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**THE RELATIONSHIP BETWEEN MARKET ORIENTATION,
COOPETITION, INNOVATION CAPABILITIES AND FIRM
PERFORMANCE**

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Abstract

Market orientation is based on identification of existing and potential customer expectations together with needs, finding ways to meet them, while giving direction to the future market. Consideration of market needs in innovation activities can result in widely adopted products and make difference in the market improving firm performance. However, in today's rapidly changing markets with uncertainties, there are obstacles to cope with. Coopetition emerges as a preferable approach at this stage with its potential benefits for small and medium enterprises (SMEs) and large corporations. It has different dynamics than conventional alliances such as risks that should be taken into consideration during innovation activities with competitors. The relationship between coopetition, market orientation, innovation and firm performance is rarely investigated in details in the literature. In this study, a research model was developed to investigate the role of coopetition between firms that are planning to increase their innovation capabilities and performance benefiting from market orientation.

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Keywords: Market orientation, coopetition, innovation, innovation capabilities, firm performance.



1. Introduction

Today's markets have many challenges such as globalization, technological advances, increasing number of firms and changing customer trends. In order to increase business performances and grow steadily, firms are looking for alternative approaches and try to develop new strategies. Numerous studies in the literature indicate that market orientation is a useful way to improve performance and gain competitive advantage (Zhou, Li, Zhou, & Su, 2008). Due to increase in awareness and selectivity of customers about market and products, businesses tend to be more market-oriented compared to past. Market orientation aims to understand expectations and needs of customers and to get a privileged place in the market by applying strategies in this direction (Narver & Slater, 1990). Market orientation mainly aims to create and maintain customer value (Slater & Narver, 1998).

The dominant view in the literature is that market orientation has positive impact on firm performance (Jaworski & Kohli, 1993; Slater & Narver, 1994). However, there are also studies with the opposite view (Agarwal, Erramilli, & Dev, 2003; Bhuian, 1997; Sandvik & Sandvik, 2003). Therefore, market orientation and the processes that follow it must be managed well. According to Kohli and Jaworski (1990), there are three dimensions of market orientation. These dimensions include gaining market knowledge, spreading of information in organization and responding to market (Kohli & Jaworshki, 1990). Narver and Slater (1990) improved this concept by adding a number of dimensions, namely, gathering information about competitors and developing cooperation between functions. They state 3 dimension of market orientation; customer orientation, competitor orientation and coordination between functions (Narver & Slater, 1990). Customer orientation means understanding the customers, responding to their needs and creating superior value. Competitor orientation includes following current competitor activities, products, services and developing effective strategies foreseeing future activities. Coordination between functions implies that resources are put together and functioning in harmony (Narver & Slater, 1990).

The main outcomes of market orientation addresses organizational performance, customer, innovation and employees (Jaworski & Kohli, 1996). Innovation field can be decided on effectively based on the information obtained about customers and competitors in the market, in addition to sharing this information within enterprise. Improvements that can be made on a product or a service and the resources needed can be determined in a better way. Innovation capability is defined as “the ability to continuously transform knowledge and ideas into new products, processes and systems for the benefit of the firm and its stakeholders” (Lawson & Samson, 2001, p. 384). Sustainable innovation capabilities play an important role in achieving and maintaining competitive advantage.

There are several challenges for firms that are market oriented and that aim to increase innovation capabilities in this direction. These are lack of resources, environmental factors, rapid changes in technology, cost and complexity of research, products requiring advanced expertise and access to value chains (Krommendijk, 2016). Coopetition stands out among the strategies for coping with these challenges. Coopetition is based on collaboration of two or more competing firms that have common interests to create value, while they also compete simultaneously to get the highest share from this value (Brandenburger & Nalebuff, 1996). It is a new subject that gains importance in management literature (Bouncken et al., 2015; Ritala et al., 2016). The concept was first introduced by the founder of a network software company, Novell, Raymond John Noorda, in 1980s by combining cooperation and competition (Ganguli, 2007; Gee, 2000).

The first conceptual academic study was conducted by two academics named Brandenburger and Nalebuff (1996), and this concept was explained in details in their book (Co-opetition) in the context of game theory.

Coopetition has different dynamics than typical alliances. Firms in cooperation combine their similar knowledge, capabilities and competencies, while sharing costs and risks. Compared to other firms, companies that compete with each other have more knowledge and competences that are complementary to each other. In this way, information sharing, adaptation and development of new information can be done more effectively (Ritala & Hurmelinna-Laukkanen, 2009). In addition, innovation capabilities through coopetition can provide greater benefits according to ordinary cooperations; because they often face similar customer needs, market conditions and environmental factors (Baumard, 2009).

Coopetition strategy has three dimensions as common benefit, trust and commitment (Morris, Kocak, & Ozer, 2007). The common benefit expresses the need for companies to achieve mutual benefits in coopetition. In bilateral relations, both sides must obtain a gain, even if the benefits are not equal. The common benefit varies depending on the degree of cooperation with competitors (Bengtsson & Kock, 2000). Trust dimension is the relationship based confidence between collaborating competitors. In long-term sustainable relationships, trust has critical importance (Farrelly & Quester, 2003). Firms need to trust each other in terms of sharing resources, preventing leakage of information, fruitful communication and use of information. At the same time, they need to have confidence that their opponents will not take actions to negatively influence their position in the market. The commitment dimension means that partners want to cooperate in both financial and other fields. These three dimensions are interacting with each other. When partners trust each other, they can share critical information and experiences with each other and share resources easier. Trust is the main determinant for the level of commitment (Sargeant & Lee, 2004). Common benefit affects commitment. If coopetitors believe that they can achieve higher benefits (eg. lower costs, increased productivity, increased customer satisfaction, better product performance), they may have higher commitments. Trust also increases common benefit and leads to cooperative success.

Beyond a conceptual term, coopetition have many real world examples, proving its applicability in many different cases. For instance, Sony and Samsung formed a temporary alliance to produce high quality LCD TVs (Ritala & Hurmelinna-Laukkanen, 2009). Another example can be given from automotive industry. Toyota and General Motors shared their resources, competences and knowledge to develop a hydrogen fuel car (Chin et al., 2008). Nokia, Motorola and Ericsson, collaborated in Chinese telecom industry; while competing in the mobile phone market (Luo, 2007). In banking sector, while banks are cooperating with their rivals about credit cards, logos and POS network, they also continue to compete.

There are risks that need to be taken into consideration during innovation with competitors. Some of these are information leaks and selfish behavior of one of the partners for its own benefits. For this reason, there needs to be a sensitive to balance between information sharing/storage and integration/isolation. Furthermore, disagreements and incompatibilities about balancing and timing of cooperation and competition may lead to internal conflicts at firms. In addition, as habit of team thinking becomes dominant, it may prevent introduction and growth of new ideas in long-lasting coopetition. Individual and different ideas are more difficult to find a place in such environments. The factors lead firms to coopetition, benefits and risks vary according to size of the firms. This topic is discussed in the following sections.

Coopetition is a recent and emerging topic. The literature lacks of comprehensive studies about

mediating effect of coepetition between market orientation, innovation capabilities and firm performance.

The benefits of market orientation for the innovation capabilities, along with the challenges of innovation and the things that can be achieved in overcoming these difficulties are studied in this work. At the same time, it is aimed to investigate the mediating effect of coepetition on market orientation, innovation capabilities and firm performance. Impacts of market orientation, coepetition and innovation capabilities on firm performance is explored. A research model that demonstrates all this relationship has also been introduced.

2. Literature Review and Theoretical Framework

There are numerous studies in the literature that focus on the relation between market orientation, innovation and firm performance. A survey study done with 225 firms in finance sector indicates that, especially in a market environment with technological uncertainties, market orientation has important contributions to technical and organizational innovation (Han, Kim, & Srivastava, 1998). Another related study including surveys done with 250 firms from different industries indicates that market orientation has positive impact on firm performance, both indirectly through innovation and directly (Baker & Sinkula, 1999). On the other hand, the same study emphasizes that market orientation can not guarantee successful innovation results solely; while design, engineering, operations, pricing and manufacturing elements have considerable contributions to innovation. A recent study proposes a scale to investigate market orientation influence on innovation outputs (Vazquez, Santos, & Alvarez, 2010). The study states that market oriented companies are more successful at commercializing their innovations and providing them to market. It is also indicated that market orientation provides more novelty in innovation outputs. In a study that aims to find a correlation between dimensions of innovation capability and firm performance, many other studies in the literature are criticized because of building direct relations and neglecting the mediating effect of variables (Migdadi et al., 2017). Another study focuses on the mediating effect of supply chain on market orientation, innovation capabilities and firm performance relation (Lim, Darley, & Marion, 2017). A recent work on Iranian biotechnology industry in 2017 was pointed out that coepetition has a positive effect on market orientation (Razghandi et al., 2016). In the same study, market orientation was considered with both response and direction to the market aspects. They found that coepetition has positive impact on market orientation with the analyzed dimensions.

There are many studies on the impact of coepetition on innovation. Conceptual and empirical studies are available. Because it is a new concept, there are mostly conceptual and case studies. Therefore, there is need for empirical studies. In general, production innovations (Bouncken, Claub, & Fredrich, 2016; Estrada, Faems, & de Faria, 2016; Pereira & Leitao, 2016), technological innovations (Aubert, Saunders, Wiener, & Wolfermann, 2016; Ansari, Garud, & Kumaraswamy, 2015), performance (Ritala, 2012; Park, Srivastava, & Gnyawali, 2014), value creation (Ritala & Hurmelinna-Laukkanen, 2009), information sharing (Enberg, 2012) and conceptual studies (Dhewanto et al., 2012; Bengtsson & Kock, 2014) are the main focuses of the related studies. In general, the dominant view in the literature is that coepetition have positive impact on innovation and increase innovation capability.

In the literature, the mediating effect of coepetition on market orientation, innovation capability and firm performance has not been discussed in details. In this direction, the relationships between market

orientation, coopetition, innovation capability and firm performance are thought to be worth for investigation.

3. Innovation Capabilities through Coopetition

The factors that lead firms to act together with their competitors in innovation studies, benefits that partners can achieve according to firm size and difficulties to be coped with are discussed in this section.

Small and medium-sized companies are more sensitive to environmental factors due to their size. Cash resources and borrowing capacities are limited. Although these firms can compete with large-scale companies in the same market, they have difficulties in conducting research and development activities due to limited resources and opportunities (Verhees & Meulenbergh, 2004). It is also dependent on specific products and services and addresses a limited customer base (Morris et al., 2007). Growing the capital in these companies is an important goal, with less tax advantages and higher costs than large firms. Especially in new ventures, there are various mistakes and issues due to lack of experience. These factors encourage small and medium-sized firms, especially new entrants to coopetite with similar competitors.

Small and medium-sized companies that prefer joint competition can reduce their costs by taking advantage of economies of scale. In addition, these companies can take part in large projects that they can not manage on their own. They even have the flexibility to direct some of their teams to other projects. In addition to these, they can reduce costs for learning and firms may be subject to less trial and error. On the other hand, the main drawbacks are prolonging decision-making processes due to inclusion of more people in the process. Furthermore, it may be more difficult for radical innovation ideas to be introduced (Bouncken & Kraus, 2013).

Large-scale companies prefer coopetition for innovation due to different reasons. These companies tend to make innovation because of rapid changes in technology, cost of developing new technologies and specific expertise that innovation requires (Gnyawali & Park, 2011).

Large firms can make innovation outputs a market standard and they can dominate the market. They may also find the opportunity to benefit from special and valuable skills of the company that they coopetitive with. Major disadvantages of coopetition among large firms are higher tensions due to size of their investments, intensity of competition and possibility of leakage of important information. Large firms may face more prolonged decision-making processes during coopetition; because they have more bureaucracies. Moreover in large firms, there are many cultural differences, which may lead to conflicts.

There is also possibility of coopetition among small and medium-sized firms and large firms. Main drivers for this strategy are opportunity to access horizontal value chains for small and medium sized firms and opportunity to create highly specialized products for large firms. In addition, small and medium-sized companies can have the opportunity to turn their ideas into products in a shorter time. The challenge of such relationships is difficulty of management due to power imbalance, possibility of a large firm to gain more benefits by taking a more dominant role. SMEs can instead build a more balanced environment by coopetition with high number of large firms.

4. The Proposed Model

4.1. Market Orientation, Coopetition and Innovation Capabilities

There is lack of studies in the literature that investigates relationship with market orientation and coopetition. As understanding of customers' needs and taking actions to meet them are among the core aims of market orientation; firms may tend to form alliances. On the other hand, another core aim of market orientation about getting more market share and customers than other firms, will force the companies to compete with the others. These are the natural reasons that direct companies towards coopetition. In this manner, they will cooperate to reach some common targets at a specific field of activity and gain more benefits than acting solely; while at the same time they will compete to get a bigger portion of achievable further profits at that field and continue to their ongoing rivalry in the other fields. The valuable insight that can be gained about competitors and the market through market orientation can be used by a company to decide on which rival to cooperate with. The information about resources, capabilities of other firms and needs of the market can highlight the path through effective product, service or process innovations that can be achieved through coopetition.

Innovation is a challenging and costly process requiring expertise, while including complexities and uncertainties. Even the firms have sufficient knowledge, capabilities and resources, they may avoid innovation due to risks and uncertainties. Coopetition is a preferable strategy in these situations. Companies that do not afford to make an innovation alone can realize it through coopetition.

The synergy formed with coopetition brings together many advantages such as reducing costs, gaining valuable information and knowledge, sharing resources (Lado, Boyd, & Hanlon, 1997). Interfirm coopetition reduces the cost of developing a new technology, distributes the risks of uncertainty, provides the advantages of economies of scale and allows high value gaining through synergy; contributing to success of innovation and releasing the barriers for companies that are not capable of making innovation alone. Based on these reasons, we state the following hypothesis:

H1: Coopetition has a mediating effect between market orientation and innovation capabilities.

4.2. Market Orientation, Coopetition and Firm Performance

Positive impact of market orientation on firm performance is among the main findings of the related studies in the literature. Firms aiming to understand their customers, competitors and the market, include these valuable information in their decision making processes and act in responsive and/or proactive ways contributing to their performance (Atuahene-Gima, 1995; Jaworski & Kohli, 1996; Slater & Narver 1994, Kohli & Jaworski 1990).

Coopetition can create synergy, reduce uncertainty and costs, create a scale economy (Gnyawali & Park, 2009) and increase firm performance (Levy et al., 2003). It increases the ability to develop new products and technologies, allows firms to cope with sectoral challenges and increases market recognition (Bengtsson & Johansson, 2014). Through coopetition, firms can create more value than they can achieve alone. Coopetition provides organizational learning that can provide competitive advantage over competitors (Bengtsson & Kock, 2000). For these reasons coopetition increases firm performance. In our model we include this impact with the following hypothesis:

H2: Coopetition has a mediating effect between market orientation and firm performance.

4.3. Market Orientation and Firm Performance

Market orientation increases quality of products and services offered to customers. It identifies customer needs correctly and produce products that meet these needs improving customer satisfaction and loyalty (Jaworski and Kohli, 1993,1996). Searching for new products, processes and ideas can increase market share, sales, return on investment and profitability (Im & Workman, 2004). Based on these reasons, we state the following hypothesis:

H3: Market orientation have positive impact on firm performance.

4.4. Market Orientation and Innovation Capabilities

As mentioned in Introduction section, there are several studies in the literature that explains positive impact of market orientation on innovation. However, there are also a number of studies with the opposite findings. This study adopts the first perspective in the model developed. A market oriented company needs to deploy additional strategies to achieve better performance outputs (Hult, Hurley, & Knight, 2004) and innovation is a forthcoming one among them.

Market orientation may lead the companies to innovate for achieving better performance outputs (Han et al., 1998). The main aim of market orientation is to understand customers well to meet today's needs and give direction to future, provides a fruitful environment for innovation and influences its effectiveness. In depth information about market, customers and competitors may improve innovation capabilities. Understanding of market and its dynamics allows development of adoptable novelties and improvements. Furthermore, close observation of rivals can give useful information about their resources and capabilities, providing the opportunity of developing effective strategies for their future moves. It can also help a firm to evaluate its competitors' strengths and weaknesses from the perspective of innovation, increasing the possibility of selecting a better match. Based on these factors we propose the hypothesis below:

H4: Market orientation have positive impact on innovation capabilities.

4.5. Market Orientation, Innovation Capabilities and Firm Performance

Strategy, economic volatility, supplier relationships and innovation are the mediating effects between market orientation and firm performance (Gruber-Muecke and Hofer, 2015). The main advantages of market orientation is to have better market sensing and customer-linking skills, improving innovation capability of firms (Narver and Slater 1990). In a study, it is stated that market orientation and organization learning impact on organizational performance is totally mediated by innovation (Jiménez-Jimenez et al., 2008). Recent studies highlighted close relation and dependence between market orientation and innovation (Migdadi et al., 2016; Altuntas et al, 2013). Based on these facts, we propose the following hypothesis:

H5: Innovation capabilities has a mediating effect between market orientation and firm performance.

The developed model is given in Figure 1.

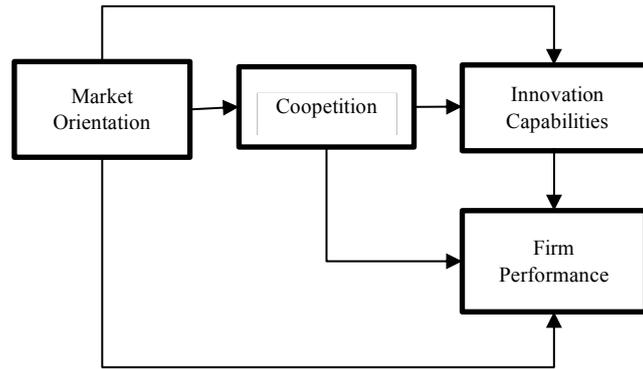


Figure 01. The proposed model

In the proposed model, it is intended to investigate and highlight relation between market orientation, coopetition, innovation capabilities and firm performance.

5. Conclusion and Discussions

This study investigated the impact of coopetition to the relation between market orientation, innovation capabilities and firm performance.

The mediating effect of coopetition between market orientation and innovation capabilities is focused on, while also taking into account coopetition effects on innovation capabilities and innovation capabilities effect on firm performance. The study also included market orientation impact on innovation capabilities and innovation capabilities with a mediating effect between market orientation and firm performance.

Innovation challenges that firms may face are emphasized. It is stated that, coopetition can have positive impact on getting over innovation challenges and achieving successful innovation results. Compared to typical alliances with firms, coopetition with rivals that have similar knowledge, products, market targets and challenges may provide better outcomes.

Coopetiting SMEs have the possibility to enter huge projects that they would not handle alone, access to valuable knowledge resources, supply chains, marketing networks and capabilities.

Coopetition also provides many opportunities for large enterprises such as reducing their costs, benefiting from other big companies' capabilities, developing general standards that will dominate markets and integrating teams with particular experience about a specific product or a field to their innovation processes.

During coopetition knowledge leakage, selfish behaviour of one of the firms, tensions between staff or departments and prolonging decision making need to be considered and the process should managed carefully.

It is stated that customer, competitor and market information gained through market orientation are in favour of coopetition process. Especially investigation of competitors can provide valuable information to a firm to be used during evaluation of which firm or firms can be chosen for coopetition, having which capabilities and resources.

The common disadvantage of market orientation and coopetition in the process of innovation is lower possibility of radical innovation ideas to find a place and grow.

Future work is planned to be on testing of the developed model using a scale through surveys. Firms with different sizes in various sectors can be focused on in future studies.

References

- Agarwal, S., Erramilli, M. K., & Chekitan, S. D. (2003). Market orientation and performance in service firms: role of innovation. *Journal of Services Marketing*, 17(1), 68-82. <https://doi.org/10.1108/08876040310461282>
- Altuntas, G., Semercioz, F., & Eregez, H. (2013). Linking strategic and market orientations to organisational performance: The role of innovation in private healthcare organisations. *Procedia Social and Behavioral Sciences*, 99, 413-419. <https://doi.org/10.1016/j.sbspro.2013.10.509>
- Ansari, S. S., Garud, R., & Kumaraswamy, A. (2015). The disruptor's dilemma: TiVo and the U.S. television ecosystem. *Strategic Management Journal*, 37, 1829-1853. <https://doi.org/10.1002/smj.2442>
- Atuahene-Gima, K. (1995). An exploratory analysis of the impact of market orientation on new product performance a contingency approach. *Journal of Product Innovation Management*, 4, 275-293. <https://doi.org/10.1111/1540-5885.1240275>
- Aubert, B. A., Saunders, C., Wiener, M., Denk, R., & Wolfermann, T. (2016). How adidas realized benefits from a contrary it multisourcing strategy. *MIS Quarterly Executive*, 15(3), 179-194. Retrieved from <aisel.aisnet.org/misqe/vol15/iss3/6>
- Baker, W. E., & Sinkula J. M. (1999). Learning orientation, market orientation, and innovation: integrating and extending models of organizational performance. *Journal of Market Focused Management*, 4, 295-308. <https://doi.org/10.1023/A:1009830402395>
- Baumard, P. (2009). An asymmetric perspective on cooperative strategies. *International Journal of Entrepreneurship and Small Business*, 8(1), 6-22. <https://doi.org/10.1504/IJESB.2009.024102>
- Bhuiyan, S. N. (1997). Exploring market orientation in banks: an empirical examination in Saudi Arabia. *The Journal of Services Marketing*, 11(5), 317-28. <https://doi.org/10.1108/08876049710176006>
- Bengtsson, M., & Johansson, M. (2014). Managing cooperation to create opportunities for small firms. *International Small Business Journal*, 32(4), 401-407. <https://doi.org/10.1177/0266242612461288>
- Bengtsson, M., & Kock, S. (2000). Cooperation in business networks—to cooperate and compete simultaneously. *Industrial Marketing Management*, 29(5), 411-426. [https://doi.org/10.1016/S0019-8501\(99\)00067-X](https://doi.org/10.1016/S0019-8501(99)00067-X)
- Bengtsson, M., & Kock, S. (2014). Cooperation—Quo vadis? Past accomplishments and future challenges. *Industrial Marketing Management*, 43(2), 180-188. <https://doi.org/10.1016/j.indmarman.2014.02.015>
- Bouncken, R. B., & Kraus, S. (2013). Innovation in knowledge-intensive industries: The double-edged sword of cooperation. *Journal of Business Research*, 66(10), 2060-2070. <https://doi.org/10.1016/j.jbusres.2013.02.032>
- Bouncken, R. B., Clauß, T., & Fredrich, V. (2016). Product innovation through cooperation in alliances: singular or plural governance? *Industrial Marketing Management*, 53, 77-90. <https://doi.org/10.1016/j.indmarman.2015.11.011>
- Bouncken, R.B., Gast, J., Kraus, S., & Bogers, M. (2015). Cooperation: a systematic review, synthesis, and future research directions. *Review of Managerial Science*, 9(3), 577-601. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2585934
- Brandenburger, A. M., & Nalebuff, B. J. (1996). Co-opetition. 1996. New York: Currency/Doubleday.
- Chilton, M. A., & Bloodgood J. M. (2010). Adaptation-innovation theory and knowledge use in organisations. *Management Decision*, 48(8), 1159-1180. <https://doi.org/10.1108/00251741011076726>
- Chin, K., Chan, B., & Lam, P. (2008). Identifying and prioritizing critical success factors for cooperation strategy. *Industrial Management & Data Systems*, 108(4), 437-454. <https://doi.org/10.1108/02635570810868326>

- Dhewanto, W., Prasetyo, E. A., Ratnaningtyas, S., Herlianaa, S., Chaerudin, R., Aina, Q., & Bayuningrat, R. H. (2012). Moderating effect of cluster on firm's innovation capability and business performance: a conceptual framework. *Proceedings of the International Congress on Interdisciplinary Business and Social Science Conference*, Jakarta, Indonesia.
- Enberg, C. (2012). Enabling knowledge integration in cooperative R&D projects—the management of conflicting logics. *International Journal of Project Management*, 30, 771-780. <https://doi.org/10.1016/j.ijproman.2012.01.003>
- Estrada, I., Faems, D., & de Faria, P. (2016). Coopetition and product innovation performance: the role of internal knowledge sharing mechanisms and formal knowledge protection mechanisms. *Industrial Marketing Management*, 53, 56–65. <https://doi.org/10.1016/j.indmarman.2015.11.013>
- Farrelly, F., & Quester, P. (2003). The effects of market orientation on trust and commitment: The case of sponsorship business-to-business relationship. *European Journal of Marketing*, 37(3/4), 530-553. <https://doi.org/10.1108/03090560310459078>
- Ganguli, S. (2007). Coopetition models in the context of modern business. *The Icfa Journal of Marketing Management*, 6(4), 6-16. Retrieved from: https://www.researchgate.net/publication/284477732_Coopetition_models_in_the_context_of_modern_business
- Gee, E. P. (2000). Co-opetition: The new market milieu. *Journal of Healthcare Management*, 45(6), 359–363. <https://doi.org/10.1097/00115514-200011000-00004>
- Gnyawali, D. R. and Park, B. (2009). Co-opetition and technological innovation in small and medium-sized enterprises: A multilevel conceptual model. *Journal of Small Business Management*, 47(3), pp.308-330. <https://doi.org/10.1111/j.1540-627X.2009.00273.x>
- Gnyawali, D. R., & Park, B. J. R. (2011). Co-opetition between giants: Collaboration with competitors for technological innovation. *Research Policy*, 40(5), 650-663. <https://doi.org/10.1016/j.respol.2011.01.009>
- Gruber-Muecke, T., & Hofer, K. M. (2015). Market orientation, entrepreneurial orientation and performance in emerging markets. *International Journal of Emerging Markets*, 10(3), 560–571. <https://doi.org/10.1108/IJoEM-05-2013-0076>
- Han, J. K., Kim, N., & Srivastava, R. K. (1998). Market orientation and organizational performance: is innovation a missing link? *Journal of Marketing*, 62(4), 30-45. <https://doi.org/10.1177/002224299806200403>
- Hult, G. T. M., Hurley, R. F., & Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing Management*, 33, 429-438. <https://doi.org/10.1016/j.indmarman.2003.08.015>
- Im, S., & Workman, J. P. (2004). Market orientation, creativity, and new product performance in high-technology firms. *Journal of Marketing*, 68, 114-132. Retrieved from www.jstor.org/stable/30161993
- Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. *Journal of Marketing*, 57(3), 53-70. <https://doi.org/10.1177/002224299305700304>
- Jaworski, B. J., & Kohli, A. K. (1996). Market orientation: Review, refinement, and roadmap. *Journal of Market-Focused Management*, 1, 1115-135. <https://doi.org/10.1007/BF00128686>
- Jimenez-Jimenez, D., Valle, R. S., & Hernandez-Espallardo, M. (2008). Fostering innovation: The role of market orientation and organisational learning. *European Journal of Innovation Management*, 11(3), 389-412. <https://doi.org/10.1108/14601060810889026>
- Kohli, A. K., & Jaworski, B. (1990). Market Orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, 54, 1-18. <https://doi.org/10.1177/002224299005400201>
- Krommendijk, K. (2016). Differences in coopetition due to firm size. *Proceedings of the 8th IBA Bachelor Thesis Conference*, Enschede, The Netherlands.
- Lado, A. A., Boyd, N. G., & Hanlon, S. C. (1997). Competition, cooperation, and the search for economic rents: a syncretic model. *Academy of Management Review*, 22(1), 110-141. <https://doi.org/10.5465/amr.1997.9707180261>

- Lawson, B., & Samson, D. (2001). Developing innovation capability in organisations: A dynamic capabilities approach. *International Journal of Innovation Management*, 5(3), 377-400. <https://doi.org/10.1142/S1363919601000427>
- 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. <https://doi.org/10.1057/palgrave.ejis.3000439>
- Lim, J. S., Darley, W. K., & Marion, D. (2017). Market orientation, innovation commercialization capability and firm performance relationships: the moderating role of supply chain influence. *Journal of Business and Industrial Marketing*, 32(7), 913-924. <https://doi.org/10.1108/JBIM-10-2016-0238>
- Lin, H. F., & Lee, G. G. (2005). Impact of organizational learning and knowledge management factors on e-business adoption. *Management Decision*, 43(2), 171-188. <https://doi.org/10.1108/00251740510581902>
- Luo, Y. (2007). A coopetition perspective of global competition. *Journal of World Business*, 42(2), 129-144. <https://doi.org/10.1016/j.jwb.2006.08.007>
- Migdadi, M. M., Abu Zaid, M. K., Yousif, M., Almestarihi, R., & Al-Hyari K. (2017). An empirical examination of knowledge management processes and market orientation, innovation capability, and organisational performance: insights from Jordan. *Journal of Information & Knowledge Management*, 16(1), 1-32. <https://doi.org/10.1142/S0219649217500022>
- Mohr, J., Sengupta, S., & Slater S. (2010). *Marketing of high technology products and innovation* (Third ed.). Prentice Hall.
- Morris, M. H., Koçak, A., & Özer, A. (2007). Coopetition as a small business strategy: implications for performance. *Journal of small business strategy*, 18(1), 35-55. Retrieved from [/libjournals.mtsu.edu/index.php/jsbs/article/view/77](http://libjournals.mtsu.edu/index.php/jsbs/article/view/77)
- Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *The Journal of Marketing*, 54(4), 20-35. <https://doi.org/10.1177/002224299005400403>
- Razghandi, M., Hashim, N. H., & Ahmadi, H. (2016). Co-opetition strategy and its relationship with responsive and proactive market orientation in Iranian biotechnology industry. *Journal of Soft Computing and Decision Support Systems*, 3(2), 1-10. Retrieved from <http://jcsdss.com/index.php/files/article/view/82>
- Park, B. Y. R., Srivastava, M. K., & Gnyawali, D. R. (2014). Walking the tight rope of coopetition: impact of competition and cooperation intensities and balance on firm innovation performance. *Industrial Marketing Management*, 43, 210-221. <https://doi.org/10.1016/j.indmarman.2013.11.003>
- Pereira, D., & Leitão, J. (2016). Absorptive capacity, coopetition and generation of product innovation: contrasting Italian and Portuguese manufacturing firms. *International Journal Technology Management*, 71(1), 10-37. <https://doi.org/10.1504/IJTM.2016.077979>
- Ritala, P. (2012). Coopetition Strategy – When is it successful? Empirical evidence on innovation and market performance. *British Journal of Management*, 23, 307-324. <https://doi.org/10.1111/j.1467-8551.2011.00741.x>
- 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. <https://doi.org/10.1016/j.technovation.2009.07.002>
- Ritala, P., Kraus, S., & Bouncken, R. B. (2016). Introduction to coopetition and innovation: contemporary topics and future research opportunities. *Int. J. Technology Management*, 71(1), 1-9. <https://doi.org/10.1504/IJTM.2016.077985>
- Sandvik, I. L., & Sandvik, K. (2003). The impact of market orientation on product innovativeness and business performance. *International Journal of Research in Marketing*, 20(4), 355-76. <https://doi.org/10.1016/j.ijresmar.2003.02.002>
- Sargeant, A., & Lee, S. (2004). Trust and relationship commitment in the United Kingdom voluntary sector: Determinants of donor behaviour. *Psychology & Marketing*, 21(8), 613-635. <https://doi.org/doi.org/10.1002/mar.20021>

- Slater, S. F., & Narver, J. C. (1994). Does competitive environment moderate the market orientation-performance relationship? *Journal of Marketing*, 58(1), 46-55. <https://doi.org/10.1177/002224299405800104>
- Slater, S. F., & Narver, J. C. (1998). Customer-led and market-oriented: Let's not confuse the two. *Strategic Management Journal*, 19(10), 1001-1006. [https://doi.org/10.1002/\(SICI\)1097-0266\(199810\)19:10<1001::AID-SMJ996>3.0.CO;2-4](https://doi.org/10.1002/(SICI)1097-0266(199810)19:10<1001::AID-SMJ996>3.0.CO;2-4)
- Vazquez, R., Santos, M. L., & Alvarez, L. I. (2010). Market orientation, innovation and competitive strategies in industrial firms. *Journal of Strategic Marketing*, 9, 69-90. <https://doi.org/10.1080/09652540123013>
- Verhees, F. J., & Meulenber, M. T. (2004). Market orientation, innovativeness, product innovation, and performance in small firms. *Journal of small business management*, 42(2), 134-154. <https://doi.org/10.1111/j.1540-627X.2004.00102.x>
- Zehir, C., Kole, M., & Yıldız, H. (2015). The mediating role of innovation capability on market orientation and export performance: An implementation on SMEs in Turkey. *Procedia Social and Behavioral Sciences*, 207, 700-708. <https://doi.org/doi.org/10.1016/j.sbspro.2015.10.141>
- Zhou, H., & Uhlener, L. M. (2009). Knowledge management as a strategic tool to foster innovativeness of SMEs. ERIM, Report Series Reference ERS-2009-025-ORG. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1410468
- Zhou, K. Z., Li, J. J., Zhou, N., & Su, C. (2008). Market orientation, job satisfaction, product quality, and firm performance: Evidence from China. *Strategic Management Journal*, 29(5), 985-1000. <https://doi.org/10.1002/smj.700>