can flow freely and welcomes everyone’s ideas regardless one’s position in the company. When it comes to the external context, creative chaos cannot be considered to have notable influence, as actual knowledge generation doesn’t take place together with the partner company.

To continue, redundancy of information can be thought to deal with the conscious overlap of information and management’s responsibilities. While replication as such can have a negative tone, Nonaka claims that when there is more information available than is directly needed, new combinations of knowledge can be created. In Case Company, there can be noticed a certain degree of redundancy of information. Knowledge is stored in a way, which makes it available for everyone, ideas are shared in informal conversations and through company’s chat channel and decisions to execute projects are made in company’s weekly meetings. This is done to ensure, that everyone is conscious of the current issues. In addition, avoiding unnecessary organizational boxes and too strict job descriptions are to guarantee that employees have clear overall picture of company’s operations. In terms of the inter-organizational context, it was brought up earlier in the analysis that there is rather a lack of information sharing not to mention an overlap of it. Again, this restricts the actual knowledge creation in the external context and explains the absence of the last stages of knowledge utilization.

According to Nonaka (1994), the third supporting factor deals with requisite variety that is concerned with established structural conditions to support knowledge exchange. As it has been discussed above, Case Company has paid considerable attention to make sure that adequate structural conditions are in place. The issue has been noticed in the concrete actions but also in the underlying market orientation as a part of company culture, which encourages open and active communication in order to serve customers in the best possible way. While Case Company invests in efficient company-wide communication, the same doesn’t apply in inter-organizational context. There are not any concrete mechanisms to ensure that the information is disseminated across the boarders due to the fact that parties tend to protect their assets and avoid unnecessarily sharing information that can benefit the other party. Thus, it cannot be ensured that the information that would be beneficial for Case Company ever reaches its representative.

To summarize, as it was observed earlier, depending on whether coopetition takes place in inter- or intra-organizational context, the dominating element differs. While competition dominates the interaction in external environment, intra-organizational coopetition is characterized with close collaboration. Moreover, the difference can be seen in the approach to knowledge coordination. In the inter-organizational context, parties pay notable attention on information protection. Thus, the focus is on pursuing
one’s private benefits, which complicates and prevents to some extent the knowledge exchange between the parties. At the same time, Case Company has paid attention to factors that facilitate efficient knowledge transfer within the company. Thus, the internal approach to coordinating information exchange is collective, implying that the established structures are in place to support communication between different business units and ensure that everyone in the company is aware of the current issues.

Table 5.5: Influencing factors

<table>
<thead>
<tr>
<th>Influencing Factors</th>
<th>Inter-Organizational Context</th>
<th>Intra-Organizational Context</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lack of common knowledge base is an advantage from Case Company’s perspective; Gains access to customer interface in expertise requiring situations.</td>
<td>Open and active company-wide communication makes everyone aware of current issues and enhances understanding of the big picture; Absorptive capacity is on adequate level.</td>
</tr>
<tr>
<td></td>
<td>Competitive element dominates inter-organizational coopetition; Efforts are directed in protecting one’s customer interfaces instead of sharing the gained information.</td>
<td>Difficulties to recognize novel information as something relevant; Recurrent signals help in spotting the information.</td>
</tr>
</tbody>
</table>
6. Conclusions

To conduct the study we explored a considerable amount of literature dealing with coopetition, innovation, marketing, market knowledge utilization and factors that influence the process to get a grasp of the big picture and understand how the issues are interrelated. Further on, we performed a case study of an SME operating in the information security branch. Given the lack of research concerning SMEs employing coopetitive strategy together with the shortage of research conducted of coopetition in marketing literature and lacking comprehension on the organization of knowledge exchange within and across companies (Gnyawali & Park, 2009; Luo, Slotegraaf, & Pan, 2006; Rindfleisch & Moorman, 2001; Alin et al., 2011), we believe that our research generated valuable insights on the topic. Finally, the information gained from the interviews enabled us to answer our research question “How can market knowledge be utilized to create competitive advantage in the interface of inter- and intra-organizational coopetition”.

In our research we wanted to address the growing need to understand how organizations can organize knowledge exchange within and across company boundaries. The results gained, had a number of interesting implications. In terms of inter-organizational coopetition, Case Company’s main objective is to increase its sales and gain access to partner’s customer interface in order to receive customer feedback that can be utilized in product development purposes. However, the dominating competitive element and the desire to protect one’s own assets hinder the knowledge exchange in the inter-organizational context. It cannot be taken for granted that customer feedback always crosses the organizational borders and consequently reaches Case Company. As the parties consider customer interface to be a valuable asset, actions are taken to protect it from outsiders. Thus, the process of transferring customer feedback is rather long and complicated in the inter-organizational coopetition projects. However, there are situations in which partner’s salesman can decide to forward the gained customer feedback to Case Company’s representative. In addition, in expertise requiring situations Case Company is granted access to partner’s customer interface to maintain credibility in front of the customer. In these situations lie the potential of gaining market knowledge that can be further utilized in Case Company’s product development. Furthermore, it can be drawn that any actual new knowledge is not generated in the inter-organizational context. Rather, the information gained will be further utilized within Case Company. Thus, the activities taking place in the external context can be seen as the preliminary stage of the knowledge utilization process.

To continue, the process of utilizing market knowledge is considerably more straightforward in the intra-organizational context. Case Company has invested in creating conditions where knowledge can easily flow between different functional units. Market orientation as a strong element of the company culture puts the customer in focus. Further on, an active company-wide communication is encouraged and collective approach to knowledge coordination is employed. To ensure that the available information can act as an asset of strategic value, adequate level of absorptive capacity guarantees that the employees not only know what is happening within the company but also understand how the information can be further utilized. The starting point for the process is a direct contact with customer. During the informal conversations the customer expresses his/her current needs. Other steps of the process include storing the
conversations in electronic form after which the recurrent ideas with most potential are picked up from the mass, shared in Case Company’s open forum and collective efforts are made to solve the customer. Finally, the implementation decision is made and offer is sent to customer. An important notion dealt with not spending too much time processing the gained information in house but rather taking it back to the customer-end as soon as possible. This avoids wasting resources on solutions that the customer is not interested in paying for.

Based on the findings we developed a model to illustrate the results. Figure 6.1 illustrates the consequent stages of the knowledge utilization that take place in the both inter- and intra-organizational coopetition. Furthermore, the process is stepwise described and the influencing factors presented.

![Figure 6.1: Utilizing market knowledge in the interface of inter- and intra-organizational coopetition](image)

In the analysis we discussed a number of factors that were suggested to support or complicate the process of utilizing market knowledge. In the inter-organizational context, the competitive element dominates the interaction and thus it is not surprising that parties aim to protect their assets and gained information from one another. The individual approach entails that information doesn’t necessarily always reach Case Company. Even in cases where Case Company receives the customer feedback, no collaborative actions are made to further utilize the information but that process will take place later within the company. Finally, situations in which Case Company’s expertise is needed it gains access to customer interface. There lies the potential of coopetition from Case Company’s point of view. Thus the specialized expertise that
Case Company possesses can be seen as a factor that supports the process in the external context.

Further on, the influencing factors in the intra-organizational context differed from those of external environment. Market orientation is the underlying factor that puts customer in the center of attention and the aim is to solve customer’s problem. The second factor that facilitates market knowledge utilization is an active company-wide communication that is supported on the management’s behalf. It can be noted that the employed collective approach on coordinating knowledge exchange entails that everyone’s input is needed in order to solve the customer problems in the best possible way. Thus, special attention has been paid on establishing adequate structural conditions to support knowledge transfer within the company. The third supporting factor deals with Case Company’s absorptive capacity that is on a satisfactory level. The borders between different specializations are consciously kept as low as possible to enable close collaboration between functional units and improve one’s understanding on the big picture. The idea that helping others helps one’s own project summarizes well Case Company’s approach. Joining forces to solve customer cases with the expertise of all business units has been successful mode of operation for Case Company. However, one issue that was brought up to complicate the process is the novelty of information. The interviewees stated that it can be problematic to identify something new to be important for Case Company. The repeatability of signals can help to spot the novel information from the masses as well as the expertise of a person can be a valuable asset in identifying important information. While the employed approach to knowledge utilization works well in Case Company – an SME present in the information security branch – it can be assumed that in companies that belong to larger size category, similar structural conditions are not necessarily sufficient to support the process of market knowledge utilization. Also the transactional nature of inter-organizational coopetition in the performed study has to be taken into consideration when reviewing the results. It is reasonable to believe that the findings would be different if inter-organizational coopetition involved shared product development efforts or actions requiring deeper collaboration.

6.1 Theoretical Implications

The choice of research question was made based on a comprehensive review of the literature. Some areas of special interest came up and the subsequent lack of conducted research guided us to investigate how market knowledge can be utilized in the interface of inter- and intra-organizational coopetition. The nature of the research question entailed that several inter-related areas needed to be included in the theoretical framework. This enabled us to create the solid foundation that was required in order to answer the research question.

We believe that our research gives insights on the areas that previously lacked attention. First of all, we wanted to address the growing need to understand how companies can organize knowledge exchange within and across company’s boundaries (Alin et al., 2011: 58). Our research provides a picture of the process and factors that influence knowledge utilization in both inter- and intra-organizational coopetition. It was of interest to find out that while activities related to knowledge transfer and translation took place in inter-organizational coopetition, actual knowledge generation could not be
found. Rather the inter-organizational coopetition could be seen as a preliminary stage of the knowledge utilization process before the gained information was further utilized within the company. Thus, it can be drawn that inter-organizational knowledge exchange represents a challenge for companies involved and is more complicated than knowledge exchange within company. The effects of collective and individualistic approaches to market knowledge utilization could be seen in the results implying that too dominant competitive element can notably complicate the process while more concrete results were reached with a collective and collaborative approach.

It was noted in the beginning of the research that SMEs have not been widely studied in the field of coopetition (Gnyawali & Park, 2009: 309). Our work provided an example of a company belonging to the category and showed the implications of employing a coopetitive strategy and the potential challenges and benefits that it entails for a smaller company. In addition, a number of researchers (Luo, Slotegraaf, & Pan, 2006:76; Rindfleisch & Moorman, 2001) have suggested that considering both inter- and intra-organizational coopetition have received surprisingly little attention in the marketing literature. As the research included a marketing element, instead of having a separate powerful marketing department, our Case Company applies company-wide market orientation as an underlying logic in its operations. Our results showed that market orientation acts as a supporting factor in market knowledge utilization.

6.2 Practical Implications

When it comes to the practical implications of the study, Case Company acted as an example of how market knowledge can be efficiently utilized within the company. The implications of market orientation as a fundamental factor puts customer in the focus and further on it is applied throughout the company in its operations. Systematic work has taken place to put together the needed structural conditions. Open and active communication is encouraged and collective approach to problem solving is employed. Information systems help in making the information available for everyone and frequent staff meetings foster the idea that everyone’s input is valuable. Furthermore, too strict organizational boxes are consciously avoided and absorptive capacity is kept on a satisfactory level facilitating the process of utilizing the market knowledge. While the approach has worked well for Case Company, establishing the needed conditions has been a time consuming process as it is deeply rooted in the company culture. Consequently, it is worth noting that even though the executed case study can act as a valuable example, the needed structural conditions and influencing factors can differ in different industries and in companies of different size category.

When it comes to the additional findings of the study with practical significance, the functionality of inter-organizational coopetition can be included. The results showed the significance of carefully formed contracts in inter-organizational coopetition. They were found to provide protection from harm and at the same time act as indicators of functionality ensuring that the goals of the project are being met.
6.3 Suggestions for Further Research

During the thesis writing process several additional issues worth studying came up.

- First, as the performed study concentrated on SME category it would be interesting to study the needed structural conditions for market knowledge utilization in larger firms.
- Furthermore, it would be of interest to see the implications of collective and individual approaches in inter-organizational coopetition in a study of several companies and see how the employed approach affects the results.
- Given that the inter-organizational coopetition in this research was of transactional nature and thus lacks knowledge transformation stage, further research efforts could be directed in studying whether the three stages (transfer, translate, transform) can be found in the inter-organizational coopetition when studying other companies.
- Complementary question could, on the other hand, investigate whether the above-mentioned three stages are needed or in case there are additional stages that should be involved in the knowledge utilization process.
7. Bibliography


University Press.


## 8. Appendix

### 8.1 Interview Guide

<table>
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<td>Drivers – Reasons behind coopetition</td>
<td>Reasons&lt;br&gt;Expected benefits and risks and threats for the company&lt;br&gt;Drivers related to resources&lt;br&gt;Technological convergence</td>
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<td>Are there clear boundaries between functions?</td>
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<td>Are there clear boundaries between functions?</td>
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