

Cooperative competitive strategies – Prevailing motives and company-specific factors for cooptition

ABSTRACT

To better cope with the current challenges of globalization, resource shortages and technological change, more and more companies are beginning to utilize cooperative strategies that involve competitors. As this form of cooperation is riskier and more difficult to implement than cooperation between non-competitors, this paper focuses on the drivers for inter-firm cooptition and prevailing economic factors that can influence and foster the continuation of these types of relationships. A review of the cooptition literature and findings from our empirical research have led to greater understanding of the following: (i) dynamics and risks of cooptitive ventures, (ii) motives and prevailing conditions of cooptition and (iii) success factors of cooptition. Cooptition success is very much dependent on company-specific competencies, resources as well as corporate culture. While relational factors for the selection of cooptition partners are categorized according to task- and company-related criteria, the stable interaction in existing cooptitive relationships is influenced by management commitment, relationship development and communication management. Using existing theory and combining it with empirical findings, we discussed similarities and differences and success factors characterizing relationships in a cooptitive context.

Keywords: Cooptition, inter-firm relationships, cooperation, strategy

INTRODUCTION

The ability to cooperate with competitors (coopetition) have increasingly become an important component of inter-firm relationships because of the current challenges of globalization, resource shortages, unstable economic developments and constant technological change (Bouncken et al., 2015; Gast et al., 2015). While the idea of developing relationships between competitors is far from new, Brandenburger and Nalebuff (1998) emphasized the term coopetition as a potential game changer. The basic goal of coopetition is to expand a company's own market share not at the expense of the other market participants, but through a joint enlargement of the market with competitors.

In the last decade traditional concepts in which competitors work together were distinct: coopetition as a phenomenon (Czakoń/Rogalski, 2014; Raza-Ullah et al., 2014; Bouncken et al., 2015), as a paradigm (Bengtsson et al., 2010; Kuhn, 1996; Padula/Dagnino, 2007) and as a paradox (Bengtsson et al., 2010; Gnyawali et al. 2016). The field of coopetition research has experienced an extraordinary boost of interest among scholars, researchers and practitioners (Bengtsson et al., 2016). Current coopetition research deal with questions regarding: actor and activity mechanisms (Bengtsson/Raza-Ullah, 2016), coopetition capabilities (Bengtsson et al., 2016), multilevel coopetition strategy (Tidström/Rajala, 2016), cooperative dynamics from stakeholder perspectives (Akpınar/Vincze, 2016) or network coopetition considering the role of trust (Czakoń/Czernek, 2016).

Coopetition seems to evolve as an emerging part of business strategy that combines the best of both spheres (in cooperation and competition) – even if coping with value creation, value capture and managing tension is hard to address (Bouncken et al., 2015; Tidström, 2008). To better understand how to manage cooperation between competitors, it is necessary to understand companies' motives for coopetition and to describe prevailing relational framework conditions, which influence and foster the initiation and continuation of inter-firm coopetition.

PURPOSE & MOTIVATION

Through simultaneously competing and cooperating in a coopetition, the establishment and maintenance of complex and risk-oriented relationships is much more sophisticated than cooperating with non-competitors (Bengtsson/Kock, 2000; Dahl 2014). This perception results in a unique context

where cooperative agreements are embedded. Therefore more research is necessary that dives into greater detail and focus on cooperation (Tidström, 2008; Bengtsson et al., 2010; Dahl 2014). In particular, this paper will address the following two research questions: *What are main motives and success factors for cooperative agreements? Which company-specific and relational framework conditions favor cooperation?*

While contributions in the existing literature show exploratory progress in the typology of cooperation (Gnyawali et al., 2006; Czakon/Rogalski, 2014; Liu et al., 2014) – based from both theoretical and empirical methodologies – we still lack an understanding of the contextual contingencies of cooperation on a company level (Bouncken et al., 2015; Dorn et al., 2016). This paper combines both literature reviews (e.g. Walley, 2007; Peng et al., 2012; Bengtsson/Kock, 2014, Bouncken et al., 2015; Bengtsson/Raza-Ullah, 2016; etc.) and company-specific motivations and accompanying framework conditions to explain the management arrangements and context of cooperation. This analysis aims to reveal relevant aspects and success factors for companies to take into account when initiating, managing and shaping cooperative agreements.

In order to initially answer the research questions the authors performed a review of the existing literature in cooperation in order to develop a detailed view of the current knowledge in the field. The resulting descriptive theoretical background, reflects the “theoretical motives for cooperation” (figure 1), “company-specific drivers” with “relational framework conditions” (figure 2 and 3) and “cooperation context” (figure 4) and “empirical motives for cooperation” (figure 5). This theoretical background helped to frame cooperation and served as a basis for the subsequent empirical investigation of 10 industrial companies who were involved in cooperative relationships. Guide-based semi-structured expert interviews with managers helped to reveal the underlying motivation for cooperation and the framework conditions for implementation and development of cooperation.

The main motivation of this paper is to provide academics and practitioners alike with a descriptive framework regarding motives and relevant framework conditions that influence and foster cooperation. Theoretical views and empirical findings were combined to further discuss success factors in a cooperative relationship.

LITERATURE REVIEW

According to Porter (1980) inter-firm relations are viewed to be competitive in nature as it is hard to identify ideal strategic choices or predict outcomes of cooperative relationships or competitive affairs. In the process of understanding these strategic choices, companies can decide which path or can combine them (Osarenkhoe, 2010). Coopetition creates value (Yami/Nemeh, 2014; Vapola et al. 2008; Stamboulis, 2007; Nalebuff/Brandenburger, 1997) through cooperation between competing organizations, aligning different interests toward a common objective and helping to create opportunities for competitive advantage (Chi et al., 2007; Gnyawali et al., 2006) by removing external obstacles and neutralizing threats (Chin et al. 2008). Coopetition is a multidimensional and multifaceted concept that assumes a number of different forms and requires multiple levels of analysis. Coopetition encompasses both economic and social issues related to inter-firm interdependence (Osarenkhoe, 2010; Chin et al., 2008; Bengtsson/Kock, 2000).

Aside from benefits or outcomes of a coopetition strategy e.g. foster internal resource and market shares of competing organizations (Bengtsson/Kock, 2000) it can also favor to achieve multi-directional learning, in which different organizations mutually benefit while competing for internal resources and market share (Tsai, 2002). The literature shows two critical points in coopetition strategy: knowledge sharing and pooling competencies, which can help strengthen competitive advantages (Zineldin, 2004; Chin et al., 2008). In terms of contextual factors in the coopetition context – simultaneously driving firms to compete and cooperate – Raza-Ullah et al. (2014) identified industrial, relational, and firm specific factors of coopetition (Gnyawali/Park, 2009), which interrelate, overlap, and affect each other over the coopetition process (Raza-Ullah et al., 2014). The phase model of coopetition research described by Dorn et al. (2016) addresses the under-investigated coopetition stages and displays antecedents and three phases (initiation, managing & shaping and evaluation) on three different levels (inter-firm, intra-firm and network) (Dorn et al., 2016).

To shed light at the recognizable impact of coopetition as a management and business strategy, Bouncken et al. (2015) analyzed previous research in the field and described (i) level of analysis, (ii) industry application and (iii) theoretical viewpoints of recent publications extending from transaction

cost economics, game theory (Ritala/Hurmelinna-Laukkanen, 2009) to dynamic capabilities theory (Storer/Hyland 2009; Park, 2011; Bouncken et al., 2015).

Although previous studies provide valuable insights into the core of coopetition, there is still lack of understanding what to make of coopetition (Walley, 2007; Bengtsson et al., 2010). Elaborations of whether coopetition is of rather contextual state or a process can be found in the recent literature (Bengtsson et al., 2010). In terms of a *contextual approach* the authors focus on environmental interaction in coopetition, meaning and describing the competitive and cooperative part of the relationships between actors and its interdependences in the environment that further influence the behavior of individuals, groups or the firm itself. Hence, the *process approach* – that tends to be more common in existent literature – describes coopetition as developing through the mutual interaction between two or more entities on different levels (intra-organizational level (Tsai, 2002) and inter-organizational levels (Bengtsson and Kock, 2001). The provided evidence from Bouncken et al. (2015) on “the context of coopetition in terms of organizational and environmental contingencies” and the limited exploration of environmental context factors in coopetition (Gast et al., 2015) justifies one aspect of the underlying research.

METHODOLOGY

Literature review: Articles on coopetition were searched in three widely used academic databases EBSCO, Emerald and Science Direct/Business Source Premier. In this process we only included academic publications, in order to synthesize the theoretical foundations related to coopetition and incorporated the comprehensive work of those authors who provided comprehensive literature reviews of coopetition. Table 1 summarizes the chronologically listed articles that focused on coopetition.

Insert Table 1 here

Guided expert interviews: Ten guide-based semi-structured interviews were performed by the team of researchers. All interviewees were knowledgeable about coopetition related research issues and agreed in advance to participate. The interviews were tape-recorded and transcribed, lasted from 1.5 to 2 hours period and were performed by at least two of the involved researchers. The interviews could

be categorized into four broad topics: (i) experiences with cooptition strategies in general (ii) motives for cooptitive agreements, (iii) framework conditions and (iv) relational aspects of cooptitions. Transcripts and notes were compared among the team in order to gain a comprehensive and common understanding of the captured data and to improve consistency of the research (Eisenhardt, 1989). An overview of interviewees including the company's industry and market characteristics is provided in the appendix.

THEORETICAL BACKGROUND

Competitive advantage and firm performance have long been emphasized in strategic management research. However, this stream of research has shifted from a competitive perspective (grounded on organizational economics and resource-based view) to a cooperative perspective (Park, 2011; Raza-Ullah et. al., 2014; Lundgren-Hendrikson/Kock, 2016). This shift is based on the collaborative and relational benefits from inter-organizational relationships (i.e. the RBV is extended to beyond the firm boundary) and demonstrates the interplay of the two perspectives – cooperative and competitive. This section sheds light on this progress, of the changing competitive and cooperative landscape, though presenting motives, drivers and relational framework conditions in the field of cooptition.

Motives for cooptition

Cooptition entails a number of challenges and can lead to conflicts within a company as well as between cooptition partners. This section states why companies choose cooptitive partnerships in spite of impediments.

Value creation and utilization are described by Bengtsson and Kock (2000) as the initial driving forces. Cooptitive value creation is generated through the integration of supplementary and complementary resources whereby deriving additional value (Das/Teng, 2000b). At the same time, competition between partners consequently forces one another to advance value creation and utilization. The resulting profits from common activities of a cooptition are considered higher than profits generated by involved companies in isolated operation (Bonel et al., 2008). It can be assumed that reasons for cooptitive partnerships vary in detail depending on the interpretation of cooptition

itself. Nevertheless it is possible to divide the identified motives for coopetition into two groups: exploitative and explorative motives (Möller/Rajala, 2007). Exploration and exploitation are described by Möllers and Rajalas (2007) as the two compensatory parameters in the value creation for newly originating business networks. Explorative motives refer to innovation and product development as well as market expansion and internationalization. Access to resources, cost reduction and the generation of competitive advantages are pertained to exploitative motives. A coopetitive operating company builds up new and previously untapped relations to competitors – a reason why Möllers and Rajalas' ideas are applicable for coopetition:

Explorative motives for coopetition

Explorative motives concentrate on the generation of common value by creating new, specified knowledge. The literature contains different explorative motives for coopetition like innovation, product development as well as market expansion and internationalization (Dougherty, 1992; Adler, 2001; Möller/Rajala, 2007).

Exploitative motives for coopetition

Exploitative motives are aimed at the (improved) use of existing business opportunities. Regarding exploitative motives for coopetitive relations the literature refers to access to new resources, chance of cost reduction and realization of competitive advantages (Dyer/Singh, 1998; Lambe et al., 2002).

In this paper our own categorization is presented based on the ideas on motives for coopetition by Möller und Rajala (2007). Identified motives from the literature are divided into three levels building upon each other (see Figure 1).

Insert Figure 1 here

The first level, awareness of resources, serves as a base for the realization of all following motives. The basic prerequisite for reaching explorative and exploitative motives for coopetition is the concentration of complementary and supplementary resources (Bengtsson/Kock, 2000). That means without certain exchange of resources the partners cannot profit from the advantages of coopetitive relations at sequential higher levels. Therefore, based on the acquired knowledge the access to resources is rather seen as a means to an end.

Explorative and exploitative motives for cooperation build the second level. Realizing these expected advantages is the factual impulse for building a cooperative relation whereby bundling resources is considered the first step in this direction. Market expansion and innovation pertain to explorative motives, whereas exploitative motives concentrate on cost reduction through achievement of synergies or scale effects, reduction in insecurity in the supply chain and reducing investment costs.

Results of generated explorative and exploitative motives are presented in figure 2. The compilation of competitive advantage through an increase of the competitiveness and market power can be a strong motive for cooperation. But at the same time it stems from realizing explorative and exploitative motives. Improved innovation ability as well as access to new markets or a leaner cost structure are aspects of competitive advantages a company can generate – over its competitors – through a cooperative agreement.

In the next sections company-specific characteristics, relational framework conditions and macro context specifics (see figure 2) are discussed.

Insert Figure 2 here

Company-specific drivers for cooperation

The literature indicates the following company characteristics as drivers for cooperation:

- Strength of the individual abilities of a company in comparison to existing challenges
- Cultural characteristics of a company
- Other company-specific drivers

The above mentioned characteristics are explained in the following:

Strength of the individual abilities of a company in comparison to existing challenges

An essential cooperation driver is related to the prevalent company challenge – the comparison of its current market and resource situation. In the case of a high technological challenge, competitors are willing to cooperate more easily in order to bear the technological uncertainty, as well as the risks and costs for exploring new technological terrains in order to keep up with the industrial development (Le Roy/Guillotreau, 2010). A key driver is the perceived vulnerability compared to the rest of the market environment. Companies that see themselves in a weak position – relative to the competition – are

more likely to increase their competitiveness through cooptition (Gnyawali/Park, 2009). In this sense, the already existing presence of strong technological capabilities and a beneficial market position of the company, create a negative impact on the relationship between competitors and common performance. Also the intense cooperation with research institutions and universities influence the probability of a cooptitive relationship in terms of product development in a negative way. This is because knowledge and complementary resources are accessible for companies at lower risk working with research institutions (Wu, 2014).

The challenge for companies depends on (i) the length of the product life cycle, (ii) the speed of technological development, (iii) the convergence of multiple technologies and (iv) the amount of costs for research and development. All of these parameters affect the probability of cooptition (Gnyawali/Park, 2009).

In their study about the cooptition probability of SMEs, Gnyawali and Park (2009, 2011) stated, in the case of short product life cycles SMEs tend to cooptitive relations with competitors which have strong technological capabilities. Oliver (2004) refers to the use of cooptition for organizational learning in the explorative stage of the product life cycle as well. Meanwhile, SMEs cooperate in technological convergence with competitors that complement the existing company resources and technologies. In the case of high development costs SMEs prefer primarily partnerships with competitors providing supplementary resources (Gnyawali/Park, 2009).

Cultural characteristics

Stable structures are highlighted by Klimas (2015) as the most important cultural feature of cooptition partners. In addition, cooptitors have a high level of formalization, centralization and a well-developed system of standards, processes and control standards. Structural stability is pertinent because it guarantees the required compliance with safety, quality and management standards for the cooptitive relationship and helps to comply with mandatory technological and safety standards defined in the partnership. Furthermore, companies – i.e. the involved employees – need a cooptitive mindset (Fernandez et al., 2014), in order to perceive cooptition as a business opportunity (Gnyawali/Park, 2009). This mindset provides the flexibility for the company being “cooperative in the cooperation phase” and “competitive in the competition phase” and additionally to overcome any

emerging conflicts due to conflicting logics (Bengtsson/Kock, 2000; Bouncken et al., 2015). The aspect is termed, coopetition capability. It allows the involved companies to build and maintain a moderate level of conflict due to the contradictory logic of coopetition. This capability supports the management of internal and external conflicts decisively and prevents external conflicts from overflowing into the business (Bengtsson et al., 2016).

An important aspect of this mindset is the internal focus of cooperative companies. They apply the internal strategic orientation as an integration of highly specialized and complicated processes, which affects the quality of the performance. In contrast, the external focus as a cultural feature, which includes the values of the customers and potential partners, appears less well pronounced (Klimas, 2015). In general corporate culture acts neither as a direct trigger of coopetition nor as an obstacle. It affects the willingness to adapt a cooperative strategy and thus contributes to the level of conflict within the coopetition and the individual companies (Klimas, 2015). Geraudel and Salvetat (2014) additionally highlight the role of individual managers, who are important for the control of the coopetition. They argue that in the end it depends on a few individuals and their relationships to each other whether coopetition happens or not. Existing antagonistic relations between the protagonists of a possible coopetition are mentioned to increase the probability of a competition instead of cooperation. The probability of a manager to decide between competition and cooperation with a competitor (or several competitors) is dependent on two factors (Geraudel/Salvetat, 2014):

- a) The company's position in the network compared to the coopetition partner, whereby centrality is an important driver for cooperation between competitors and
- b) a person's personality (a coopetition is more likely to be established between individuals who get along well together).

Other company-specific drivers

In literature, additional company-specific drivers, which encourage coopetition like the company's overall strategy, as well as the structural position in the network are discussed. Companies which focus on explorative and innovative aspects are more likely to enter in cooperative relationships

because they are looking for “first mover” or “close follower” advantages (Gnyawali/Park, 2009). Structural autonomous companies are more competitively orientated, active and more versatile in terms of competitive strategies. However, the ability in generating competitive advantages from their position in the network varies. For example, firms with higher market diversity are benefiting more from their structural position. Therefore, the market diversity of a company influences how much value can be pulled out of its network position (Gnyawali et al., 2006). If market diversity is not fulfilled, a company could gain more value from its position through cooptation. In addition, organizations well embedded in the network tend to prefer intra-network cooperation and are more likely to be averse to cooperate on an inter-network level (Schiavone/Simoni, 2011).

Relational framework conditions for cooptation

The probability of the realization of a successful cooptation also depends on the availability of suitable partners and on the relationship of the company to its competitors (Klein, 2014). The structure of this chapter is motivated on the phase model of the alliance life-cycle by Specht et al. (2002), which describes the following steps regarding business cooperation procedures: (1) Initial decision, (2) partner selection, (3) configuration and (4) implementation & management. For each phase of the life cycle, framework conditions and drivers are highlighted in the following, which encourage the establishment and – in the later stages – the receipt of a cooptative relationship.

Initial decision to a cooptation

The initial phase of the alliance life-cycle is used for the analysis of the initial situation and for the evaluation of the attractiveness of cooptation with regard to the existing objectives of the company (Specht et al., 2002). Later, the objectives are also basis for the definition of relevant task- and company-related criteria to select cooptation partners. Depending on whether the company assumes the role of the initiator or of the companion of the cooptative relationship, phases of the initial decision and the subsequent choice of partners could vary.

Partner selection

In the literature, the selection of partner is one of the most influential factors for cooperation in order to avoid dysfunction and to guarantee long-term success (Klein, 2014). Companies are not looking for the perfect partners, but for an optimal cooperative relationship with partners established upon awareness and trust (Yoon/Song, 2014).

The original motives influence the evaluation parameters i.e. factors and characteristics for potential partners (Mowery et al., 1998). To extend the company's technological diversity and innovation, it is preferable to cooperate with larger competitors, because they are rather able to provide complementary technologies (Mention, 2011). In the evaluation of partners, Geringer (1991) distinguishes between task-related and partner-related dimensions. Task-related dimensions include the operational skills, knowledge and resources needed for the success of a partnership, whereas partner-related dimensions include factors associated with the effectiveness and efficiency of partner cooperation. Das and He (2006) propose the grouping of selection criteria (applied in table 2).

Insert Table 2 here

Based on the requirement profile, the task-related selection criteria of the partner selection are developed. The literature therefore considers the need to find the best possible partner for the task as the most important issue in the partner selection phase. As soon as partner search has started, relational framework conditions take precedence.

Further subdivisions of criteria for the selection of cooperation partners distinguish between learning-related criteria and risk-related criteria. *Learning-related criteria* involve how far and what kind of knowledge a company is able to learn from potential partners. *Risk-related criteria* consider and weigh the risks of cooperation (Cummings/Holmberg, 2012). Meanwhile, Bierly and Gallagher (2007) describe the partner selection as a complex process which is influenced by three endogenous factors – fit, trust, and strategic expediency. These three endogenous factors, in turn, are dependent on the magnitude of two exogenous factors – uncertainty and time constraints.

Configuration

After evaluation of potential cooperation partners there will be basically the three following steps (Alves/Meneses, 2015):

- I] At the beginning socialization takes place between the managers of both firms.
- II] Cooperation ideas are generated to identify how synergy benefits can be created – (in case the selection has not yet been aligned to a specific task/goal).
- III] The closing partner choice leads to an invitation to a formal cooperative agreement.

After the acceptance of this invitation from the companion, the legal and organizational framework is designed in the configuration phase (Specht et al., 2002). This serves to avoid a dysfunction of cooperation and consists of two parts: the choice of (i) the form of institutionalization as well as the governance structure and (ii) the definition of organizational-structural aspects (Klein, 2014). Forms of institutionalization of a cooperative relationship are based on the general forms of cooperation. A distinction is made between purely contractual cooperation forms and cooperation forms of capital participation, such as joint ventures and majority - or minority shareholdings (Dussauge/Garrette, 1999). Das and Teng (2000 a,b) prove in their studies the connection between the intended form of cooperation and the perceived risk of cooperation. They highlight the following features of collaboration, which have an influence on the partner's perceived risk: ownership structure, level of integration, control mechanisms, cooperation duration and difficulty of the unplanned termination of the cooperation. The (perceived) risk is divided into relational risks (lack of commitment of partners) and performance risks (failure to achieve cooperation goals). Depending on the extent of the presence of these two types of risk, different cooperation forms will be considered by the partners as desirable. Governance has a significant impact on the performance of a cooperation. Singular (relational or transactional governance alone) governance can be used if the level of cooperation is low or if there is no cooperation, whereas the plural combined governance concentrates on the complexity of cooperation (Bouncken et al., 2016). Whether the governance structure enables or inhibits the performance of the cooperation depends also on their motive and goal.

In their study of vertical cooperation Bouncken et al. (2016) figured out that transactional governance lowers product innovation while relational governance improves the effect of cooperation on product

innovation. The effect increases when companies are using a higher level of relational governance. Through incremental shifts from singular to plural governance, it becomes more efficient for product innovation under increasing cooperation level. According to Klein (2014) the choice of the governance mechanism is depending on transaction costs of exchange relationships and the time horizon of the cooperation. However, a mere capital investment for the realization of cooperation is often insufficient. Therefore additional rules should be drawn up to protect against opportunism.

Governance strategies can work against the emergence of opportunism. Wathne and Heide (2000) categorize forms of opportunism in four quadrants according to the dimensions of circumstances (new/existent) and behavior (active/passive), circumvention of obligations (present/passive), adjustment refusal (new/passive), breach of the agreement (present/active) and forced renegotiation (new/active). Information asymmetries and lock-in effects reinforce opportunism. They complicate (i) the detection of opportunistic behavior and (ii) increase the tolerance for opportunism. Governance strategies, such as monitoring, incentive systems, the previous selection of partners with low opportunism tendencies and socialization between the partners, are reducing information asymmetries, as well as the advantages of opportunistic behavior and increase the target congruency. Effectiveness of governance strategy depends on the emphasis of opportunistic behavior (as categorized above) (Wathne/Heide, 2000).

Potential benefits that can be generated by companies in a cooperation are also linked with the organizational and structural setup. This setup includes: (i) the involvement of the stakeholders and role distribution, (ii) separation of competitive and cooperative activities, (iii) allocation of cooperative activities between the partners, and (iv) standardized forms for documentation (see table 3).

Insert Table 3 here

Implementation & management of cooperation

A characteristic of a functioning cooperative relationship is that the partners will adapt their processes and products. They share information and experiences and minimize the causes of uncertainty as a sign of commitment and as a basis for higher confidence and healthier atmosphere in the continuing

business relationship. Relationships, which will ultimately be considered by the partners as being successful, do not include only fair exchange, but also cooperation and coordination efforts towards joint value creation (Kanter, 1994). In the implementation of coopetition strategies Bonel et al. (2008) identify the presence of a threshold effect, which prevents the exploitation of positive complementary effects also after the commitment of the partners. To exceed this threshold, it is necessary to get the support of all management levels and the coordination of the new strategy which can result in a reallocation of resources and priorities or the identification of new rules. Asymmetries have a special impact on the stability of coopetition. They exist due to resource inequalities and varying degrees of competitive behavior and can be eclectic (i.e. justified in terms of size, origin, level of experience, ownership, location, internationalization), strategic, competitive, power-related or network-related. Cimon (2004) investigates the relationship between cooperation stabilities and the three types of knowledge-based asymmetries: information, knowledge and learning asymmetries. Information asymmetries have negative effects on the stability of partnerships while asymmetries of knowledge are correlating positively with the stability of cooperation. This could be due to the dependence among the partners, which arises because of the inequality of knowledge. However, learning asymmetries have positive and negative influences on cooperation stability depending on whether an opportunistic behavior of the partners can be observed or not. Nonexistent opportunistic behavior strengthens the resistance of inter-firm cooperation while the existence of such behavior harms the trust between the partners. As a result the duration of the cooperation will be adversely affected. In addition, the stability and the implementation of the cooperation objectives are strengthen each other positive (Cimon, 2004). Interoperability between the partners is an important factor to exploit the full potential of coopetition. To reach this it is necessary to remove or reduced identified barriers of conceptual (due to syntactic and semantic differences of exchanged information), technological (caused by the incompatibility of information technologies) and of organizational nature (influenced by the definition of the responsibilities and competences). Interoperability covers data, services, processes and business activities and can vary from completely closed systems up to fully customized systems (Guédria et al., 2011).

The likelihood in terms of initiation and the general attractiveness of a cooperation between two or more companies depends further on a macro context of cooperation consisting of (i) ecosystem specifics and (ii) market or industry-specifics. Especially the factors “perceived uncertainty” and “risk” play a central and two-sided role. High uncertainty and high risk in the ecosystem or the market positively correlate with the development of cooperative relationships, while high uncertainty and high risk in the relational context negatively affect this structure (Raza-Ullah et al. 2014). Figure 3 provides an overview of this relevant macro context of cooperation, which influences company’s cooperation behavior.

Insert figure 3 here

However, a favorable environment definitely is not enough to necessarily motivate competitors to cooperate. When a concrete need arises: e.g. a specific customer order creates a cooperation motive in case the order exceeds the internal competences of the company. As a result, the company-specific framework conditions also apply.

As the theoretical background on motives and framework conditions for cooperation was examined in the preceding sections, the results of the empirical research on these issues will be presented and compared with the findings from literature further on.

FINDINGS AND RESULTS

Based on the theoretical background and analysis of the empirical data the team of researchers was able to identify the prevailing motives, conditions and success factors for cooperation (figure 4).

Insert figure 4 here

Part one of the findings summarizes captured general experiences with cooperation and motives for cooperation strategies based on the transcribed data collected through the interviews.

General experience with cooperation and motives for cooperation

Of the ten surveyed companies, six cooperate with direct competitors. Three companies cooperate with indirect competitors and one company stated that it only cooperated with a competitor in a public project, and not their regular industry market place. Reasons for companies to opt out of or avoid cooperative collaboration were the existence of alternative partners in the value chain, possible compliance conflicts with competition rights, a confrontational competition strategy, high market transparency and low complexity of products and services.

From the interviews, the following business areas and motives for cooperative agreements were expressed in figure 5.

Insert figure 5 here

Relational framework conditions

Part two of the findings summarizes the relational framework conditions of a cooperation i.e. factors in the partner selection, governance mechanisms and the communication structure between the cooperation partners.

Task-related factors in the partner selection

According to the respondents, the core of task-related factors for the selection of a cooperative partner is the customer's request. In cases where the customer is a driving factor for the success of a cooperation, the latter actively contributes to the choice of a partner and identifies companies that are to work together. The service required by the customer forms the basis for the necessary resources and

competencies of the partners. Quality levels and certifications that confirm compliance with specific standards are further criteria. In addition, the belief that it is possible to increase actual customer usage with the help of the partner supports the decisions to select properly.

If the goal of cooperative cooperation is geographic expansion and access to new markets, the existing infrastructure of the partner and its access to the targeted market or to customers operating in it play a decisive role. The discoveries also drew attention to a particular consideration: *“If a company allows access to its market for its partner company, is this partner company willing to grant access to its existing market in return?”*

According to an interviewee, the final decision is the consideration of the possible cooperation is related to the constructed business case (including the possible benefits as well as the associated costs and risks). If the respective risks or costs are too high compared to the benefit generated by the additional partner, a cooperation relationship will not be pursued.

Company-related factors in the partner selection

The following company-related factors for selection were highlighted from the interviews:

- Trust is an important aspect in the partner selection process: Perceived trust in work attitude and fairness of the partner, particularly in agreements that do not include formal or contractual regulations.
- Trust is also based on previous experience and those experiences need not have to be direct experiences (i.e. a company's unfair or opportunistic behavior is leaked out within the industry very quickly)
- The commitment of the potential partner company to participate in the cooperation has been considered as necessary.
- Additionally, existing competition or cooperation strategies of the potential partners and their compatibility with their own strategies are also relevant. Existing cooperation and the interests of the company's stakeholders are also taken into account here.

Governance in cooperative agreements

The following aspects – captured from the empirical investigation – influence governance mechanisms: (i) the form of and the resulting legal connection through the cooperation, (ii) the extent and nature of the actual cooperation as well as (iii) the starting point for cooperation.

In the interviews, a cooperation agreement and corresponding non-disclosure agreements were named as the formal and legal basis for a cooperation. These contracts should also include contingencies in the event of certain failure or the natural end of the cooperative agreement. However, in three of the ten companies surveyed, there is no written contract for the concerned cooperative project partners per se. While only the absolute minimum necessary is written down, operations mainly happen on the basis of informal arrangements. The main reasons for this procedure are to enable flexibility and reduce critical operational conflict resolution. Also the intensity of the cooperative cooperation was captured to be decisive for surveyed companies, to mainly rely on informal agreements. In this case, the partners are mainly independent from each other whereas only the improvement of interfaces between products or services is carried out jointly. One company reported the frequent practice to start to work on the basis of formal arrangements (to comply with tight realization periods) until a final written contract is negotiated.

Communication practices in cooperative agreements

Three structures of communication structures were captured during the empirical phase:

In cooperation relationships which are primarily encouraged by customers, the customer is often responsible for communication with the individual cooperation partners, especially in projects that require minimal contact between the partners and therefore allow the partners a necessary independent work setting. In this situation (→ the customer as the centre of communication and ties), cooperatively operating companies do not seek direct contact with their cooperation partners. One of the surveyed companies underlined that the general relationship overview as well as the information flow starting at the customer is difficult to control.

Two companies reported on the implementation of cooperative agreements based on projects. Following an accepted invitation to a cooperation, the project teams meet for a kick-off meeting to

negotiate the framework conditions. During the course of the project further meetings are held at certain intervals or after reaching predefined milestones. The communication and organization based on projects fosters involvement and allows flexible participation of project specialists when required. One of the surveyed companies actively participates in an association in which companies from the same industry, and thus also competitors, work together on topics such as the standardization of new technologies or the representation of interests. The communication structure among this association results in establishing different committees formed by specialists from the member companies. Derived results of the association are either made public or communicated to the public authorities. Any company is allowed to continue to use the outcomes of the association for own operations or purposes, as long as the results are not confidential.

Two additional aspects that are related to communication structures involve (i) escalation procedures in the event of conflict and (ii) role of implementing a communicator for cooperative agreements:

In one interview, the conflict resolution at different hierarchical levels was mentioned. A majority of problems that occur between the cooperative project teams are considered to usually be solved by the project members themselves or the project manager. If this is not the case, the next hierarchical level is assigned with the conciliation of the conflict. The project sponsor supports and promotes the project during the initiation as well as during the implementation and has a corresponding interest in its successful conclusion. Ultimately, if the conflict is long and lasting, the managers of the conflicting companies are invoked to try to find a solution to maintain the cooperation.

In four of the companies interviewed, an implemented communicator (i.e. middleman) coordinates the communication between the partners. This agent installed from the customer company can be a neutral agent or an independent project communicator. The capacity for action of that project coordinator varies from structured distribution of information to wide-ranging project consulting activities. An implemented consulting role is a doable option in the initiation phase, by actively bringing competitors together to ignite a cooperation and to show the potentials of cooperative relationships. In this step, a

complete cooperation strategy with involved companies and the network used is presented. Further crucial tasks involve:

- (i) Collect incoming information, anonymize and filter it further (i.e. gatekeeping)
- (ii) Distribute tasks among the companies, manage their implementation and optimize the interfaces between existing sub-functions (i.e. coordinating)
- (iii) Minimize unintended knowledge transfer/drain and reduce odds for opportunism of partners (“firewall”)
- (iv) Seek to settle conflicts and resolve resolutions (“arbitration”).

Success factors for cooperation

Part three of the findings concludes this section: In order to gain insight into framework conditions of company's cooperative agreements, the interviewees were asked for the success factors of the respective cooperation relationships and for market changes that reinforce cooperation.

The starting point for cooperation is a specific customer order or business case. This represents a delimited area of the economic activity of the company in which opposing competitive interests are accepted. The successful fulfillment of this customer order creates the targeted customer benefit, which justifies the cooperative relationship between the companies. It should be assessed how well the customer requirements were met by the cooperation partners by means of key performance indicators (KPIs) which represent the joint and individual performance after completion of the order. Finally, the fulfillment of the cooperation objective should result in a value-add and should bring a win-win situation for all companies involved.

It was noted that a clearly defined cooperation strategy should prioritize the cooperation, defining objectives and how these are pursued. The strategy should also take into account the influence of the cooperation on stakeholders and partners in other markets. Furthermore, cooperation strategies in general are defined for markets in which companies are not directly working together in order to facilitate the conflict discussed above. Apart from the strategic planning of the cooperation, however, operational details should not be neglected.

In the interviews, the operational staff was considered as a success factor, since they enable the plan to succeed and cooperate with the employees of the other companies. Accordingly, the relational factors between the operational employees of the company partners, such as trust and cultural fit, are also crucial for the success of the cooptition and just like at the top-management level. Likewise, the commitment to cooptition must be present at both strategic and operational levels to ensure that the cooperation between the competitors is actually operational and successful.

Other success factors for cooptitive agreements identified from the interviews are:

- Mechanisms to focus the information exchange and, subsequently, the reduce the opportunism of partners,
- the establishment of reciprocal economic exchange to strengthen the emotional connection between the partners,
- the further development of company's own competences in order to increase proprietary attractiveness as a cooptition partner and
- legal advice during cooptitive cooperation to counteract compliance conflicts.

The concluding discussion section compares empirical insights with the findings from literature research and highlights the most prominent similarities and differences. Directions for future research are provided.

DISCUSSION

Most of the interviews suggested that cooperation with competitors is rarely considered as a strategy. Companies seem to prefer less risky cooperations with companies other than their competitor. Therefore, favorable conditions (i.e. a substantial customer order, existing trust and commitment, a win-win situation, etc.) and a corresponding pressure on the market (i.e. cost pressure, regulatory provisions, new technologies, etc.) need to be in place before initiating a cooptitive relationship. Additionally, interviewees noted other motives including (i) opportunities for cost reduction, (ii) bundling resources or (iii) company reputation. This relationship between the favorable conditions and motives emerged more clearly in the empirical phase of this research than in the literature. Likewise, the empirical insights emphasize the fact that cooptitive agreements arise frequently from specific

customer orders or from projects, in which companies – who typically reject cooperation with competitors – are involved actively. The presented results regarding the ecosystem and industry/market-specific framework conditions – that can favor coopetition – as well as the discussed motives are mostly in accordance with existing literature.

With regard to the relational aspects, new insights were provided in terms of communication structures within coopetitive relationships. Results described three potential structures of communicating in a coopetition setting: (i) the customer as the centre of communication and ties, (ii) communication and organization based on projects and (iii) communication among an association.

Discovering respective strengths and weaknesses as well as suitability of these presented communication structures in distinct business cases or industry settings would be an interesting area for future research.

In business practice, the risk of unintentional knowledge transfer, which is underlined in the literature, and the resulting opportunism of the coopetition partners are countered by integrating a neutral company. The insights particularly point out the relevance of a conflict resolution process and an escalation procedure with clearly defined responsibilities at different hierarchy levels depending on the duration and intensity of the conflict. A counterintuitive aspect in the findings refers to the fact that initiation and realization of coopetitive agreements are often executed with a minimal contractual basis and mainly informal agreements. This also affects the selection criteria for coopetition partners. Above all trust and commitment are mentioned as the most relevant company-related criteria according to the literature review. Another important principle is weighting the suitability of the potential partner in terms of ability to enrich the relationship through contribution based on the business case (i.e. benefits, costs, risk).

The general responsibility for coopetition (i.e. responsible role) differs from company to company. Respondents' duties within their organization refer to (i) international distribution, (ii) partner consulting, (iii) project management specialists (with experiences in coopetitive project environments), (iv) business development or (v) founder/co-founder of the company. Although the number of interviewees is low, a multitude of different points of view and approaches to the topic in

focus has been given. An approximate insight into whether Austrian companies act in cooperative dynamics and how their business strategies involve cooperation has been provided.

LIMITATIONS AND FUTURE RESEARCH AVENUES

The limitations of the underlying work mainly concern the reduced generalizability of the provided results due to the sample size and the diverse industry settings that are referred to in the study. However the motives and presented conditions and success factors for initiating and implementing cooperation could be investigated in a wider survey. From a managerial perspective, the paper demonstrated one counterintuitive aspect in the findings which referred to the fact that initiation and realization of cooperative agreements are often executed with a minimal contractual basis and mainly informal settlements. A potential future research activity could investigate the suitability of the mentioned communication structures in distinct business cases or industry settings.

REFERENCES

- Adler, Paul S. 2001. "Market, Hierarchy, and Trust: The Knowledge Economy and the Future of Capitalism." *Organization Science* 12(2):215–234.
- Akpınar, Murat; Vincze, Zsuzsanna. 2016. "The dynamics of coopetition: A stakeholder view of the German automotive industry." *Industrial Marketing Management* 57:53-63.
- Alves, João; Meneses, Raquel. 2015. "Partner selection in co-opetition. A three step model." *Journal of Research in Marketing and Entrepreneurship* 17(1):23–35.
- Bengtsson, Maria; Kock, Sören. 1999. "Cooperation and competition in relationships between competitors in business networks." *Journal of Business & Industrial Marketing* 14(3):178–194.
- Bengtsson, Maria; Kock, Sören. 2000. "Coopetition" in Business Networks - to Cooperate and Compete Simultaneously." *Industrial Marketing Management* 29:411–426.
- Bengtsson, Maria; Kock, Sören. 2001. "Tension in Coopetition." *16th Nordic Academy of Management Meeting*, Uppsala August 16-18.
- Bengtsson, Maria; Eriksson, Jessica; Wincent, Joakim. 2010. "Co-opetition dynamics – an outline for further inquiry." *Competitiveness Review: An International Journal* 20(2):194-214.
- Bengtsson, Maria; Kock, Sören. 2014. "Coopetition-Quo vadis? Past accomplishments and future challenges." *Industrial Marketing Management* 43(2):180–188.
- Bengtsson, Maria; Raza-Ullah, Tatbeeq. 2016. "A systematic review of research on coopetition: Toward a multilevel understanding." *Industrial Marketing Management* 57:23-39.
- Bengtsson, Maria; Raza-Ullah, Tatbeeq; Vanyushyn, Vladimir. 2016. "The coopetition paradox and tension. The moderating role of coopetition capability." *Industrial Marketing Management* 53:19–30.
- Bierly, Paul E.; Gallagher, Scott. 2007. "Explaining Alliance Partner Selection. Fit, Trust and Strategic Expediency." *Long Range Planning* 40(2):134–153.
- Bonel, Elena; Pellizzari, Paolo; Rocco, Elena. 2008. "Coopetition and Complementarities. Modeling Coopetition Strategy and Its Risks at an Individual Partner Level." *Journal of the Iberoamerican Academy of Management* 6(3):189–205.
- Bouncken, Ricarda B.; Fredrich, Viktor. 2012. "Coopetition: Performance implications and management antecedents." *International Journal of Innovation Management* 16(5):1-28.
- Bouncken, Ricarda B.; Clauß, Thomas; Fredrich, Viktor. 2016. "Product innovation through coopetition in alliances. Singular or plural governance?" *Industrial Marketing Management* 53:77–90.
- Bouncken, Ricarda B.; Fredrich, Viktor. 2016. "Learning in coopetition. Alliance orientation, network size, and firm types." *Journal of Business Research* 69(5):1753–1758.
- Bouncken, Ricarda B.; Gast, Johanna; Kraus, Sascha; Bogers, Marcel. 2015. "Coopetition. A systematic review, synthesis, and future research directions." *Review of Managerial Science* 9(3):577–601.

- Brandenburger, Adam M.; Nalebuff, Barry J. 1998. "Co-opetition. 1. A revolutionary mindset that combines competition and cooperation, 2. The game theory strategy that's changing the game of business." New York.
- Castaldo, Sandro; Möllering, Guido; Grosso, Monica; Zerbini, Fabrizio. 2010. "Exploring how third-party organizations facilitate coopetition management in buyer-seller relationships." Pp. 141-165 in *Coopetition: Winning strategies for the 21st century*, edited by Saïd Yami. Cheltenham: Edward Elgar.
- Chi, Lei; Holsapple, Clyde W.; Srinivasan, Cidambi. 2007. "Competitive dynamics in electronic networks: A model and the case of interorganizational systems." *International Journal of Electronic Commerce* 11(3):7-49.
- Chin, Kwai-Sang; Chan, Boris L.; Lam, Ping-Kit. 2008. "Identifying and prioritizing critical success factors for coopetition strategy." *Industrial Management & Data Systems* 10(4):437-454.
- Cimon, Yan. 2004. "Knowledge-related asymmetries in strategic alliances." *Journal of Knowledge Management* 8(3):17-30.
- Cummings, Jeffrey L.; Holmberg, Stevan R. 2012. "Best-fit Alliance Partners. The Use of Critical Success Factors in a Comprehensive Partner Selection Process." *Long Range Planning* 45(2-3):136-159.
- Czaron, Wojciech; Rogalski, Mariusz. 2014. "Coopetition typology revisited – a behavioural approach." *International Journal of Business Environment* 6(1):28-46.
- Czaron, Wojciech; Czernek, Katarzyna. 2016. "The role of trust-building mechanisms in entering into network coopetition: The case of tourism networks in Poland." *Industrial Marketing Management* 57:64-74.
- Dahl, Johanna. 2014. "Conceptualizing coopetition as a process: An outline of change in cooperative and competitive interactions." *Industrial Marketing Management* 43:272-279.
- Das, T. K.; Teng, Bing-Sheng. 2000a. "A Resource-Based Theory of Strategic Alliances." *Journal of Management* 26(1):31-61.
- Das, T. K.; Teng, Bing-Sheng. 2000b. "Instabilities of Strategic Alliances. An Internal Tensions Perspective." *Organization Science* 11(1):77-101.
- Das, T. K.; He, Irene Y. 2006. "Entrepreneurial firms in search of established partners. Review and recommendations." *International Journal of Entrepreneurial Behavior & Research* 12(3):114-143.
- Dorn, Stefanie; Schweiger, Bastian; Albers, Sascha. 2016. "Levels, phases and themes of coopetition: A systematic literature review and research agenda." *European Management Journal* 34(5):484-500.
- Dougherty, Deborah. 1992. "Interpretative barriers to successful product innovation in large firms." *Organization Science* 3(2):179-202.
- Dowling, Michael J.; Roering, William D.; Carlin, Barbara A.; Wisnieski, Joette. 1996. "Multifaceted Relationships Under Coopetition. Description and Theory." *Journal of Management Inquiry* 5(2):155-167.

- Draulans, Johan; deMan, Ard-Pieter; Volberda, Henk W. 2003. "Building Alliance Capability." *Long Range Planning* 36(2):151–166.
- Dussauge, Pierre; Garrette, Bernard. 1999. "Cooperative strategy. Competing successfully through strategic alliances." Chichester: John Wiley.
- Dyer, Jeffrey H.; Singh, Harbir. 1998. "The relational view: Cooperative strategy and sources of interorganizational competitive advantage." *Academy of Management Review* 23(4):660–679.
- Eisenhardt, Kathleen M. 1989. "Building Theories from Case Study Research." *The Academy of Management Review* 14(4):532-550.
- Emden, Zeynep; Calantone, Roger J.; Droge, Cornelia. 2006. "Collaborating for New Product Development. Selecting the Partner with Maximum Potential to Create Value." *Journal of Product Innovation Management* 23(4):330–341.
- Enberg, Cecilia. 2012. "Enabling knowledge integration in cooperative R&D projects - The management of conflicting logics." *International Journal of Project Management* 30(7):771–780.
- Fernandez, Anne-Sophie; Le Roy, Frédéric; Gnyawali, Devi R. 2014. "Sources and management of tension in co-opetition case evidence from telecommunications satellites manufacturing in Europe." *Industrial Marketing Management* 43(2):222–235.
- Gast, Johanna; Filser, Matthias; Gundolf, Katherine; Kraus, Sascha. 2015. "Coopetition research: towards a better understanding of past trends and future directions." *International Journal of Entrepreneurship and Small Business* 24(4):492-521.
- Geraudel, Mickael; Salvetat, David. 2014. "What are the antecedents of coopetition?" *European Business Review* 26(1):23–42.
- Geringer, J.M. 1991. "Strategic determinants of partner selection criteria in international joint ventures." *Journal of International Business Studies* 22(1):41-62.
- Ghobadi, Shahla; D'Ambra, John. 2011. "Coopetitive Knowledge Sharing: An Analytical Review of Literature." *Electronic Journal of Knowledge Management* 9(4):307-317.
- Gnyawali, D. R.; He, Jinyu; Madhavan, Ravindranath. 2006. "Impact of Co-Opetition on Firm Competitive Behavior. An Empirical Examination." *Journal of Management* 32(4):507–530.
- Gnyawali, Devi R.; Park, Byung-Jin. 2009. "Co-opetition and Technological Innovation in Small and Medium-Sized Enterprises. A Multilevel Conceptual Model." *Journal of Small Business Management* 47(3):308–330.
- Gnyawali, Devi R.; Park, Byung-Jin. 2011. "Co-opetition between giants. Collaboration with competitors for technological innovation." *Research Policy* 40(5):650–663.
- Gnyawali, Devi R.; Madhavan, Ravi; He, Jinyu; Bengtsson, Maria. 2016. "The competition cooperation paradox in inter-firm relationships: A conceptual framework." *Industrial Marketing Management* 53:7-18.
- Guédria, Wided; Naudet, Yannick; Chen, David. 2011. "Enterprise Interoperability Maturity: A Model Using Fuzzy Metrics." *Advanced Information Systems Engineering Workshops* 83:69-80.

- Kanter, Rosabeth Moss. 1994. "Collaborative Advantage: The Art of Alliances." *Harvard Business Review* 72(4):96–108.
- Klein, Benjamin. 2014. "Coopetitive Dynamics. Zum Entwicklungsverlauf kooperativer Beziehungen zwischen Wettbewerbern." Wiesbaden: Springer Fachmedien Wiesbaden.
- Klimas, Patrycja. 2015. "Organizational culture and coopetition. An exploratory study of the features, models and role in the Polish Aviation Industry." *Industrial Marketing Management* 53:91–102.
- Kuhn, Thomas S. 1996. "The structure of scientific revolutions". University of Chicago Press.
- Lambe, C. Jay, Spekman, Robert E., & Hunt, Shelby D. 2002. "Alliance competence, resources, and alliance success: Conceptualization, measurement, and initial test." *Journal of the Academy of Marketing Science* 30(2):141–158.
- Le Roy, Frédéric; Guillotreau, Patrice. 2010. "Successful strategy for challengers: Competition or coopetition with dominant firms." Pp. 238-255 in *Coopetition. Winning strategies for the 21st century*, edited by Saïd Yami. Cheltenham: Edward Elgar.
- Liu, Yi; Luo, Yadong; Yang, Pianpian; Maksimov, Vladislav. 2014. "Typology and Effects of Co-opetition in Buyer–Supplier Relationships: Evidence from the Chinese Home Appliance Industry." *Management and Organization Review* 10(3):439-465.
- Lundgren-Henriksson, Eva-Lena; Kock, Sören. 2016. "A sensemaking perspective on coopetition." *Industrial Marketing Management* 57:97-108.
- Luo, Yadong. 2004. "Coopetition in international business." Copenhagen: Copenhagen Business School Press.
- Mention, Anne-Laure. 2011. "Co-operation and co-opetition as open innovation practices in the service sector. Which influence on innovation novelty?" *Technovation* 31(1):44–53.
- Möller, Kristian; Rajala, Arto. 2007. "Rise of strategic nets - New modes of value creation." *Industrial Marketing Management* 36(7):895–908.
- Mowery, David C.; Oxley, Joanne E.; Silverman, Brian S. 1998. "Technological overlap and interfirm cooperation. Implications for the resource-based view of the firm." *Research Policy* 27(5):507–523.
- Nalebuff, Barry J.; Brandenburger, Adam M. 1997. "Co-opetition: Competitive and cooperative business strategies for the digital economy." *Strategy & Leadership* 25(6):28-33.
- Oliver, Amalya L. 2004. "On the duality of competition and collaboration. Network-based knowledge relations in the biotechnology industry." *Scandinavian Journal of Management* 20(1-2):151–171.
- Osarenkhoe, Aihie. 2010. "A study of inter-firm dynamics between competition and cooperation-A coopetition strategy." *Journal of Database Marketing & Customer Strategy Management* 17(3):201–221.
- Oxley, Joanne E.; Sampson, Rachelle C. 2004. "The scope and governance of international R&D alliances." *Strategic Management Journal* 25(89):723–749.

- Padula, Giovanna; Dagnino, Giovanni. 2007. "Untangling the Rise of Coopetition. The Intrusion of Competition in a Cooperative Game Structure." *International Studies of Management and Organization* 37(2):32–52.
- Park, B.-J. 2011 "The Effects of Coopetition and Coopetition Capability on Firm Innovation Performance." *Dissertation* Virginia Polytechnic Institute and State University, Virginia.
- Peng, Tzu-Ju Ann; Pike, Stephen; Chung-Hsin Yang, Johnson; Roos, Göran. 2012. "Is Cooperation with Competitors a Good Idea? An Example in Practice." *British Journal of Management* 23:532-560.
- Porter, Michael E. 1980. "Competitive Strategy." New York: The Free Press.
- Raza-Ullah, Tatbeeq; Bengtsson, Maria; Kock, Sören. 2014. "The coopetition paradox and tension in coopetition at multiple levels." *Industrial Marketing Management* 43(2):189–198.
- Ritala, Paavo; Hurmelinna-Laukkanen, Pia. 2009. "What's in it for me? Creating and appropriating value in innovation-related coopetition." *Technovation* 29(12):819–828.
- Schiavone, Francesco; Simoni, Michele. 2011. "An experience-based view of co-opetition in R&D networks." *European Journal of Innovation Management* 14(2):136–154.
- Specht, Günter; Beckmann, Christoph; Amelingmeyer, Jenny. 2002. „F&E-Management. Kompetenz im Innovationsmanagement.“ Stuttgart: Schäffer-Poeschel.
- Stamboulis, Yeoryios A. 2007. "Towards a systems approach to innovation systems and policy." *International Journal of Technology and Globalisation* 3(1):42–55.
- Stein, Harald D. 2010. "Literature overview on the field of co-opetition." *Business: Theory & Practice* 11(3):256-265.
- Storer, Maree; Hyland, Paul. 2009. "Dynamic capabilities and innovation in supply chains." In *Enhancing the innovation environment, Proceedings of the 10th International CINet Conference*, Brisbane.
- Tidström, Annika. 2008. "Perspectives on Coopetition on Actor and Operational Levels." *Journal of the Iberoamerican Academy of Management* 6(3):207-217.
- Tidström, Annika; Rajala, Anni. 2016. "Coopetition strategy as interrelated praxis and practices on multiple levels." *Industrial Marketing Management* 58:35-44.
- Tsai, Wenpin. 2002. "Social Structure of "Coopetition" within a Multiunit Organization: Coordination, Competition, and Intraorganizational Knowledge Sharing." *Organization Science* 13(2):179-190.
- Vapola, T. J.; Tossavainen, Päivi; Gabrielsson, Mika. 2008. "The battleship strategy: The complementing role of born globals in MNC's new opportunity creation." *Journal of International Entrepreneurship* 6(1):1–21.
- Walley, Keith. 2007. "Coopetition: An Introduction to the Subject and an Agenda for Research." *International Studies of Management and Organization* 37(2):11-31.
- Wathne, Kenneth H.; Heide, Jan B. 2000. "Opportunism in Interfirm Relationships. Forms, Outcomes, and Solutions." *Journal of Marketing* 64(4):36–51.

- Wilhelm, M. M. 2011. "Managing cooptition through horizontal supply chain relations: Linking dyadic and network levels of analysis." *Journal of Operations Management* 29(7-8):663-676.
- Wu, Jie. 2014. "Cooperation with competitors and product innovation. Moderating effects of technological capability and alliances with universities." *Industrial Marketing Management* 43(2):199-209.
- Yami, Saïd; Nemeh, André. 2014. "Organizing cooptition for innovation: The case of wireless telecommunication sector in Europe." *Industrial Marketing Management* 43:250-260.
- Yoon, Byungun; Song, Bomi. 2014. "A systematic approach of partner selection for open innovation." *Industrial Management & Data Systems* 114(7):1068-1093.
- Zineldin, Mosad. 2004. "Co-opetition. The organisation of the future." *Marketing Intelligence and Planning* 22(7):780-790.

TABLES AND FIGURES

TABLE 1 – LIST OF ARTICLES PRESENTING THE RELEVANT BODY OF COOPETITION LITERATURE

Author(s)	Year	Title	Short description
Nalebuff/ Brandenburger	1997	Co-opetition: Competitive and cooperative business strategies for the digital economy	In this book, Nalebuff and Brandenburger use game theory to develop a set of guidelines and encourage readers to think about not only how to play the game, but also how to change the rules. N&B offers valuable perspectives on management and their advice is summarized in a checklist, which should help managers to develop strategies in which cooperation could be profitable.
Zineldin	2004	Co-opetition: The organisation of the future	In this research paper it is shown that co-opetition can deliver synergy if carefully planned, managed and controlled, and preconditions for achieving this outcome are examined. Equally, weak management of a relationship can produce the opposite effect, so preconditions for survival are also discussed. Coopetition requires moral and ethical standards plus enough trust and the patience not to try to exploit short-term gains at the expense of long-term benefits.
Walley	2007	Coopetition: An Introduction to the Subject and an Agenda for Research	This paper presents an agenda which is generated by reconciling a review of the literature on coopetition with a similar review of the literature relating to competition and cooperation. The agenda also incorporates two innovative ideas based on anecdotal evidence and personal observations. The inclusion of these last two ideas brings with it the implication that coopetition has applications beyond just the inter-firm relationships.
Bengtsson et al.	2010	Co-opetition dynamics - an outline for further inquiry	The paper outlines how different types of co-opetitive interactions result in archetypical situations where the dynamics of co-opetition are present as well as where the dynamics of co-opetition are missing due to a lack of balance between cooperation and competition. It notes four co-opetitive forces : over-embedding, distancing, confronting, and colluding. Overall, it is suggested that there is an arena for co-opetition dynamics which allows for a variety of different combinations of cooperation and competition , as long as the strength of the interactions on the respective continue is relatively moderate; not overly strong or overly weak.
Stein	2010	Literature overview on the field of co-opetition	This paper gives a comprehensive literature overview on the field of co-opetition. It includes also an overview of publications related to co-opetition with estimation of their importance.
Chin et al.	2010	Identifying and prioritizing critical success factors for coopetition strategy	This paper aims to determine and to examine success factors critical to coopetition strategy management and to explore the identified factors in Hong Kong manufacturing. Based on a literature review and expert interviews following the analytic hierarchy process, this paper comprise three success factor categories: management commitment, relationship development, and communication management . The results show that management leadership and development of trust are

			the most important success factors.
Osarenkhoe	2010	A cooperation strategy – a study of inter-firm dynamics between competition and cooperation	Results in this paper show that managerial leadership and development of trust are the key success factors . From a managerial perspective, the findings demonstrate the multifaceted nature of cooperation .
Ghobadi/ D'Ambra	2011	Coopetitive Knowledge Sharing: An Analytical Review of Literature	This study explored the development of the phenomenon of “Coopetitive Knowledge Sharing” in three bodies of literature. It is recognised that developments in our understanding of “Coopetitive Knowledge Sharing” require multi-disciplinary areas (e.g., knowledge management, organisational management, game theory) that address different viewpoints.
Wilhelm	2011	Managing cooperation through horizontal supply chain relations: Linking dyadic and network levels of analysis	This paper explores the interplay of the supplier–supplier and network of analysis by focusing on the inherent tension between cooperation and competition. It is argued that the buyer is able to exert influence not only on the cooperation level, so within “horizontal supply chain relations,” but that the cooperative tension in the overall network can in fact be managed through the active establishment and maintenance of such relations.
Bouncken/ Fredrich	2012	Cooperation: Performance implications and management antecedents	Results of 469 firms indicate that (a) cooperation requires different facets of an alliance-management system depending on the mix of trust and dependency, and (b) a high trust/high dependency environment fosters the relationship of cooperation and performance outcomes the most. It is also shown that firms intending to increase cooperation can achieve this goal through the use of an alliance strategy and an alliance function . It is found that an alliance function significantly lesser increases cooperation under high trust/low dependency than under low trust/high dependency. Furthermore, cooperation faces threats of opportunism, hold-up, and knowledge leakage in cooperation but the high achievements by radical innovation seem to compensate these risks.
Bengtsson/ Kock	2014	Cooperation - Quo vadis? Past accomplishments and future challenges	New definition suggests that cooperation is a paradoxical relationship between two or more actors, regardless of whether they are in horizontal or vertical relationships, simultaneously involved in cooperative and competitive interactions. Five directions for future research: (1) understand the balancing of cooperation and competition, (2) understand the cooperation paradox and engendered tension, (3) apply a multilevel perspective on cooperation (4) understand the dynamics of cooperative interaction, and (5) understand how cooperation impacts business models and strategy.

Czakov/ Rogalski	2014	Coopetition typology revisited - a behavioural approach	This paper shows that there is an orthogonal nature of coopetition as a concept composed of competition and collaboration, which can therefore take different forms depending on the degree of its components. Some firms opt for an active adapter model , but others choose moderate partner or contender models , while some firms act on a passive monoplayer model . Firms often choose to be passive in collaborative or competitive terms. Interestingly, this passiveness can concomitantly appear in coopetition related to legal requirements. If not mandated to, coopetitors would refuse to enter into inter-organisational relationships with competitors. Furthermore, informants clearly explained the rationale of entering into coopetition, but also underlined that there is limited room for decision – coopetition might be a reaction for demand or the result of regulatory inducements .
Dahl	2014	Conceptualizing coopetition as a process: An outline of change in cooperative and competitive interactions	This framework distinguishes three mechanisms underlying change: inter-organizational learning manifested in cooperation between competitors, intra-organizational learning based on confrontations between conflicting experiences among organizational members, and the development of the external environment . Scenarios suggest that rules for interaction change in a predefined or discontinuous manner depending on the balance and strength of the cooperative and competitive interactions.
Raza-Ullah et al.	2014	The coopetition paradox and tension in coopetition at multiple levels	In this paper it is stated that emotional ambivalence in coopetition prevails at different levels, and vary in its level of intensity and persistency in relation to different contexts. The central argument of this article is that the paradox , which materializes when competitor firms cooperate or partner firms compete simultaneously, elicits both positive and negative emotions as soon as the actors cognitively evaluate its consequences.
Gast et al.	2015	Coopetition research: Towards a better understanding of past trends and future directions	The citation analysis in this paper shows that coopetition research can be traced back to theories explaining the competitive and cooperative ties between firms separately (cluster 1) before the nature of coopetition as being the co-occurrence of cooperation and competition elements in one and the same inter-firm relationships was explored (cluster 2 and A). Once the existence and relevance of coopetition was accepted, its scope was analysed (cluster 3 and B/C), with a focus on larger firms in knowledge-intensive and dynamic environments, and innovation processes.
Bouncken et al.	2015	Coopetition: A Systematic Review, Synthesis, and Future Research Directions	By critically evaluating the current body of literature and definitions, and connecting it to other promising domains, a new definition of coopetition is developed and several promising areas for future research are highlighted.

Bengtsson/ Raza-Ullah	2016	A systematic review of research on cooptation: Toward a multilevel understanding	In this paper, a systematic literature review of the field is conducted, and based on a final set of 142 contributions, a dynamic multilevel model is developed. This model helps future research better understand how the phenomena of cooptation at one level of analysis are distinct, yet interlinked, from cooptation at other levels, and in so doing, provides a richer and more complete perspective of the phenomenon of cooptation.
Dorn et al.	2016	Levels, phases and themes of cooptation: A systematic literature review and research agenda	Current knowledge on cooptation is consolidated and presented across multiple levels of analysis along a phase model of cooptation. On the basis of this in-depth review, the authors synthesize a conceptual map that highlights five multilevel research areas : (1) the nature of the relationship, (2) governance and management, (3) the output of the relationship, (4) actor characteristics, and (5) environmental characteristics. The framework makes it possible to map extant research efforts along cooptation antecedents and the three main phases : the initiation phase, the managing and shaping phase, and the evaluation phase. This approach has made it possible to incorporate multiple levels (intra-firm, inter-firm, and network level), integrating the “emergent” perspective on cooptation (“phenomenon”), and considering it as a deliberate strategy.
Gnyawali et al.	2016	The competition–cooperation paradox in inter-firm relationships: A conceptual framework	With a focus on inter-firm relationships involving the simultaneous pursuit of competition and cooperation, a conceptual framework is developed that explicates key paradoxical conditions, paradoxical tension, and performance implications of tension in such relationships. There are two constituent elements of tension (strain and conflict), and specific factors which lead to such tension (dualities and contradictions). Efforts solely focused on reducing tension may not be fruitful because some level of tension is necessary and productive. Behavioral failures could occur at both low and high levels of tension, but for different reasons. Low perceived tension limits alertness, consciousness, and understanding of the complexity, whereas high tension leads to the use of existing heuristics and routines and justification of their use.
Tidström/ Rajala	2016	Cooptation strategy as interrelated praxis and practices on multiple levels	The findings show the importance of recognizing cooptative activities on different levels . From a managerial perspective the findings of the study show that activities undertaken by individuals and teams within the company can influence cooptative activities between companies. The findings also indicate that an open and flexible organizational structure without routines can trigger individual praxis that can influence the cooptative practice of the organization on a relational level. Moreover, the findings show how a business relationship can develop from being cooperative to become cooptative through the development of competing products on multiple levels.

TABLE 2 - TASK-RELATED AND COMPANY-RELATED SELECTION CRITERIA (DAS/HE, 2006)

Task-related dimensions	Company-related dimensions
Complementary resources (e.g. products and knowledge)	Strategic fit, interdependency or compatible objectives
Technological skills or uniqueness	Compatible or cooperative culture and ethics
Financial resources	Simplicity of communication
Geography	Connections and successful businesses before cooperation
Marketing- or distribution systems or established customer base	Trust between top managers
Support for faster entry into the target market	Strong commitment
Management skills	Similar status, size and structure
Government relations incl. regulatory requirements and government sales/sales to the public sector	Reciprocal relationship
Reputation and image	Appropriate risk
Attractiveness of the industry	

TABLE 3 – ORGANISATIONAL AND STRUCTURAL SETUP IN COOPETITION

Organizational and structural aspects	Description
Involvement of stakeholders and role distribution	There should be as few actors as possible in the coopetition involved because of the coopetitive logic conflict and to minimize the risk of an unintentional knowledge outflow (Bengtsson/Kock, 1999, 2000; Oxley/Sampson, 2004). The appointment of a "relationship manager" and a steering group or steering committee serves to reduce the complexity, to optimize the coordination of the information flow and the interface internally as well as externally (Dowling et al., 1996; Bengtsson/Kock, 1999). In the literature it is advised to integrate a trustworthy but independent third-party, a trustee, in the coopetitive collaboration. This party take different roles in different phases of coopetition (Castaldo et al., 2010).
Division of competitive and cooperative activities	According to the separation principle it is necessary to separate the competing and cooperative activities. The competition takes place in the value chain close to the customer and the cooperation activities away from the customers (Bengtsson/Kock, 2000).
Division of co-operative activities between the partners	<p>In the case of so-called supply cooperation (cooperation in upstream activities to reduce costs or for strategic reasons such as F&E) there are only cooperative activities coordinated. These cooperation take place independently of the individual partners. The project is divided between the partners, for example by the means of knowledge domains which take the specific technological capabilities of the collaboration partner into account and which enables the creation of task domains. A steering group is responsible for the overall coordination. It is possible that the creation of commercial domains of product and market activities of the partners disconnects after the success of the cooperation.</p> <p>It is necessary to distribute the activities in market penetration cooperation (cooperation for the development of new, complementary skills and resources) and quasi-concentration alliances (cooperation for the realization of economies of scale) (Dussauge/Garrette, 1999).</p>
Standardized forms for documentation	<p>Standardized forms to document desired outcomes, project scope, planning, and process specifications help at the beginning of the cooperation. This creates a common understanding and defined the extent of knowledge that is shared between the partners.</p> <p>The use of integration mechanisms limits the allowed communication and the exchange of knowledge dramatically. To avoid an undesired transfer of knowledge, solving a problem and the decision-making process should be separated into two different activities (Enberg, 2012).</p>

FIGURE 1 – (BUILD-UP) LEVELS OF MOTIVES IN COOPETITION

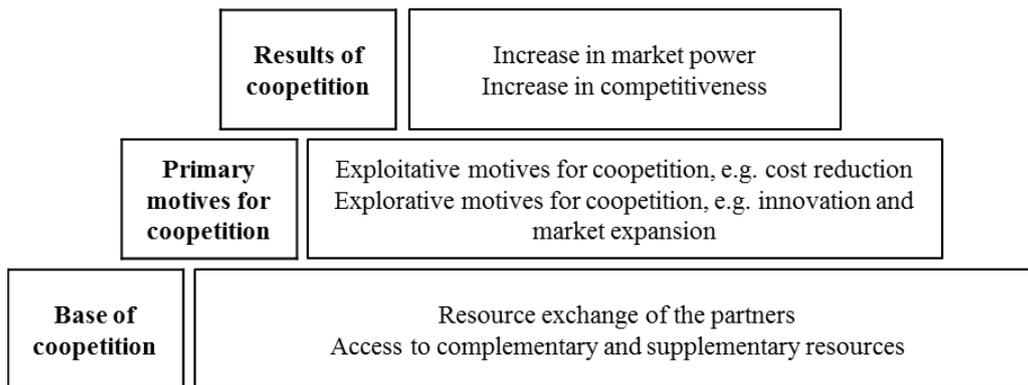


FIGURE 2 – DRIVERS, FRAMEWORK CONDITIONS AND MACRO CONTEXT SPECIFICS IN COOPETITION

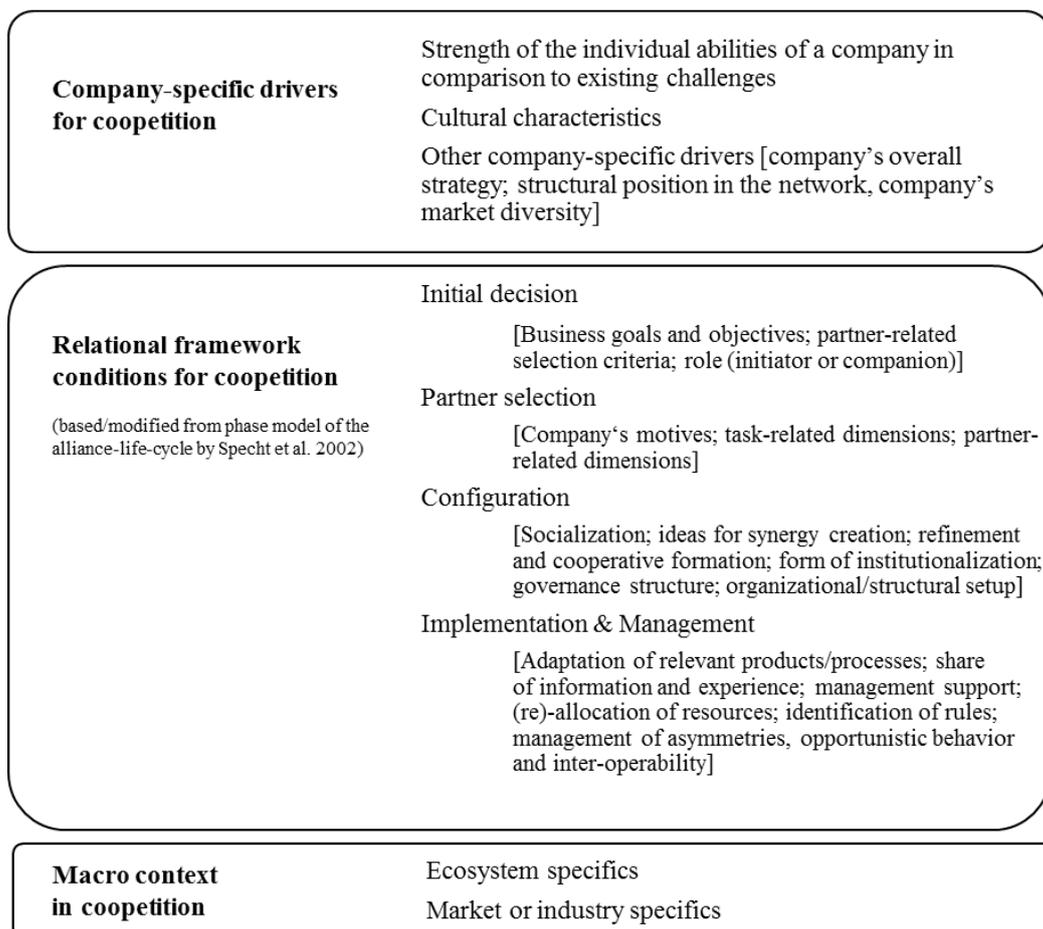


FIGURE 3 – MACRO CONTEXT IN COOPETITION

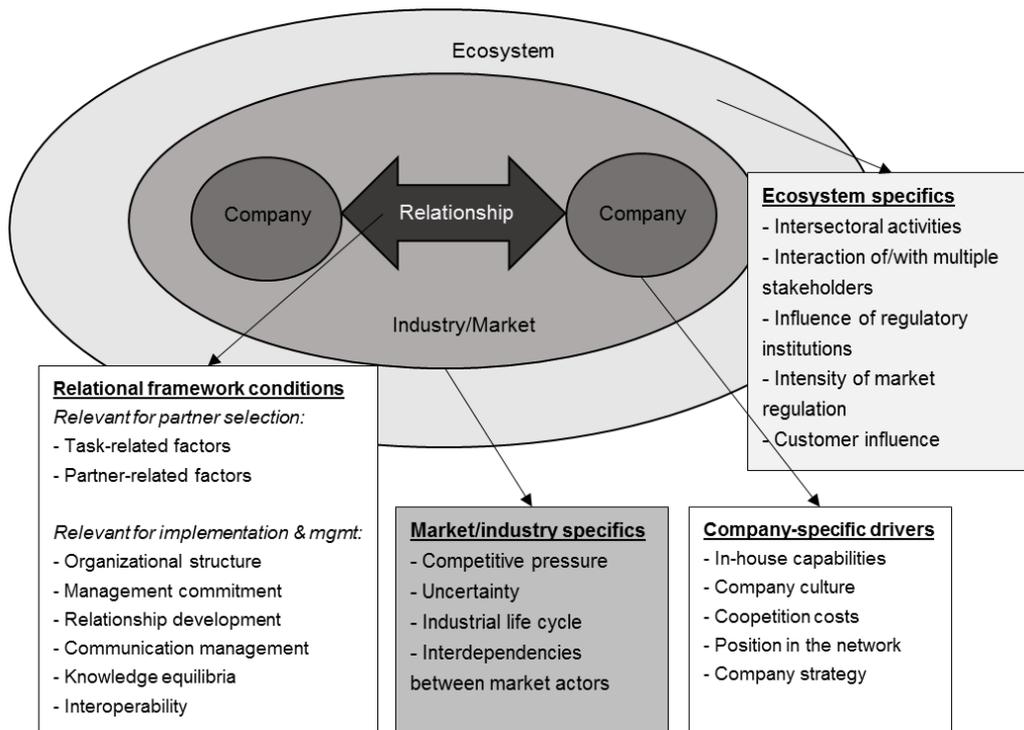
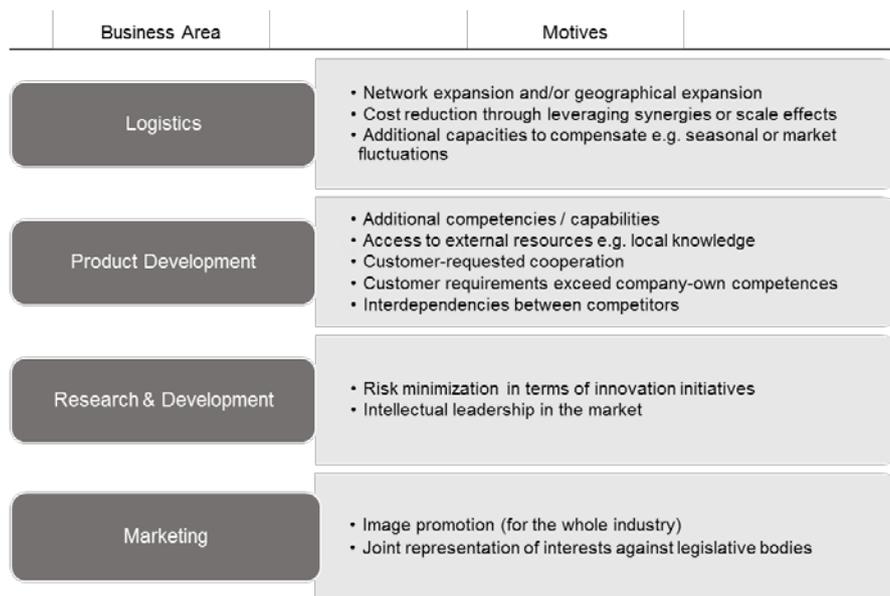


FIGURE 4 – STRUCTURE OF EMPIRICAL FINDINGS

Empirical insights at a glance
<p>Part 1 Motives and prevailing conditions for coopetition – based on business areas</p>
<p>Part 2 Relational framework conditions</p> <ul style="list-style-type: none"> • Task-related factors in the partner selection • Company-related factors in the partner selection • Governance in cooperative agreements • Communication practices in cooperative agreements
<p>Part 3 Success factors for coopetition – based on experiences among investigated sample</p>

FIGURE 5 – COOPETITION MOTIVES ACCORDING TO BUSINESS AREA (EMPIRICAL RESULTS)



APPENDIX

List of interviewees from empirical investigation

	Company's industry	Market characteristics	Position in company
A	Vehicle transportation	Fierce competition; high cost pressure and customer power	CIO
B	Smart home systems	Relatively young, growing industry; competitors are primarily conventional alternatives from home automation	Supply chain network manager
C	Fertilizer	Mass market; high transparency; competition by crisis decimated, but numerous	Sales manager
D	Automation/systems engineering	Regular customer-oriented; few equivalent competitors in Europe; competition by crisis decimated	Business develop. manager
E	Web-based software solutions	Far-reaching market; fast-moving	CEO
F	Trade	High market concentration; dominance of two large enterprises	General manager
G	Washing and cleaning agent	Mass product; high attachment with competitors at several levels (as customers or suppliers)	Logistics manager
H	Fire control and protection	Governments as customers (municipalities,...); relation with competitors at many levels (as customers or suppliers)	Managing director
I	Motorcycle industry	Far-reaching competition; member in the association of European motorcycle manufacturers	CCO
J	Organization for cooperation between commercial enterprises and manufacturer's enterprises, above all in the FMCG area		Logistics manager