Planning for Coopetition to Mitigate Risks: Findings from Three Studies

Abstract

In an economic environment characterized by competitive intensity and uncertainty, many companies are turning to inter-organizational cooperation to acquire key resources and capabilities, and to share risk. Increasingly, some of these collaborations are undertaken with competitors (and labelled coopetition). Coopetition therefore is emerging as an attractive strategy to achieve economies of scale, obtain complementary resources, advance knowledge, and reduce distribution risks. However, coopetition can also be characterized by opportunistic behaviors and lack of trust between partners, which can hinder any positive effects that coopetition may have on organizational performance. The current study explores the decision-making process employed when establishing coopetition, while addressing the potential impact on both risks mitigation, and long term strategy. Our findings reveal two approaches to coopetition planning, namely formal and personal. Each approach bears a different impact on risks and future strategy.

Keywords

Coopetition, coopetition planning, performance

Introduction

In an economic environment characterized by competitive intensity and uncertainty, many companies are turning to inter-organizational cooperation to acquire key resources and capabilities, and to share risk (Bouncken and Fredrich, 2012; Renna and Argoneto, 2012; Ritala and Hurmelinna-Laukkanen, 2013). Among the different types of organizational partnerships, coopetition strategy (simultaneous competition and cooperation, see Raza-Ullah et al., 2014) is emerging as a meaningful way of achieving this aim. Consequently, there is increasing evidence of coopetition in businesses today, in varied industries (Ritala, 2012), and across company types (Dahl, 2014; Gnyawali and Park, 2009; Levy et al., 2003; Morris et al., 2007). Previous research shows that firms cooperate with competitors to achieve economies of scale (Miotti and Sachwald, 2003), obtain complementary resources (Ancarani and Costabile, 2010), advance their knowledge (Ritala and Hurmelinna-Laukkanen, 2013), and reduce distribution risks (Meyer, 1998).

Evidence also exists that while coopetition can bring about the above benefits, it also encompasses higher levels of uncertainty (Park and Russo, 1996). Its main uncertainty is associated with its relationship with performance, which is often conditional on the environment (Ritala, 2012). For example, previous findings show that coopetition is the least effective way of developing highly novel products due to opportunistic behaviors and lack of trust between partners (Nieto and Santamaria, 2007). Hence, coopetition can be beneficial, but its performance consequences are not straightforward (Bengtsson & Kock, 2000; Gnyawali and Park, 2009). The lack of clarity in how coopetition can affect organizational performance may be due to our still limited understanding of the mechanisms by which

coopetition is established and managed. These mechanisms are needed to mitigate the risks associated with coopetition, and are inevitably essential to harnessing coopetition effects on performance.

Previous studies have addressed managerial aspects as antecedents to such mechanisms, exploring their impact on coopetition while mainly focusing on separation and integration in managing the coopetition alliances (Fernandez et al., 2014; Le Roy and Fernandez, 2015). Yet, a more constructed understanding of the different aspects associated with planning and managing coopetition is lacking. Therefore, this study's aims are twofold. First, we explore the decision-making process which stands at the core of coopetition planning. Second, we aim to elaborate on how this process relates to risk management, as well as to coopetition outcomes as perceived by the collaborating firms.

In the following section, key research areas of coopetition literature including definition, performance outcomes, relationship characteristics, and management of existing coopetition are reviewed. We then outline the methodology employed in conducting three separate qualitative studies, and follow this by presenting the overall findings. We conclude with a discussion of the theoretical and managerial implications, limitations, and an agenda for future research.

Literature review

Definition and characteristics of coopetition

Bengtsson and Kock (2000) define coopetition as a situation where competitors simultaneously cooperate and compete with each other. More specifically, it is said that

competing firms cooperate with each other in order to create value and generate a larger business pie, and then compete for the newly created value and divide the pie up (Brandenburger and Nalebuff, 1996).

Even though coopetition can be a lucrative strategy for companies to solve resources and capabilities constraints and gain competitive advantages, the participating firms also face more tensions and conflicts than cooperating with non-competing organizations (Das and Teng, 2003; Tidström, 2014). Not only can coopetition lead to internal conflicts (Dowling et al., 1996; Zineldin, 2004), but also a loss of control (Akdoğan and Cingšz, 2012), flexibility and freedom (Baumard, 2009), due to the interdependence among partners. It is sometimes even described as a 'dangerous situation' (Pellegrin-Boucher et al. 2013, p. 74), because it entails conflicts from different levels due to the conflictual and paradoxical nature of the relationship. Conflicts mainly stem from the competitive elements of the relationship, which means companies need to not only create value together to benefit the collaboration, but also have to appropriate resources or capabilities to enhance their own competitiveness for themselves (Hamel et al., 1989; Yami et al., 2010). Firstly, Bouncken and Kraus (2013) suggest that trust and relationships among participating firms can diminish and change rapidly, and lack of trust could be detrimental to the cooperative relationship and negatively influence coopetition outcomes. Secondly, successful coopetitive relationships are based on mutual knowledge sharing (De Rond and Bouchikhi, 2004), whereas partners face the dilemma of sharing knowledge with competitors and protecting their own valuable knowledge. Sometimes, the coopetitive relationship becomes a 'learning race' and each player tries to hold back their own knowledge, while opportunistically achieving their own

objectives (Park and Russo, 1996). This also creates a vicious circle and harms the relationship. Thirdly, allowing competitors to have access to unique resources and capabilities may decrease the focal firm's competitiveness as a result (Bouncken and Kraus, 2013).

Because most coopetitive relationships are short-term and project-based, competitors may absorb and make use of their partners' valuable knowledge or other intangible assets for own use when the relationship ends, which may reduce the uniqueness of their partners' resources and capabilities in the long term. Last but not least, power imbalance occurs when the smaller firm is highly dependent on a dominating partner (Osarenkhoe, 2010). The small firm may need to sacrifice its full access to product data and core competences in order to obtain the resources from the dominating partner. The coopetitive relationship can then become weak and the bigger firm may eventually abandon the small company.

Outcomes of coopetition

According to the resource-based view, companies' competitive advantages can be developed from heterogeneous internal resources (Barney, 1991; Peteraf, 1993). When a company has unique resources and capabilities, it is more lucrative to adopt aggressive competition so as to remain competitive and increase market share. However, when companies in general (and SMEs in particular) do not possess the resources and capabilities needed, they can seek to acquire resources or capabilities from other organizations (Lambe and Spekman, 1997). Competing firms tend to possess relevant resources and capabilities to each other, serving similar customers, sharing similar goals, and facing similar pressures. Collaboration between competing firms can then become viable as a means to acquire new resources and capabilities

(Quintana-García and Benavides-Velasco, 2004; Ritala and Hurmelinna-Laukkanen, 2009). Therefore, in order to overcome resource constraints, collaborating with competitors is sometimes a suitable strategy. Coopetition gives firms timely access to knowledge and resources that are otherwise unavailable (Powell et al., 1996), and creates new capabilities (Quintana-García and Benavides-Velasco, 2004). The purpose of coopetition is to achieve mutual benefits, by realizing the complementary use of the advantageous elements of participating organizations.

The primary logic of using coopetition strategy is to combine collective efforts among competitors, which create value together first and then individually capture and divide it. Brandenburger and Nalebuff (1996) metaphorize this as growing 'the size of the pie', so that each player can have a bigger slice. Coopetition can not only increase the current market size, but also create a new market together (Ritala et al., 2014). Competitors' complementary resources and capabilities can jointly expand current market or explore new market much faster than an individual firm on its own. Most coopetition studies argue that coopetition is more likely to take place in input activities far away from the customers in the value chain, such as logistics, production, and R&D, while companies tend to compete in activities close to the customers (Bengtsson and Kock, 2000; Tether, 2002; Luo, 2007). Cooperating with competitors on R&D and new product development helps to share costs, achieve economies of scale (Miotti and Sachwald, 2003), gain access to scarce resources (Ancarani and Costabile, 2010), and distribute investment risks (Meyer, 1998). Last but not least, forming cooperative alliances with certain competitors can help the focal firm to gain competitive advantages over the competitors who are not involved (Bouncken & Kraus, 2013).

Coopetition enables firms to gain access to competitors' know-how, skills, and complementary resources that are otherwise unavailable (Quintana-García and Benavides Velasco, 2004).

Managing coopetition

As explained above, coopetition can be a "double-edged sword" (Bouncken and Fredrich, 2012, p. 2060). On the one hand, it can help to increase a company's competitiveness, innovativeness, and performance, while on the other it is characterized with increased tensions and inter-firm risks. Therefore, it needs to be carefully managed so that the benefits can be maximized. Two contradictory approaches to managing tensions are frequently debated in the literature. The separation approach recommends the management of cooperative and competitive forces separately (Dowling et al., 1996; Bengtsson and Kock, 2000), while the integration approach debates that the paradoxical forces need to be internally accepted and integrated (Das and Teng, 2000; Oshri and Weber, 2006). A more recent study by Le Roy and Fernandez (2015) argues that different approaches need to be adopted at different levels of management. More specifically, they advise firms to adopt separation principles at the organizational level, and integration principle at the individual level. They also discovered a third principle comprises of both aspects which rests in the middle of the separation-integration continuum, co-management. According to them this principle should be implemented at the working group level.

With regards to managing inter-organizational risks in coopetitive relationships, the literature tends to focus on existing coopetitive relationships, rather than mitigating risks of

future or pending relationships. For example, coopetition risk mitigation is advocated via coopetition strategy management (Chin et al., 2008), which includes management leadership, long-term commitment, organization learning, development of trust, knowledge and risk sharing, information system support, and conflict management system. In addition to literature on mitigating risk, there is evidence of key success factors in coopetition. For example, in their study of Sony and Samsung, Gnyawali and Park (2011) propose that management's coopetition mind-sets, coopetition experience, complementary resources and capabilities, and balancing between knowledge sharing and uniqueness protection by means of formal cross-licensing, are all key to successful coopetitive relationships. In this context, companies may also need to develop abilities to differentiate and protect their own innovation against imitation in coopetitive relationships (Ritala and Hurmelinna-Laukkanen, 2009).

As can be seen from the above, the extant literature on managing coopetition to mitigate risks, however, has largely focused on coopetition management *after* the relationship has already begun. The process of planning for coopetition *before* coopetition begins, has tended to be overlooked. However, for any strategy to be successfully implemented, a systematic planning process is usually indispensable. A number of questions therefore arise. What are the key stages of coopetition planning? Are there any other success factors that companies need to be aware of when involving in coopetition? Our research aims to provide insights into these questions.

Methodology

Israel was chosen as the setting for the study as it has become a hub for coopetition activities (Tirosh, 2014). In line with our research goal, we aimed at illustrating the decision-making process which occurs before coopetition agreements are put in place, and how this can mitigate risks and impact long term operations and performance. "How" questions, concerned with identifying underlying mechanisms that explain phenomena, can best be researched via qualitative inquiry (Anteby et al., 2014). Furthermore, due to the complex nature of our goal, identifying patterns of relationships between constructs, multiple cases are typically more powerful than single studies, as they allow for a greater level of abstraction and triangulation, and enhance potential generalizability (Eisenhardt, 2014). Therefore, we employed three qualitative studies (Edmondson and McNanus, 2007). Since our research question was process-oriented, we used semi-structured interviews as the bases for all three studies. All interviews were transcribed and coded to allow content analysis.

Study 1 – we performed 12 in-depth interviews with "knowledgeable agents" (see Gioia, 2014). Specifically, respondents were chief executive officers or managing directors of eligible Israeli firms (i.e., organizations engaged in coopetition). Firms were selected to ensure maximum variation (in terms of size, age, and industry), as required when the objective is to identify common patters (Kuzel, 1992). In these interviews we aimed to identify commonalities and draw out general themes regarding the coopetition process, antecedents and outcomes (Silverman, 2005). Interviews were recorded and transcribed to identify narratives (Silverman, 2005) by which respondents describe their experience (reality) of collaborating with competitors. Data were analyzed in the sociological tradition using classic content analysis (Ryan and Bernard, 2000), in the form of Miles and Huberman's

(1984) method for data coding and matrix/network displays. 1st-order and 2nd-order analysis was performed so that informant-centric terms were represented in 1st-order within-case displays, and common themes and relationships depicted in 2nd-order cross-case displays using researcher-centric terminology. Finally, the conceptual framework and propositions were developed by combining the cross-case 2nd-order displays with existing literature.

Study 2 – we performed case studies of two separate Israeli firms – The first firm operates in the high-tech industry, and the second, in the desalination industry. Both firms engage in performing strategic alliances and coopetition agreements for other firms on a daily base, hence are very suitable as case studies. Moreover, such a method is most appropriate when much can be learned from individual cases (Stake, 2000).

The case studies were based on in-depth interviews involving a total of 35 hours of interviews, with 4 chief executive officers, two of each firm. The interviews were transcribed and analyzed for mutual themes based on Miles and Huberman's (1984) within case analysis aimed at identifying main issues of conduct, followed by a cross-case analysis aimed at capturing the process of creating coopetition agreement. Through the case studies, we aimed to triangulate study 1's outcomes while creating a deeper knowledge of specific issues highlighted in the interviews (i.e., the mitigation of risk at the pre-coopetition stage as well as the process accompanying the strategic choice of coopetition).

Study 3 – we performed a case study analysis based on four firms all collaborating under one coopetition agreement (cluster). The data was collected through in-depth interviews with the relevant manager in charge of the coopetition operations, in each of the firms. The interviews lasted around 2 hours each and took place in the manager's office. Here too we

performed a within case, and cross case analysis aimed at identifying mutual patterns associated with the perceptions and behaviors of the managers in charge of the operation. We also triangulated the outcomes of the cluster analysis with the outcomes of the two previous studies in an endeavor to establish a clearer approach to coopetition and how such approach mitigates risks, determines boundaries, and drives performance. The findings from this study are represented by a letter since all four firms are operating in the same industry, and due to privacy issues.

Findings

Based on the analyses of the three studies performed, we identified two distinct approaches to coopetition planning – formal (see Figure 1), and personal (informal) (see Figure 2). The findings presented here focus on the different approaches to coopetition planning, comparing between formal and personal-based planning, and analyzing the three main areas of the nomological net, namely the coopetition planning process, the influence of the planning process on coopetition risks, and coopetition outcomes. In what follows, we present specific findings.

Figure 1 – Coopetition model – Formal approach

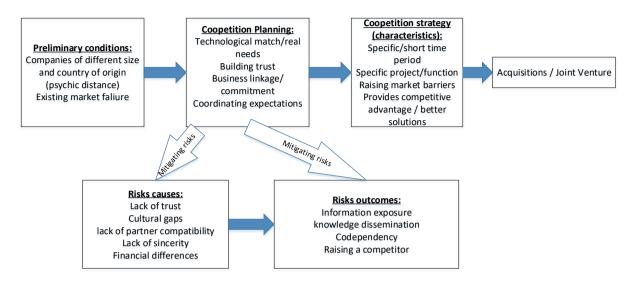
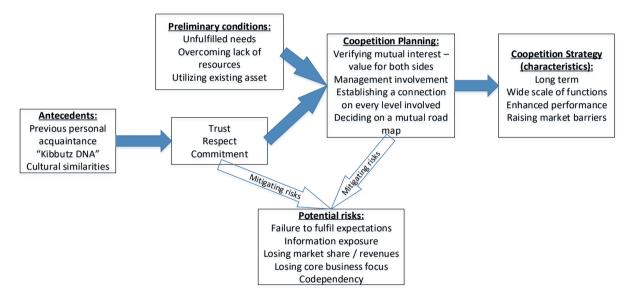


Figure 2 – Coopetition model – Personal approach



Formal coopetition planning

The main issue addressed in these studies pertains to coopetition planning. According to the interviewees a systematic coopetition planning process has two main stages: competitors screening, and establishing the coopetition relationship.

With regards to competitors screening, the process adopts a customer-oriented perspective, that is identifying from the customer end the current solutions' weaknesses, and then looking for competitors to collaborate with in order to provide a more advanced solution. This serves as a preliminary stage to competitors' screening.

"Always looking at both the customer (needs), and the competitors (solutions). Learning who is giving the best solution and identifying their weaknesses. Trying to offer a solution to enhance their product." (Desalination firm).

As for the screening itself, the formal approach advocates for a well-planned and comprehensive process aimed at identifying the best competitor(s) to collaborate with:

"Profiling the ideal partner; identifying the aspects that can serve as bases for collaboration; spotting the potential partner's reasons for entering such collaboration. Proceed screening companies based on these factors and move to a process we call engagement." (High tech firm).

"The process begins by creating a list of potential collaborators. Each needs to possess the necessary knowledge / resources we lack. We then narrow this list until we end with one most suitable firm" (Electronics firm).

"Analyzing the existing competitors against the opportunity. After identifying all the advantages and disadvantages of each competitor I choose to collaborate with a competitor based on criteria such as number of previous winnings, reducing costs, and synergetic assets." (Defense firm).

As for relationship establishment, it incorporates building relationship infrastructure, and agreeing on a mutual expectations base.

"...Building trust; Working with decision makers to establish the level of commitment needed; Coordinating expectations." (High tech firm).

Formal coopetition planning mitigates risks

When asked about how the process relates to the risks associated with coopetition a few of our interviewees claimed that by performing preliminary screening and relationship establishment, firms are able to mitigate those risks.

"Identifying real needs on both sides; A two-way trust; Personal commitment – there need to be champions leading it from both sides." (Desalination firm)

Formal coopetition planning outcomes

The outcomes of coopetition can be categorized as either internal or external. Internal outcomes are measured through performance and future strategy.

"Although such agreements are formed for a specific time period, they can impact the size of the firms engaged in them and thus shift the power in the industry in their favor." (Electronics firm).

"Coopetition is usually a relatively short-term agreement. If it works, well then it leads to M&A. It must be backed by specific goals that can be measured. It will always be defined by either a specific timeframe or by a specific developing process." (High tech firm).

"Short term – coopetition, Long term – joint venture." (Electronics firm).

External outcomes are defined through market changes and barriers to entry.

"Coopetition creates a turbulence in the market because it gives the cooperators an advantage on the rest of the competitors and offers a better solution to the customers. Overall, such agreements improve the market because it pushes forward everyone." (Desalination firm).

Personal coopetition planning

The second approach to coopetition, namely personal (informal) is distinguished from the formal type mainly by two issues – the factors incorporated into the planning process, and the prerequisites enabling the establishment of the personal approach.

While the planning process is similar under the two approaches in stating the importance of mutual needs and the involvement of management, the cluster members referred to additional crucial factor being the time scope for the coopetition. This factor is based on building connections at each managerial level, and agreeing on a mutual road map.

"That means a connection between each level of the two companies - if its experts, managerial or field. Also, the level of the manager in charge. It has to be at the highest levels. Last, the importance of a road map." (Firm D).

Antecedents to personal coopetition planning

When discussing personal coopetition planning, interviewees raised antecedents (which they did not do when discussing formal coopetition planning). They stated three prerequisites to establishing a stable coopetition relationship namely trust, respect and commitment. These three are stimulated by the existence of previous personal connections and also by cultural similarities which include the fact that all four cluster members are or were at the beginning a part of a cooperative (Kibbutz). Out of the three, trust appeared in previous studies and seems to be a cornerstone of coopetition and an important condition for mitigating opportunistic behavior, as well as reduces the tendency to view informality as a negative aspect of coopetition.

"Business happen between people and so the personal connection is very central to the collaboration." (Firm Y).

"You have to make sure that all parties are satisfied. Friendship never hearts, that is personal ties. Integrity, (and) trust." (Firm A).

"The "Kibbutz's (cooperative) DNA" is crucial. Also both companies being Israeli maintain a certain level of suspect." (Firm D).

Personal coopetition planning and risk mitigation

While coopetition is considered to be a successful strategy in many cases, firms acknowledge the risks associated with it. While no specific question was directed at the mechanism for risk mitigation, some interviewees referred to it, supporting the personal approach's advantage in reducing risks.

"When there is a similar DNA (similar way of thinking, coming from the same background) there is a smoother transition into working together. Cultural aspects bear significant impact; cultural similarity can be critical to maintaining a successful collaboration." (Firm N)

Personal coopetition planning outcomes

The differences between the formal and the personal approaches to coopetition are reflected also in the outcome of the strategy. While under the formal approach interviewees claimed that coopetition is narrow in scope and in the long run will lead to acquisitions or joint ventures, under the personal approach they stated that the agreement serves as a bases for development into other fields, and also the timeframe is indefinite. Indeed some said they hope it will last for many years.

"Only long term. Although the agreement specifies an ending date, we will keep collaborating for as long as both sides want to." (Firm N).

"The current collaboration was about marketing and today we have long term agreements in R&D which might lead to several others (fields)." (Firm A).

Discussion

The current study aimed to explore the planning process involved in establishing coopetition agreements. By better understanding this process, we can enhance our knowledge on the disputable point of whether or not coopetition is good for firms, and under which conditions it may enhance/harm performance. While previous research addressed managerial aspects of coopetition, it mainly focused on the integration and separation aspects of it, therefore concentrating on the "day after" management. Our study aimed to address the decision-making process leading to the establishment of coopetition in order to recognize

how, through better planning, firms can mitigate risks. We discovered two approaches to coopetition arrangements – formal and personal. According to the formal approach, coopetition establishment is motivated by more technical and external triggers, such as market barriers and market failure and is based on written agreements. This approach corresponds with previous findings, that focused on the aftermath of coopetition (Bouncken and Kraus, 2013; Fernandez et al. 2014; Le Roy and Fernandez, 2012; Luo et al. 2006). Yet, coopetition can also be driven and motivated by personal relationships and mutual goals. Such informal agreements are characterized by simple personal contacts between company representatives which serve to enhance their stability.

The main difference between the formal and the personal approaches lays in the antecedents to the coopetition planning approach. While the establishment of coopetition agreement based on the formal approach is driven by external conditions such as market failure, the personal approach is more internal and rests on the utilization of existing resources bridged by personal connections. The antecedents stated by the interviewees, personal acquaintance and cultural similarities facilitate trust, respect, and commitment. These three elements were previously linked to inter-organization relationships, enhancing interaction and improving information transfer (Friman et al. 2002). Indeed, existing coopetition literature refers to them as crucial ingredients of agreement stability (Akdogan et al. 2015; Chin et al. 2008; Ganesan et al. 2010; Luo, 2007). Trust, commitment and respect refer to the extent to which cooperating firms have mutually held confidence towards each other and their willingness to sacrifice short-term benefits for long-term gains. They serve as critical success factors for long-term relationships and collaborations (Chin et al. 2008).

Therefore, building trust, commitment and respect among partners is essential (Bouncken and Kraus, 2013), as partners are more motivated to share knowledge, contribute more, communicate with each other, and use the information acquired from competitors in a coopetitive environment with high level of trust (Tidström, 2014).

Management commitment is also manifested through the creation of a "Champion" that is a person dedicated to managing the coopetition. It also drives the allocation of time and resources needed for the operation to succeed.

Since under the personal approach trust, commitment, and respect exist primary to the establishment of the planning process, they also serve to mitigate risks previously associated with coopetition by providing stability and constant reassurance (Perry et al. 2004). As such, the personal acquaintance raises the barriers for opportunistic behavior which might occur otherwise.

The second meaningful contribution of the study is with regard to the scope and timeframe of the agreement. Under the formal approach interviewees reported that the agreement tends to focus on a specific function and if viewed as having a positive long lasting impact it will probably lead to acquisitions or joint ventures, placing coopetition as a short-term strategy. Yet, the personal approach interviewees reported that the agreement, while focuses on a specific function, once proved positive tends to spread from it to other functions/fields. They also claimed that coopetition can serve for the long run as long as it remains stable and provides benefits for all collaborators.

Conclusion

The current study aims to address a previously neglected aspect of coopetition strategy — the planning process pre-coopetition implementation, while addressing its role in mitigating risks as well as its strategic outcomes. Based on three qualitative studies we revealed two approaches to competition — formal and personal. While the first adheres to previous findings regarding coopetition strategy, the latter is achieved through the existence of three preliminary conditions. Once achieved these conditions provide an added value for the collaborating firms in the form of stability. This enables the firms to plan ahead based on the existing agreement.

Future research should look to establishing the strength of the identified relationships, possibly via the implementation of a survey of firms which are engaged in coopetitive partnerships.

References

- Akdogan, A. A., Dogan, N. Ö., & Cingöz, A. (2015). Coopetition as a business Strategy: determining the effective partner selection criteria using Fuzzy AHP. *International Review of Management and Business Research*, 4(1), 137.
- Ancarani, F., & Costabile, M. (2010). Coopetition dynamics in convergent industries: Designing scope connections to combine heterogeneous resources. *Coopetition: Winning strategies for the 21st century*, 216-237.
- Anteby, M., Lifshitz, H., and Tushman, M. 2014. Using qualitative research for "How" questions. *Strategic Management Journal*, **Primer** (September), http://smj.strategicmanagement.net/editorials-and-primers.php (accessed 28.10.2015).
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120.
- Baumard, P. (2009). An asymmetric perspective on coopetitive strategies. *International Journal of Entrepreneurship and Small Business*, 8(1), 6-22.
- Bengtsson, M., & Kock, S. (2000). "Coopetition" in business Networks—to cooperate and compete simultaneously. *Industrial marketing management*, 29(5), 411-426.
- Bettis, R.A., Gambardella, A., Helfat, C. and Mitchell, W. 2014. Editorial Qualitative empirical research in strategic management. *Strategic Management Journal*, **Primer** (September), http://smj.strategicmanagement.net/editorials-and-primers.php (accessed 28.10.2015).
- Bouncken, R. B., & Fredrich, V. (2012). Coopetition: performance implications and management antecedents. *International Journal of Innovation Management*, 16(05), 1250028.
- Bouncken, R. B., & Kraus, S. (2013). Innovation in knowledge-intensive industries: The double-edged sword of coopetition. *Journal of Business Research*, 66(10), 2060-2070.
- Casciaro, T., & Piskorski, M. J. (2005). Power imbalance, mutual dependence, and constraint absorption: A closer look at resource dependence theory. *Administrative Science Quarterly*, 50(2), 167-199.
- Chin, K. S., Chan, B. L., & Lam, P. K. (2008). Identifying and prioritizing critical success factors for coopetition strategy. *Industrial Management & Data Systems*, 108(4), 437-454.
- Dahl, J. (2014). Conceptualizing coopetition as a process: An outline of change in cooperative and competitive interactions. *Industrial Marketing Management*, 43(2), 272-279.
- Das, T. K., & Teng, B. S. (2003). Partner analysis and alliance performance. *Scandinavian journal of management*, 19(3), 279-308.
- De Rond, M., & Bouchikhi, H. (2004). On the dialectics of strategic alliances. *Organization science*, 15(1), 56-69.
- Dowling, M. J., Roering, W. D., Carlin, B. A., & Wisnieski, J. (1996). Multifaceted relationships under coopetition: Description and theory. *Journal of Management Inquiry*, 5(2), 155-167.
- Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field

- research. Academy of management review, 32(4), 1246-1264.
- Eisenhardt, K.M. 2014. Theory building from multiple cases. *Strategic Management Journal*, **Primer** (September), http://smj.strategicmanagement.net/editorials-and-primers.php (accessed 28.10.2015).
- Fernandez, A. S., Le Roy, F., & Gnyawali, D. 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.
- Friman, M., Gärling, T., Millett, B., Mattsson, J., & Johnston, R. (2002). An analysis of international business-to-business relationships based on the Commitment–Trust theory. *Industrial marketing management*, *31*(5), 403-409.
- Ganesan, S., Brown, S. P., Mariadoss, B. J., & Ho, H. (2010). Buffering and amplifying effects of relationship commitment in business-to-business relationships. *Journal of marketing research*, 47(2), 361-373.
- Gioia, D. 20014. A 1st-order/2nd- order qualitative approach to understanding strategic management. *Strategic Management Journal*, **Primer** (September), http://smj.strategicmanagement.net/editorials-and-primers.php (accessed 28.10.2015).
- Gnyawali, D. R., & Park, B. J. R. (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, D. R., & Park, B. J. R. (2011). Co-opetition between giants: Collaboration with competitors for technological innovation. *Research Policy*, 40(5), 650-663.
- Hamel, G., Doz, Y. L., & Prahalad, C. K. (1989). Collaborate with your competitors and win. *Harvard business review*, 67(1), 133-139.
- Kuzel, A.J. 1992. Sampling in qualitative enquiry, In *Doing Qualitative Research*. Crabtree, B.F. and Miller W.L. Sage Publications: Newbury Park, CA; 31-44.
- Lambe, C. J., & Spekman, R. E. (1997). Alliances, external technology acquisition, and discontinuous technological change. *Journal of product innovation management*, 14(2), 102-116.
- Lavie, D., Lechner, C., & Singh, H. (2007). The performance implications of timing of entry and involvement in multipartner alliances. *Academy of Management Journal*, 50(3), 578-604.
- Le Roy, F., & Fernandez, A. S. (2015). Managing coopetitive tensions at the working-group level: The rise of the coopetitive project team. *British Journal of Management*, 26(4), 671-688.
- Levy, M., Loebbecke, C., & Powell, P. (2003). SMEs, co-opetition and knowledge sharing: the role of information systems. *European Journal of Information Systems*, 12(1), 3-17.
- Luo, Y. (2007). A coopetition perspective of global competition. *Journal of world business*, 42(2), 129-144.
- Luo, X., Slotegraaf, R. J., & Pan, X. (2006). Cross-functional "coopetition": The simultaneous role of cooperation and competition within firms. *Journal of Marketing*, 70(2), 67-80.
- Meyer, H. (1998). My enemy, my friend. Journal of Business Strategy, 19(5), 42-46.
- Miles, M. B., Huberman, A. M., & Saldana, J. (1984). Qualitative data analysis: A sourcebook. *Beverly Hills*.

- Miotti, L., & Sachwald, F. (2003). Co-operative R&D: why and with whom?: An integrated framework of analysis. *Research policy*, *32*(8), 1481-1499.
- Morris, M. H., Koçak, A., & Özer, A. (2007). Coopetition as a small business strategy: Implications for performance. *Journal of small business strategy*, 18(1), 35.
- Nieto, M. J., & Santamaría, L. (2007). The importance of diverse collaborative networks for the novelty of product innovation. *Technovation*, 27(6), 367-377.
- Osarenkhoe, A. (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.
- Oshri, I., & Weeber, C. (2006). Cooperation and competition standards-setting activities in the digitization era: The case of wireless information devices. *Technology Analysis & Strategic Management*, 18(2), 265-283.
- Park, S. H., & Russo, M. V. (1996). When competition eclipses cooperation: An event history analysis of joint venture failure. *Management science*, 42(6), 875-890.
- Pellegrin-Boucher, E., Le Roy, F., & Gurău, C. (2013). Coopetitive strategies in the ICT sector: typology and stability. *Technology Analysis & Strategic Management*, 25(1), 71-89.
- Perry, M. L., Sengupta, S., & Krapfel, R. (2004). Effectiveness of horizontal strategic alliances in technologically uncertain environments: are trust and commitment enough?. *Journal of Business Research*, *57*(9), 951-956.
- Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic management journal*, 14(3), 179-191.
- Powell, W. W., Koput, K. W., & Smith-Doerr, L. (1996). Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative science quarterly*, 116-145.
- Quintana-Garcia, C., & Benavides-Velasco, C. A. (2004). Cooperation, competition, and innovative capability: a panel data of European dedicated biotechnology firms. *Technovation*, 24(12), 927-938.
- Raza-Ullah, T., Bengtsson, M., & Kock, S. (2014). The coopetition paradox and tension in coopetition at multiple levels. *Industrial Marketing Management*, 43(2), 189-198.
- Renna, P., & Argoneto, P. (2012). Capacity investment decision in co-opetitive network by information sharing. *Computers & Industrial Engineering*, 62(1), 359-367.
- Ritala, P. (2012). Coopetition strategy—when is it successful? Empirical evidence on innovation and market performance. *British Journal of Management*, 23(3), 307-324.
- Ritala, P., Golnam, A., & Wegmann, A. (2014). Coopetition-based business models: The case of Amazon. com. *Industrial Marketing Management*, 43(2), 236-249.
- Ritala, P., & Hurmelinna-Laukkanen, P. (2009). What's in it for me? Creating and appropriating value in innovation-related coopetition. *Technovation*, 29(12), 819-828.
- Ritala, P., & Hurmelinna-Laukkanen, P. (2013). Incremental and radical innovation in coopetition—The role of absorptive capacity and appropriability. *Journal of Product Innovation Management*, 30(1), 154-169.
- Ryan, G.W. and Bernard, H.R. 2000. Data management and analysis method. In *Handbook of Qualitative Research*, Second Edition. Denzin, N.K. and Lincoln, Y.S. (eds). Sage Publications: Thousand Oaks, London, New Delhi; 769-802.

- Silverman, D. 2005. *Doing Qualitative Research: A Practical Handbook*. Second Edition. Sage Publications: London, Thousand Oaks, New Delhi.
- Stake, R.E. Case studies. In *Handbook of Qualitative Research*, Second Edition. Denzin, N.K. and Lincoln, Y.S. (eds). Sage Publications: Thousand Oaks, London, New Delhi; 435-454.
- Tether, B. S. (2002). Who co-operates for innovation, and why: an empirical analysis. *Research policy*, 31(6), 947-967.
- Tidström, A. (2014). Managing tensions in coopetition. *Industrial Marketing Management*, 43(2), 261-271.
- Tirosh, E. 2014. Israeli cooperation and collaboration is making Silicon Wadi the Valley's major competitor. *Venture* Beat, February 25th, http://venturebeat.com/2014/02/25/the-native-israeli-character-is-making-silicon-wadi-the-valleys-major-competitor (accessed 28.10.2015).
- Yami, S., Castaldo, S., Dagnino, B., & Le Roy, F. (Eds.). (2010). *Coopetition: winning strategies for the 21st century*. Edward Elgar Publishing.
- Zineldin, M. (2004). Co-opetition: the organisation of the future. *Marketing Intelligence & Planning*, 22(7), 780-790.