## From Strategizing Coopetition to Managing Coopetition

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Abstract: In many existing researches on the theory of competition and cooperation, scholars generally believe that competition and cooperation is a strategy that can improve the performance level better than other ways, that is ,the companies that implement competition and cooperation strategy can obtain higher performance expectation than the companies that only adopt cooperation strategy or only adopt competition strategy. But in fact, competition strategy is a double-edged sword. Whether it has a positive impact depends on what kind of management competition strategy is adopted. This paper starts from the strategic competition and cooperation to the tense situation of competition and cooperation, and combs the current research on competition and cooperation management, which focus on the management principales. At the same time, it puts forward the research prospect of "daily competition and cooperation management"-a black box for exploring competition and cooperation.

Key words: strategic competition and cooperation; competition and cooperation strategy; competition and cooperation management; tense situation

## 从战略竞合到管理竞合

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摘 要: 在现有很多关于竞合理论的研究中,学者们普遍认为竞合是一种比其他方式更能提升业绩水平的策略,即实施竞合策略的公司,相比于单一采用合作策略或竞争策略的公司,可以获得更高的绩效预期。但实际上,竞合策略是把双刃剑,它是否带来积极影响,取决于对其采用何种管理竞合。从策略竞合到竞合紧张态势出发,对当前竞合管理的研究进行了梳理,主要关注的是管理原则,同时提出了深入探索竞合"黑匣子"即日常竞合管理的研究展望。

关键词: 战略竞合;竞合策略;管理竞合;紧张态势

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#### Introduction

Since the seminal book of Brandenburger and Nalebuff (1996), coopetition has been the subject of an increasing amount of research. Publications on coopetition have been developed in so many directions that today it is difficult to make a complete synthesis (Yami et al., 2010; Bengtsson

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and Kock, 2014; Czakon et al., 2014; Bengtsson and Raza-Ullah, 2016; Dorn et al., 2016). A common agreement between coopetition scholars is that coopetition could lead to higher levels of performances. As a consequence, since the beginning, coopetition is not only a research topic but also a strategy leading to higher performance level than other ones. Firms implementing coopetition strategies, i. strategizing e. coopetition, should expect higher performances than firms that implement pure cooperative or pure ( Brandenburger competitive strategies Nalebuff, 1996: Lado et al., 1997).

The power of strategizing coopetition has been first justified by Game Theory (Brandenburger & Nalebuff, 1996). In the prisoner dilemma, the cooperative solution is counter-intuitive but still the best strategy. Another explanation of the relevance of strategizing coopetition is rooted in the Resource-Based-View theory (Bengtsson and Kock, 1999). As competitors have specific and highly complementary resources, combining those resources leads to high performance level. Other theoretical lenses could be used to justify the coopetition power as the Network (Gnyawali & Madhavan, 2001), the Resource Dependence Theory (Chiambaretto & Fernandez, 2016), or the Dynamic Capabilities Theory (Estrada et al., 2016), etc.

However, from other theoretical perspectives, the link between coopetition strategies and performance could appear as null or negative. For instance, according to the Transaction Cost theory, high levels of uncertainty lead to opportunism. As coopetition is characterized by high uncertainty, especially in radical innovation projects, coopetitors could be damaged by high technology plunders and unintended spillovers. Therefore, they must avoid coopetition strategies (Arranz and Arroyabe, 2008). In the same way, the Core-competence theory considers that coopetitors are engaged in a learning race which could be damaging for the loser (Hamel, 1991;

Khanna et al., 1998).

To sum up, coopetition could be a win-win strategy but also a win-lose strategy. Therefore strategizing coopetition is not enough to reach high levels of performance! Coopetitors should pay attention to the risk of plunder in coopetition relationships. This risk of plunder does not mean that coopetitors have neither to end their coopertitive relationship nor to refuse it, but rather that they have to manage it properly in order to create the conditions of successful coopetition. To make coopetition a successful strategy, the key point is the management of coopetition. The management is the "missing link" between coopetition and performance (Le Roy and Czakon, 2016). In this way, the core hypothesis defended in this chapter is that coopetition strategy could have a positive, null or negative impact on performance depending on the quality of the coopetition management implemented.

### 1 Strategizing Coopetition: a doublesword effect

Coopetition is a dual and paradoxical relationship, combining simultaneously collaboration to create value and competition to capture a higher share of the value jointly created (Peng et al., 2012; Ritala, 2012). The paradox generated by the simultaneity of competition and cooperation represents the essence of the concept of coopetition (Bengtsson & Kock, 2000; Raza-Ullah, Bengtsson, & Kock, 2014).

The idea of combining collaboration and competition instead of opposing them is new in the literature. Economic Theory considers that collaboration means collusion and is not good for welfare. So, efficient competition implies the absence of collaboration between competitors. On contrary, considers coopetition that collaboration between competitors could be good for the consumer if and only if this collaboration does not mean the end of competition. Collaboration between competitors is better than pure competition as long as the competitors keep competing (Jordee and Teece, 1991).

This original point of view still requires theoretical justification and empirical evidence. Coopetition as a successful strategy for companies has been first legitimated by using Game Theory (Brandenburger & Nalebuff, 1996). The well-known prisoner dilemma or the stag hunt game has been used to demonstrate the value of collaborating and competing at the same time (Ritala & Hurmelinna-Laukkanen, 2009). The coopetitive solution is counter-intuitive and the actors will prefer a competitive solution. But this solution is the best one for them and leads to an optimal equilibrium.

Bengtsson & Kock (1999, 2000) built on Resource-Based-View (RBV) to justify relevance of strategizing coopetition. The RBV explains why competitors are very good potential partners. Indeed, as they have similar and complementary resources, they could combine them to encourage economies of scale and learning (Gnyawali & Park, 2011; Ritala & Hurmelinna-Laukkanen, 2009). These arguments consistent with the Capabilities Based View (CBV) (Estrada et al., 2016). From the CBV perspective, the recombination of knowledge is critical to build dynamic capabilities (Helfat and Peteraf, 2003). More specifically, innovation capabilities emerge from the recombination of complementary knowledge (Kogut and Zanders, 1992). For this reason, some scholars argue that coopetition is one of the best way to combine complementary knowledge and to successful product innovation (Quintana-García Benavides-Velasco, 2004: Ritala and HurmelinnaLaukkanen, 2009; Gnyawali and Park, 2009, 2011).

The Network Theory provides arguments in line with the RBV and the CBV. The Network Theory recommends to firms in the same industry, with different but complementary resources and capabilities, to deeply collaborate. Indeed, by

collaborating not only at the dyadic level but also at the industry level, they could benefit from a broader knowledge base and become performant (Gnyawali & Madhavan, Gnyawali et al., 2006). According to this approach, the challenge for the firm is to become the central actor in the coopetitive network (Sanou et al., 2016). The best strategy consists in being highly cooperative to become central in the network. This central position will give power to the focal firm which will be able to become more aggressive and, therefore, more profitable. Following this approach, coopetition strategy is better than the pure competition strategy or pure cooperation strategy (Le Roy & Sanou, 2014; Robert et al., in press)

Game Theory, RBV, CBV and Network Theory all lead to an optimistic view of coopetition. Coopetition becomes a better strategy than pure competition or pure collaboration. However, this optimistic view of coopetition is inconsistent with researches built on Transaction Cost Theory (TCT) (Arranz & Arroyabe, 2008; Park & Russo, 1996). The TCT considers that coopetition creates a situation of high level of uncertainty in which actors have incentive to behave opportunistically. Therefore, coopetitors could not develop a trustworthy relationship and could not fully collaborate together. According to this approach, coopetition is a particular kind of cooperation in which trust is hard to develop (Arranz & Arroyabe, 2008; Czakon & Czernek, 2016). As both coopetitors are aware of the opportunistic risk, they are discouraged from pooling their core knowledge. Cooperation with competitors exposes the firm to undesired spillovers that can be used by the coopetitor against it. Thus, firms are reluctant to collaborate openly and it is difficult to develop the necessary level of trust for the success of common projects.

In the same way, the Core-competence theory considers that coopetition is a risky strategy in which coopetitors are involved in a learning race (Hamel, 1991). Cooperating with a competitor involves sharing knowledge, skills and resources. Without this sharing, the collaboration is useless. But, as the coopetitor is opportunist by nature, it would use this knowledge for its own individual benefit rather than for common benefits. If there is an important asymmetry of learning, coopetition becomes a win-lose strategy i. e. one coopetitor is winning at the expense of the other (Hamel et al., 1989; Baumard, 2010).

The TCT and Core-competence theory lead to a pessimistic view of coopetition. On the one hand, as collaboration is not really possible between competitors, coopetition could not have positive effect. On the other hand, because of the high risks of opportunism, coopetition could be very damaging. Therefore, coopetition effect should be null in the best situation and negative in the worst situation. Coopetition strategies should thus be avoided as much as possible.

To sum up, depending on the perspective adopted, strategizing coopetition could lead to different outcomes. According to Game Theory, the RBV, the CBV and the Network Theory, the best partner is a competitor and coopetition is a powerful win-win strategy, even a better strategy than pure collaborative or pure competitive strategies. By contrast, the TCT and the Corecompetence theory consider coopetition as an inefficient strategy and in some extreme cases as a potential damaging strategy. Coopetition is conceptualized as a win-lose strategy that firms should be avoiding

As a conclusion, strategizing coopetition in itself is not enough to create high level of performance. Therefore the question for any firm is not to decide whether it has to strategize coopetition or not but rather how to strategize coopetition successfully. Our main idea in this chapter is that managing coopetition is the principal key success factor of strategizing coopetition.

#### From strategizing coopetition to coopetitive tensions

By combining simultaneously two opposite

behaviors (collaboration and competition), coopetition can be understood as a paradoxical strategy (De Rond and Bouchiki, 2004; Smith and Lewis, 2011; Raza-Ullah et al., 2014). The combination of collaborative and competitive behaviors contributes to the emergence of tensions at different levels: inter-organizational, intra-organizational and inter-individual (Bengtsson and Kock, 2000; Czakon, 2010; Fernandez et al., 2014; Le Roy and Fernandez, 2015; Luo et al., 2006; Padula and Dagnino, 2007). Tensions between cooperation and competition are driven by the conflict between generating shared benefits and capturing private benefits (Khanna et al., 1998; Czakon, 2010; Ritala and Tidstr? m, 2014).

At the inter-organizational level, the first tension arises out of the dilemma between the creation of common value and the appropriation of private value (Gnyawali et al., 2012; Ritala and Tidström, 2014). After the knowledge creation phase, tensions arise between the distributive and integrative elements of knowledge appropriation (Oliver, 2004). Another type of coopetitive tension arises out of the risks of transferring confidential information and the risks of technological imitation. Partners pool strategic resources to achieve their goals (Gnyawali and Park, 2009) but at the same time they need to protect their core competences because they remain strong competitors.

At the intra-organizational level i. e. at the project level, coopetitive tensions are even more important because the implementation of coopetition strategies requires employees from competing parent firms to work together (Fernandez et al., 2014; Gnyawali and Park, 2011). The project level is thus crucial to an understanding of how intra-organizational tensions are managed.

One critical intra-organizational tension arises from the dilemma between sharing and protecting information (Fernandez et al., 2014; Levy et al., 2003; Fernandez and Chiambaretto, 2016). The

partners of an alliance can easily learn from one another, especially if they are competitors (Baruch and Lin, 2012; Khanna et al., 1998; Estrada et al., 2016).

Although partners must share information and knowledge to achieve the common goal of the collaboration (Gnyawali and Park, 2011; Mention, 2011), each partner must also protect the strategic core of its knowledge from its competitor because partners that operate in the same industry must develop unique skills (Baumard, 2010; Ritala et al., 2015). Information that is shared within a common collaborative project potentially could be used in a different market in which the partners compete. The competing partner could benefit by appropriating the shared information (Hurmelinna-Laukkanen and Olander, 2014)

In a coopetitive project in which partners could utilize shared information for their own purposes, the risk of opportunism and appropriation is particularly high (Baruch and Lin, 2012: Bouncken and Kraus. 2013: Hurmelinna-Laukkanen and Olander, 2014; Ritala and Hurmelinna-Laukkanen, 2009, 2013). Fernandez and Chiambaretto (2016) defined this coopetitive tensions related to information as "the difference between a firm's need to share information to ensure the success of the common project and its need to limit information sharing to avoid informational spillovers into other markets".

Another critical tension appears between the different business units (Luo et al., 2006). Managers involved in internal activities compete with colleagues involved in coopetitive activities to obtain human, technological and financial resources from the parent firm (Tsai, 2002).

At the inter-individual level, coopetitive tensions could appear for a variety of reasons. Individuals face the dilemma of choosing between an individual strategy and collaboration. In a pure collaborative project, a common identity is gradually created as individuals from different companies work together over time. In a

coopetitive project, two firms' identities are mixed without being merged. The psychological equilibrium of the individuals involved can become disturbed (Gnyawali et al., 2008; Raza-Ullah et al., 2014; Gnyawali et al., 2016). Another source of tension relates to employees involved in activities developed with competitors. These employees face tensions when a current competitor becomes a partner or when a partner becomes a competitor (Gnyawali and Park, 2011; Raza-Ullah et al., 2014).

In a nutshell, tensions are substantial to coopetition. They are due to the competitive dimension of the coopetitive relationship. These tensions can be considered as very damaging for the quality of the collaboration between coopetitors. They can create mistrust, mutual negative affect and unsolvable conflicts between coopetitors. But they can also be considered as the real source of coopetition success as they encourage coopetitors to find a way to transcend their paradoxical coopetitive relationship.

In this way of thinking, coopetition provides coopetitors additional resources and competitive challenges to best use these resources. Coopetitive tensions stimulate firms and individuals to give the best of them and go faster and further than pure competition or pure collaboration. coopetitive tensions are considered more as a real power of coopetition than as an issue. In this perspective, reducing coopetitive tensions will lead to a decrease of competition and thus to the end of coopetition (Park et al., 2014). Consequently, companies must not try to reduce or eliminate these tensions but they have to manage them efficiently (Le Roy & Czakon, 2016). Instead of reducing competition or collaboration, firms would rather maintainthem in a balance (Clarke-Hill et al., 2003). Relevant managerial tools are then required toreach this balance and to preserve it (Chen et al., 2007; Chen, 2008; Bengtsson et al., 2016).

#### When coopetitive tensions require managing coopetition

Coopetition paradox belongs to a larger

literature dedicated to the management of paradoxes(Lewis, 2000; Smith & Lewis, 2011). In this literature, two contradictory approaches to managing paradoxical tensions are frequently debated. The first approach recommends paradox resolution through splitting opposite forces (Poole & Van de Ven, 1989). The second approach argues that separating creates vicious cycles. Therefore, scholars in this second approach recommend accepting and transcending the paradox at both the individual and the organizational levels. Once the paradox is accepted, a resolution strategy should be implemented (Sundaramurthy and Lewis, 2003: Smith and Tushman, 2005: Jarzabkowski et al., 2008; Smith and Lewis, 2011)

According to the paradox resolution approach, some coopetition scholars consider that the management of collaboration and the management of competition should be split to manage coopetitive tensions (Dowling et al., 1996; Bengtsson and Kock, 2000; Herzog, 2010). Theseparation can be functional or spatial. For instance, coopetitors can cooperate on one dimension of the value chain (i. e., R&D) while competing on another dimension (i. e., marketing activities). Or coopetitors can cooperate on a given market while competing on another one.

However, other scholars note the limitations of this principle and recommended a more integrative approach (Oshri and Weber, 2006; Chen, 2008). The main problem with the separation principle is the creation in internal conflict into the company, between people dedicated to competition and people dedicated to collaboration ( Pellegrin-Boucher forthcoming). In line with the paradox acceptance approach, the integration principle requires individuals to understand their roles in a paradoxical context and to behave accordingly, following both logics simultaneously. Thus, the challenge for managers is to transcend the paradox, to simultaneously manage collaboration

and competition and, therefore, optimize the benefits of coopetition (Luo, 2007).

The separation principle and the integration principles belong to two different and opposite schools of thought. In the first one, the basic idea is that individuals cannot integrate the paradox. Therefore, the separation principle is needed and the only one to implement coopetition strategy. In the second schools of thought, the separation principle is considered as a negation of paradoxical nature of coopetition. Companies are able to manage successfully coopetition if and only if individuals are able to develop their coopetitive mindset.

A third school of thought tries to combine these two opposite approaches. Instead of opposing the separation and the integration principles, scholars argue that both principles should be used simultaneously in order to efficiently manage coopetitive tensions (Fernandez et al., 2014; Fernandez and Chiambaretto, 2016; Seran et al., 2016). The separation principle is required at the organizational level. Competition and cooperation should be split between different levels of the value chain, or between different products or markets. This separation is necessary to define a dominant role for each activity within the firm, collaborative or competitive. But this single separation is not sufficient to efficiently manage the multiple coopetitive tensions because they generate additional tensions within the organization, at the individual level.

At the individual level, the integration of the coopetition paradox is necessary to manage coopetitive tensions. Indeed, the separation principle creates internal tensions within firms, between employees who are in charge of collaboration and those in charge of competition. The only way to control these tensions is to allow people to understand the role of each employee in a coopetitive setting. The understanding of the coopetition paradox contributes to limit the tensions within the firm and allows individuals to

adopt simultaneous cooperative and competitive behaviors with their coopetitors. The integration of coopetition paradox by individuals is facilitated by the joint implementation of formal coordination (procedures, regular meetings, etc.) and informal coordination (social networks, social interaction, trust, etc.) (Seran et al., 2016).

The separation and the integration principles are complementary. Each principle has some virtuous and some limits and the combination of the both permits to compensate their limits. For instance, Fernandez and Chiambaretto (2016) demonstrated empirically how to combine both principles to manage tensions related to information at the project level. According to the separation principle, managers use formal control mechanisms i. e. the information system to share only the critical information required to achieve the project and to protect the noncritical. Simultaneously, managers use informal control mechanisms to differentiate appropriable from nonappropriable information to transform appropriable critical information into non-appropriable critical information. Such abilities developed by managers rely on a cognitive integration of the coopetition paradox. Thus, managing efficiently tensions related with information requires a combination of both the separation and of the integration principles.

Other empirical evidence is provided by Seran and colleagues (2016) in the banking sector. In this sector, coopetition relationships exist within multi-unit organizations such as Crédit Agricole or Banque Populaire Caisse d'Epargne. Coopetitive tensions appear at the intraorganizational and interindividual. Authors have shown these tensions are efficiently managed by the implementation of a separation principle – independent banks, distinct brands and staff – and the implementation of an integration principle based on formal and informal coordination.

# Opening the black-box: managing coopetition on a daily basis

The separation and integration principles are used together but at different levels. The

separation belongs to the organizational design of the company or, at least, within the Business Unit. Within a Business Unit some projects are done with rivals and other projects are done in pure competition with these rivals. The integration principle belongs to the individual level. People are more or less able to integrate the paradox of coopetition and adopt both a balanced mindset and behavior.

Between the organizational design level and the individual level, an intermediary level is the working group dedicated to the common project with the competitor. At this working group level people of competing firms work together on a daily basis. This is at this level that firms share their knowledge, their know-how, their resources and competencies. Therefore, this is at this level that the value of coopetition is created, but it is also at this level that the risks of plunder are the highest. Consequently, this level is critical for the coopetition success.

The question becomes, how should firms manage coopetition at this working-group level? Two past researches are dedicated to this question. The first one focuses on technology coopetition (Le Roy & Fernandez, 2015) and the second one focuses on selling coopetition (Pellegrin-boucher et al., forthcoming). Both conclude to the identification of an additional principle; the comanagement principle for technology coopetition and the arbitration principle for the selling coopetition.

First, the co-management principle is needed for technology coopetition (Le Roy & Fernandez, 2015). This co-management principle is implemented into the common team created by the coopetitors, named the Coopetitive Project Team. The co-management principle is based on a peer logic. The Coopetitive Project Team is managed by a dual managerial structure. Team members from competing firms are pooled and work together on a daily basis. Parent firms adopt an organizational design in which they equally share the decision-

making process, thus managing the risk of opportunism. Therefore, power is balanced and symmetric in a horizontal collaboration. This redundancy of managerial functions could appear as a waste of resources but it is essential to develop trust and to encourage the necessary knowledge sharing between team members (Le Roy & Fernandez, 2015; Fernandez et al., in press).

Second, the arbitration principle is needed for selling coopetition (Pellegrin-Boucher et al., forthcoming). Selling coopetition relies on alliance managers. The mission of these alliance managers is to win call for tenders by collaborating with competitors. This mission creates internal tensions between alliance-managers and sales managers who may also apply for this call for tenders alone. These tensions cannot be solved by the separation and integration principles and the hierarchy must rely on arbitration to solve these internal conflicts.

Based on these previous studies, we propose a multi-level framework to analyze the management of coopetition strategies (Figure 1). The separation principle is relevant to manage coopetitive tensions at the organizational level and the integration principle is appropriate to manage coopetitive tensions at the individual level. At the project level (R&D or sales project), the comanagement principle is relevant in technology coopetition whereas the arbitration principle is more adapted for selling coopetition. These principles should be simultaneously combined and implemented to manage efficiently coopetitive tensions.

The importance of the combination of these principles was initially found in the space industry for technology coopetition (Le Roy and Fernandez, 2015) and in the ICT industry for selling coopetition (Pellegrin-Boucher et al., forthcoming). These high-tech industries are characterized by high levels of R&D costs, high levels of risks, high levels of knowledge, high market uncertainty, etc. All companies evolving in high-tech industries are facing the same issues.

Thus, our framework could guide these companies to adopt coopetition strategies and to succeed in such environments. Further researches could confirm this assumption in other high-tech or low-tech industries. In this perspective, coopetition management is a new and stimulating research topic with high potential for researchers and practitioners.

Figure 1

#### Conclusion and research perspectives

In this chapter we argue that coopetition strategy can be a double-edged sword. It can either be a win-win or a win-lose strategy. The positive or negative effect of strategizing coopetition clearly depends on the management of coopetition. Because coopetition combines simultaneously two contradictory logics, it creates tensions at different levels: interorganizational, intra-organizational and inter-individual levels. These tensions need to be efficiently managed so that firms can benefit from coopetition. The question of relevant principles for managing coopetition is therefore the key question of coopetition research.

This question is still an open one and so far three schools of through can be distinguished. The first one is based on the separation principle, the second one is based on integration principle, and the third one combines the separation and the integration principles. In this third school, some researches go deeper at the working group level and identify two other principles depending of the coopetition type: co-management principle for technology coopetition and arbitration for selling coopetition. As a sum, managing successfully coopetition requires combining three

complementary principles: the separation principle at the Business Unit level - the co-management principle (for technology coopetition) or the arbitration principle (for selling coopetition) at the working group level - the integration principle at the individual level.

Yet, coopetition remains more an open field of research than a closed one. Research on managing coopetition is still scarce and further research is needed in other industries to discuss the relevance of preliminary results presented in this chapter. Is our framework relevant for other companies in low-tech industries or for SMEs? Understanding and analyzing the management tools used in coopetition strategy in these circumstances is crucial.

As highlighted in this chapter, previous researches remained focused on management principles. Once these management principles have been identified it is necessary to go deeper and deeper into the black-box of coopetition. For instance, specific research should organizational designs used by firms at the working group level. Le Roy and Fernandez (2015) identified the Coopetitive-Project-Team. companies use other types of organizational designs than Coopetitive-Project-Team and why? A recent contribution shows that a company could use another organizational design named Separated-Project-Team according to the risks, the costs and the innovativeness of the project (Fernandez et al., forthcoming). Additional researches are needed to reveal other organizational designs and to understand their drivers and their implications. Especially, we need to know how companies manage their coopetition strategy when coopetitive project involves more than two coopetitors.

Some future researches should also be dedicated to some managerial aspects of coopetitive project. For instance, the information systems used to achieve coopetitive projects represent an exciting research perspective. The pioneer work of Fernandez and Chiambaretto (2016) needs

additional research to better understand how information is shared and protected by coopetitors. We also need to investigate better the management control of coopetitive projects. A preliminary research shows that management control creates some specific issues that need to be deeper investigated (Grafton and Mundy, 2017). The marketing management of coopetition represents another fascinating research perspective. Pellegrin-Boucher et al. (forthcoming) show that managing selling coopetition involves a specific principle named arbitration. We need to investigate further the management of selling coopetition, but also of marketing, distribution or branding coopetition (Chiambaretto et al., 2016). Managing coopetition in supply-chains, purchasing or logistics is an entirely open question and needs to be specifically studied as well.

To sum up, we are just making the first steps toward a broader understanding of coopetition management. As coopetition management is the key success factor of strategizing coopetition, further research is absolutely necessary on this topic.

#### 参考文献:

- [1] BRANDENBURGER A M, NALEBUFF B J. (1996). Co-Opetition: A Revolutionary Mindset That Redefines Competition and Cooperation. Doubleday: New York, 121. Chen, M-J. (2008).
- [2] YAMI S, CASTALDO S, DAGNINO GB, et ak. (2010). Coopetition winning strategies for the 21st century. Edward Elgar: Cheltenham, UK; Northampton, MA.
- [3] BENGTSSON M, KOCK S. Coopetition—quo vadis?
  Past accomplishments and future challenges.
  Industrial Marketing Management, 2014,43(2): 180188.
- [4] CZAKON W, FERNANDEZ A-S, MIN? A. From paradox to practice: the rise of coopetition strategies.

  International Journal of Business Environment, 2014, 6(1): 1-10.
- [5] BENGTSSON M, RAZA-ULLAH T. A systematic review of research on coopetition: Toward a multilevel understanding. Industrial Marketing

- Management, 2016(57): 23-39.
- [6] DORN S, SCHWEIGER B, ALBERS S. Levels, phases and themes of coopetition: A systematic literature review and research agenda. European Management Journal, 2016, 34(5): 484-500.
- [7] LADO A A, BOYD N G, HANLON S C. Competition, cooperation, and the search for economic rents: A syncretic model. Academy of Management Review, 1997, 22(1): 110-141.
- [8] GNYAWALI D R, MADHAVAN R. Cooperative networks and competitive dynamics: A structural embeddedness perspective. Academy of Management review, 2001, 26(3): 431-445.
- [9] CHIAMBARETTO P, FERNANDEZ A S. The evolution of coopetitive and collaborative alliances in an alliance portfolio: The Air France case. Industrial Marketing Management, 2016(57): 75-85.
- [10] ESTRADA I, FAEMS D, DE FARIA P. Coopetition and product innovation performance: The role of internal knowledge sharing mechanisms and formal knowledge protection mechanisms. Industrial Marketing Management, 2016(53): 56-65.
- [11] ARRANZ N, DE ARROYABE J C F. The choice of partners in R&D cooperation: An empirical analysis of Spanish firms. Technovation, 2008, 28 (1-2): 88-100.
- [12] HAMEL G, DOZ Y L, PRAHALAD C K. Collaborate with your competitors—and win. Harvard Business Review, 1989, 67(1): 133-139.
- [13] KHANNA T, GULATI R, NOHRIA N. The dynamics of learning alliances: competition, cooperation, and relative scope. Strategic Management Journal, 1998, 19(3): 193-210.
- [14] LE ROY F, CZAKON W. Managing coopetition: the missing link between strategy and performance. Industrial Marketing Management, 2016(53); 3-6.
- [15] PENG T J A, PIKE S, YANG J C H, et al. Is Cooperation with competitors a good Idea? An example in practice. British Journal of Management, 2012, 23(4): 532-560.
- [16] BENGTSSON M, KOCK S. "Coopetition" in business networks to cooperate and compete simultaneously. Industrial Marketing Management, 2000, 29(5): 411-426.
- [17] RAZA-ULLAH T, BENGTSSON M, KOCK S. The coopetition paradox and tension in coopetition at multiple levels. Industrial Marketing Management,

- 2014, 43(2): 189-198.
- [18] RITALA P, HURMELINNA-LAUKKANEN P. What's in it for me? Creating and appropriating value in innovation-related coopetition. Technovation, 2009 (29):819-820.
- [19] GNYAWALI D R, PARK B J. Co-opetition between giants: Collaboration with competitors for technological innovation. Research Policy, 2011, 40 (5): 650-663.
- [20] QUINTANA- GARC? A C, BENAVIDES-VELASCO C. A. Cooperation, competition, and innovative capability: a panel data of European dedicated biotechnology firms. Technovation, 2004, 24(12): 927-938.
- [21] GNYAWALI D R, PARK B J. Co-opetition and technological innovation in Small and Medium-Sized Enterprises: a multilevel conceptual model. Journal of Small Business Management, 2009, 47 (3): 308-330.
- [22] LE ROY F, SANOU F H. Does Coopetition Strategy improve Market Performance: an Empirical Study in Mobile Phone Industry. Journal of Economics and Management, 2014(17): 63-94.
- [23] ROBERT M, CHIAMBARETTO P, MIRA B, et al. (in press). Better, Faster, Stronger: The impact of market-oriented coopetition on product commercial performance, Management.
- [24] CZAKON W, CZERN HAMEL EK K. The role of trust-building mechanisms in entering into network coopetition: The case of tourism networks in Poland. Industrial Marketing Management, 2016(57): 64-74.
- [25] FERNANDEZ A S, LE ROY F, GNYAWALI DR. Sources and management of tension in co-opetition case evidence from telecommunications satellites manufacturing in Europe. Industrial Marketing Management, 2014, 43(2): 222-235.
- [26] LE ROY F, FERNANDEZ A S. Managing coopetitive tensions at the working-group level; the rise of the coopetitive project team. British Journal of Management, 2015, 26(4): 671-688.
- [27] LUO X, RINDFLEISCH A, TSE D K. Working with rivals; the impact of competitor alliances on financial performance. Journal of Marketing Research, 2007, 44(1): 73-83.
- [28] RITALA P, TIDSTRöM A. Untangling the valuecreation and value-appropriation elements of coopetition strategy: A longitudinal analysis on the

- firm and relational levels. Scandinavian Journal of Management, 2014,30(4): 498-515.
- [29] FERNANDEZ A S, CHIAMBARETTO P.

  Managing tensions related to information in
  coopetition. Industrial Marketing Management, 2016
  (53): 66-76.
- [30] BAUMARD P. (2010). Learning in Coopetitive Environments. In S. Yami, S. Castaldo, G. B. Dagnino, & F. Le Roy (Eds.), Coopetition: winning strategies for the 21st century. Cheltenham: Edward Elgar.
- [31] HURMELINNA-LAUKKANEN P, OLANDER H. Coping with rivals' absorptive capacity in innovation activities. Technovation, 2014, 34(1): 3-11.
- [32] GNYAWALI D R, HE J, MADHAVAN R. Coopetition. Promises and challenges. In 21st Century Management: A Reference Handbook, Wankel, C. (ed). Sage Publications: London: 2008; 386-398.
- [33] GNYAWALI D R, MADHAVAN R, HE J, et al. The competition—cooperation paradox in inter-firm relationships: A conceptual framework. Industrial Marketing Management, 2016(53): 7-18.
- [34] PARK B J. (ROBERT), SRIVASTAVA M K, GNYAWALI D R. Walking the tight rope of coopetition; Impact of competition and cooperation intensities and balance on firm innovation performance. Industrial Marketing Management, 2014, 43(2): 210-221.
- [35] CLARKE-HILL C, LI H, DAVIES B. The paradox of co-operation and competition in strategic alliances: towards a multi-paradigm approach. Management Research News, 2003, 26(1): 1-20.
- [36] CHEN M J. Reconceptualizing the competition-cooperation relationship: a transparadox perspective.

  Journal of Management Inquiry, 2008, 17 (4): 288-304.
- [37] BENGTSSON M, RAZA-ULLAH T, VANYUSHYN V. The coopetition paradox and tension: The moderating role of coopetition

- capability. Industrial Marketing Management, 2016 (53): 19-30.
- [38] SMITH W K, LEWIS M W. Toward a theory of paradox: A dynamic equilibrium model of organizing.

  Academy of management Review, 2011, 36 (2): 381-403.
- [39] SUNDARAMURTHY C, LEWIS M. Control and collaboration: Paradoxes of governance. Academy of management review, 2003, 28(3): 397-415.
- [40] DOWLING M J, ROERING W D, CARLIN B A, et al. Multifaceted relationships under coopetition description and theory. Journal of Management Inquiry, 1996, 5(2): 155-167.
- [41] HERZOG T. (2010). Strategic management of coopetitive relationships in CoPS-related industries. In Coopetition: winning strategies for the 21st century, Yami S, Castaldo S.
- [42] OSHRII, WEEBER C. Cooperation and competition standards-setting activities in the digitization era: The case of wireless information devices. Technology Analysis & Strategic Management, 2006, 18(2): 265-283.
- [43] PELLEGRIN-BOUCHER E, LE ROY F, GURăU,
  C. (forthcoming), Managing Selling Coopetition: a
  case study of the ERP industry, European
  Management.
- [44] SERAN T, PELLEGRIN-BOUCHER E, GURAU C. The management of coopetitive tensions within multi-unit organizations. Industrial Marketing Management, 2016(53): 31-41.
- [45] GRAFTON J, MUNDY J. "Relational contracting and the myth of trust: Control in a coopetitive setting", Management Accounting Research, 2017 (36): 24-4.
- [46] CHIAMBARETTO P, CALIN G, LE ROY F. Coopetitive branding: Definition, typology, benefit and risks, Industrial Marketing Management, 2016 (57): 86-96.