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Managing coopetition: the missing link between strategy and performance

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Since the seminal book of Brandenburger and Nalebuff (1996), coopetition has been the subject of an increasing amount of research in the field of strategic management. Research on coopetition has been developed in many directions, to the point that today it is difficult to make a complete synthesis (Yami, Castaldo, Dagnino, & Le Roy, 2010; Bengtsson & Kock, 2014; Czakon, Mucha-Kuś, & Rogalski, 2014a). An essential question about coopetition is its impact on performance. Since its inception coopetition theory has been resolutely normative. For Brandenburger and Nalebuff (1996), coopetition is a strategy that will lead to superior performance. This normative point of view has not been questioned, and is always considered as relevant in coopetition theory (Czakon, 2009; Bengtsson & Kock, 2014). However, coopetition is not a universally best strategy. For instance, working with rivals creates tensions relative to the risk of undesired knowledge transfer and asymmetrical learning. If coopetition can be a win–win strategy, it can also be a win–lose strategy. So a key point for the success of coopetition is the management of coopetitive tensions. This special issue is dedicated to this key point: how to manage coopetition to achieve the success of this strategy?

1. Coopetition strategy: high performance at a price

Pioneer research considers that coopetition should become an alternative to strategies based on pure cooperation, and on pure competition. Brandenburger and Nalebuff (1996); Lado, Boyd, and Hanlon (1997), and Bengtsson and Kock (1999, 2000) agree that coopetition is a strategy that holds the greatest potential for firms' performance or, at least, has the greatest impact on variables clearly identified as likely to make them more efficient. Cost savings, resource access and sharing, enhanced value creation and stimulation that promote innovation are listed among the potential gains from this strategy (Czernek & Czakon, 2016).

A company that follows a coopetitive strategy is in a position where it can benefit from the advantages of both competition and cooperation. Competition pushes firms to introduce new product combinations, to innovate, to improve products–services and so on. It is therefore a progress factor for firms. In addition, coopetition enables firms to improve their market position and their performance at the expense of rivals (Gnyawali & Park, 2011). Cooperation, in turn, allows the company to have access to almost-free resources, skills and knowledge that are necessary or indispensable (Lado et al., 1997).

If coopetition is potentially a source of high performance for firms, it is also a source of drawbacks. Alliances between competitors do not end the rivalry between them (Hamel, Doz, & Prahalad, 1989). Rivalry does not stop with collaboration, but co-exists with collaboration. A firm collaborates with its competitors to increase its own competitiveness, and to beat partners on the market. Collaboration is an opportunity to access competitor's resources, and the objective is to increase its own competitive advantage. Collaborating with competitors is an opportunity to become better on the market, but it offers the same opportunity for the partner–rival. So, collaborating with competitors does not decrease competitive tensions. The competitive tensions are integrated in coopetition which is based simultaneously on collaboration and trial of force.

In this way of thinking, collaborating with competitors is the best way to have access to their knowledge. All coopetitors also try to capture the knowledge of their partner-rival. Hence, the art of coopetition would be to appropriate more than coopetitors. Coopetitors are

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engaged in a learning race, and try to obtain asymmetric learning at their advantage (Hamel et al., 1989; Hamel, 1991). If the gains are symmetric, then coopetition is a win–win relationship. If there is an asymmetry of learning, then coopetition becomes a win–lose strategy. Knowledge sharing turns into knowledge plunder. One coopetitor wins at the expense of the other. This outcome should be the real "hidden agenda" of coopetition (Hamel et al., 1989; Hamel, 1991).

The paradox of coopetition is that collaborating with a rival increases the competitiveness of this rival (Gnyawali & Park, 2009). The more a company wants to benefit from collaboration with a rival, the more it shares its knowledge, and the more its coopetitor learns and become dangerous on the market. Increasing the intensity of collaboration in coopetition may increase the benefits of coopetition. But it may also increase the competitiveness of the coopetitor. The partner-rival has access to new knowledge, skills, *etc.* and can increase its competitive aggressiveness at the expense of its coopetitors (Sanou, Le Roy, & Gnyawali, 2015).

Consequently, coopetitive strategy should be considered both as a source of potentially superior performance, and as a source of additional risks (Pellegrin-Boucher, Le Roy, & Gurau, 2013). Coopetition could be a real success for a firm but could also be damaging for others. If coopetition can be the solution of the problem for a firm, it could be the origin of the problem for another firm (Bonel and Rocco, 2007). So we can expect that results of empirical research reflect this duality of coopetition outcomes.

2. Coopetition and performance: mixed empirical results

Coopetition is a normative theory which promises superior performance to firms that adopt this strategy. This fundamental assertion has engendered some empirical testing. Several studies attempted to elucidate the impact of cooperation between competitors on innovation performance (Quintana-García & Benavides-Velasco, 2004; Belderbos, Carree, & Lokshin, 2004, Neyens, Faems, & Sels, 2010; Nieto & Santamaría, 2007; Le Roy, Robert, & Lasch, 2016). Other studies aimed at determining the impact of strategies of coopetition on economic, financial or market performance (Oum, Park, Kim, & Yu, 2004; Morris, Koçak, & Özer, 2007; Luo, Rindfleisch, & Tse, 2007; Ritala, Hallikas, & Sissonen, 2008; Robert et al., 2009; Kim & Parkhe, 2009; Ritala, 2012; Le Roy & Sanou, 2014).

In accordance with coopetition theory, some studies show a positive relationship between cooperation with competitors and performance. For instance, Quintana-García and Benavides-Velasco (2004) found in a European biotechnology firm's sample, that coopetition strategy increases technological diversity, and the development of new products. Belderbos et al. (2004) in turn identified a positive impact of coopetition on labor productivity and sales per employee, in a large sample of innovating Dutch firms. Morris et al. (2007) demonstrated on a large sample of small Turkish firms that there is a strong and positive relationship between coopetition strategies and performance. Robert et al. (2009) substantiated that coopetition between French football clubs does not improve their sporting performance, but does improve their economic performance. Neyens et al. (2010) established on a sample of Flemish start-ups that there is a positive impact of "continuous strategic alliances" with competitors, on the performance in radical innovation. Peng, Pike, C-H, and Roos (2012) show in Taiwanese supermarket networks that cooperation with competitor does lead to better performance. Le Roy and Sanou (2014) confirm that coopetition strategy has a higher impact on market performance than either pure competitive strategy or pure cooperative strategy.

On the contrary, some studies establish a negative relationship between coopetition and performance. Nieto and Santamaría (2007) show in a longitudinal study of Spanish manufacturing firms, that cooperation with competitors has a negative impact on the newness of innovation. Ritala et al. (2008) in turn find in the global ICT sector, that a relatively high number of alliances within a group of competing firms contributes negatively to performance. Kim and Parkhe (2009) demonstrate on a global alliances sample, that competing similarity between alliance partners is negatively related to alliance outcomes.

Beyond opposite findings, some studies clearly show mixed effects of coopetition on performance: both negative and positive. Luo et al. (2007) find that the impact of company alliances with a company's competitors on performance is curvilinear — first a negative, then a positive association between cooperation with competitors and innovation performance. Oum et al. (2004) show that horizontal alliances have a positive impact on productivity but not on profitability.

The contradiction in empirical results is in line with the paradoxical nature of coopetition (Czakon, Fernandez, & Minà, 2014b). This incites to adopt a contingency approach, long established in the strategy literature (Venkatraman, 1989). Following that thread, a close scrutiny of moderating, mediating, and other relationships between coopetition and performance in given contexts is important. For instance Ritala (2012) shows that the relationship between coopetition strategy and market performance is moderated by market uncertainty, network externalities and competitive intensity. Le Roy et al. (2016) found that geographical distance plays a moderating role too. For French firms, coopetition strategy has a deep impact on innovation when coopetitors are located in other countries in Europe or in USA, and no impact when coopetitors are located in France.

3. The missing link: management of coopetition tensions

Coopetition creates various tensions between coopetitors and within coopeting firms. They are located at three different levels: inter-organizational, intra-organizational, and inter-individual (Fernandez, Le Roy, & Gnyawali, 2014). At the inter-organizational level a tension between the creation of common value and the appropriation of private value has been identified (Gnyawali, Madhavan, He, & Bengtsson, 2012; Ritala & Tidström, 2014; Czakon, Mucha-Kuś, & Sołtysik, 2016). In order to create common value firms have to cooperate, but they are in competition to capture that value. Another tension comes from the risks of transferring confidential information, and the risks of technological imitation. Partners pool strategic resources to achieve their goals (Gnyawali & Park, 2009). Yet, in coopetitive situations they must also protect their core competencies.

Two main sources of coopetitive tension are likely to exist at the intra-organizational level. First, there are some tensions between the different business units (Luo, Slotegraaf, & Pan, 2006). Managers involved in coopetitive activities compete with colleagues involved in internal activities to obtain financial, technological, human, and other resources from the parent firm (Tsai, 2002). Second, there are tensions for employees involved in common activities. They must find a position when a partner becomes also a competitor or when a current competitor becomes also a partner (Gnyawali & Park, 2011; Raza-Ullah, Bengtsson, & Kock, 2014). At the individual level tensions come from the difficulty to create a common identity in coopetitive activities. The psychological equilibrium of the individuals involved can become disturbed (Gnyawali & He, 2008; Raza-Ullah et al., 2014).

A key question is thus how to manage coopetitive tensions to ensure the success of this strategy, and alleviate damaging effects. We focus here on coopetition paradoxical nature. How organizations and people could manage the coopetitive paradox? Two opposing points of view exist in the literature. In the first one, individuals cannot integrate the coopetitive paradox (Bengtsson & Kock, 2000). Thus, the management of competition, and the management of collaboration must be split inside the organization (Dowling, Roering, Carlin, & Wisnieski, 1996; Bengtsson & Kock, 2000; Herzog, 2010). The separation can be functional or spatial. Partners can cooperate on one dimension of the value chain (*i.e.*, R&D), while competing on another dimension (*i.e.*, marketing activities). In the second point of view, separation between competition and collaboration is not coherent with coopetition nature (Das & Teng, 2000; Oshri & Weeber, 2006; Chen, 2008). The implementation of separation is inefficient because it creates new internal tensions within the

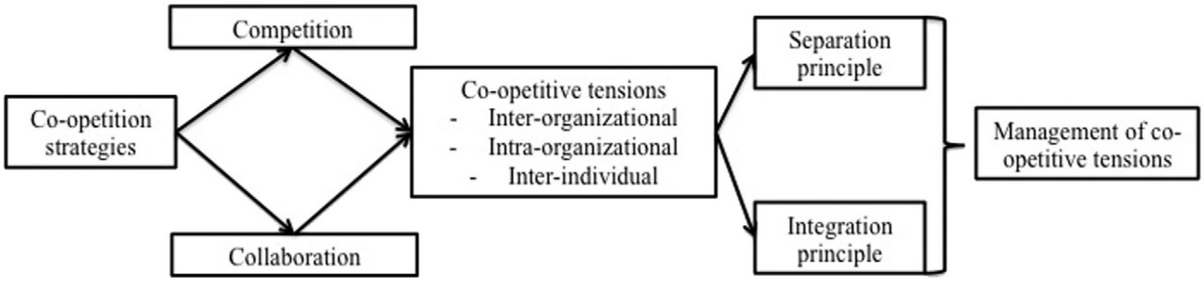

Fig. 1. Management of coopetitive tensions. Source: Fernandez et al. (2014).

organization. For example, a conflict can arise between people running collaboration, and those responsible for competition. Some may be perceived as a "traitors" because they collaborate with "the enemy". So it's necessary for people to integrate individually the coopetitive paradox. This integration appears as the condition to successfully implement coopetition strategy.

The debate between the management by separation and the management by integration is far from closed. Fernandez et al. (2014) show that separation and integration principles are opposite, but reveal also complementary. Successful management of coopetition combines separation with integration (cf. Fig. 1).

Furthermore, Le Roy and Fernandez (2015) show that using separation and integration principle is not enough. The separation principle is used at the organizational level and the integration principle is used at the individual level. But the simultaneous implementation of these principles is not enough to manage coopetitive tensions at the working-group level, i.e. at the level where employees of rival firms work together. Firms must also use a co-management principle at this working-group level to ensure the stability of coopetition.

The coopetition management enigma calls for further scrutiny. A closer examination of ways of managing coopetition is critical to develop a theory of coopetition (Walley, 2007; Chen, 2008; Gnyawali & Park, 2011). Previous research on these questions has been mainly theoretical (Das & Teng, 2000; Clarke-Hill, Li, & Davies, 2003; De Rond & Bouchikhi, 2004; Chen, 2008; Gnyawali & He, 2008). Empirical studies remain to date very rare (Tidström, 2014; Fernandez et al., 2014; Le Roy & Fernandez, 2015).

4. Managing a paradox: conceptual frameworks and empirical tests

In order to transcend the coopetition paradox, we offer a collection of papers which contribute to develop a coopetition theory. Generally, all contributions focus on the contingencies that impact the strategy-performance relationship. One way of looking at those contingencies is to develop a framework of advanced research models, incorporating moderating and mediating effects. The other way is to mobilize variables which have so far been rarely used, or not used at all: cognitive, structural, cultural, governance and so on. As a result we offer a coherent collection, which moves beyond an overly simplified stance of normative theory, and lays foundations for increased managerial relevance by focusing on managing coopetition. We organize the ten studies as follows.

Firstly, conceptual frameworks for moderating relationships are developed. Gnyawali et al. (2016–this issue) propose that paradox management capabilities moderate the relationship between paradoxical situations specific to coopetition strategy and performance. This paper also develops the concept of felt tensions, as a manifestation of the paradox. In the same line of inquiry, Bengtsson et al. (2016–this issue) present and test a theoretical model where coopetition capability moderates external tensions, and reduces internal tensions within coopetition relationships in a large sample of Swedish firms. Also, this study develops a view on coopetition capability as ambidexterity in dealing with external and internal tensions, and responding to contradictory demands.

The next two papers explore structural contingencies of coopetition management deployed in order to foster the benefits, and protects against drawbacks of internal tensions. Pellegrin-Boucher et al. (2016–this issue) provide an in-depth study of leading French banking institutions to unveil how formal and informal management helps individuals to cope with coopetition tensions. It develops the paradox integration thread of thinking through a scrutiny of various practices implemented to alleviate tensions. Strese et al. (2016–this issue) establish in a sample of German firms how leadership styles and management structures favor inter-department coopetition. Formalization and centralization are found to have opposite effects on cross-functional coopetition.

The following two papers explore the role of information sharing and protection mechanism in managing coopetition. Estrada et al. (2016–this issue) show on a sample of Flemish firms that coopetition has a positive impact on innovation only when both knowledge sharing and knowledge protection mechanisms are in place. Fernandez and Chiambaretto (2016–this issue) study in depth the information sharing mechanisms in French aerospace consortia to unveil that formal and informal control mechanisms are important in coopetitive projects.

Next governance concepts are mobilized by Bouncken et al. (2016–this issue) in order to test single or plural governance mechanism relevance in a sample of German medical firms, and find that plural governance use fosters innovativeness. Klimas (2016–this issue) in turn adopts the organizational culture framework in order to demonstrate that culture profiles displayed by coopetitors in the Polish aviation industry are different than those of non-coopetitors. This study sheds light on the role of cultural contingencies in entering coopetition, and managing its paradoxical nature. The last two papers are conducted on the network level of analysis. Mariani (2016-this issue) studies an Italian tourism event and unveils that contractual mechanisms are not necessary to manage multi-party coopetition, while various formal coordination mechanisms play a crucial role. Velu (2016–this issue) finds that dominant firms use coopetition for radical innovation in offensive manner, while less dominant firms use it for evolutionary improvement in a defensive way.

Further research on coopetition strategy is clearly needed at various levels of analysis, starting with an ecosystem, and going down to individual strains engendered by the paradoxical coopetition nature. Various lenses may be applied in order to develop a solid understanding of coopetition-performance relationship, including the managerial methods and toolboxes. We believe that our special issue contributes to the advancement of coopetition theory in this direction. We take this opportunity to thank all the authors, the many anonymous reviewers, and Giovanni Battista Dagnino from the University of Catania for contributing to the crafting of this special issue.

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