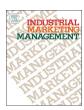
ELSEVIER

Contents lists available at ScienceDirect

Industrial Marketing Management

journal homepage: www.elsevier.com/locate/indmarman



Coopetition and COVID-19: Collaborative business-to-business marketing strategies in a pandemic crisis



James M. Crick, Dave Crick*

University of Ottawa, Telfer School of Management, Ontario K1N 6N5, Canada

ARTICLE INFO

Keywords:
Coopetition
Coronavirus
COVID-19
Business-to-business marketing

ABSTRACT

Although coopetition (simultaneous cooperation and competition) should positively affect company performance, it is unclear how implementation of these business-to-business marketing strategies can take place during large-scale emergencies. Therefore, guided by resource-based theory and the relational view, this investigation examines how organisations have used coopetition to cope with the novel Coronavirus (COVID-19) pandemic. Key examples include retailers sharing information about stock levels, pharmaceutical organisations working together to develop a vaccine, technological giants collaborating for the greater good, and charities forming alliances for a joint cause. This paper strengthens the extant literature by highlighting the heterogeneity of coopetition strategies that firms can use within a global crisis. Practitioners must balance the risks and rewards of coopetition activities. In turn, they should decide whether to continue to cooperate with their competitors once the pandemic has ended, or resume operating under individualistic business models. This article ends with some future research directions.

1. Introduction

"The basic aim of collaboration is to pursue goals collaboratively that otherwise would be difficult to pursue" (Di Benedetto, Lindgreen, Storgaard, & Clarke, 2019, p. 1).

While the health-related shocks associated with the novel Coronavirus (COVID-19) are well known, the disease has caused commerce to change in unprecedented ways (Cortez & Johnston, 2020). Most employees are working from home (instructed by policy-makers to self-isolate), demand for home deliveries has risen substantially, restaurants and many other establishments have closed their doors to the public, and business failure rates have increased exponentially (Washington Post, 2020). That said however, certain sectors are performing better in comparison to others, such as food and beverage retailers that have served as substitutes for the now-closed bars and restaurants (MSN, 2020). Various recommendations exist for preparing a business for a post-pandemic world, including open innovation and horizon planning (Chesbrough, 2020; Lund Pedersen & Ritter, 2020). For example, Ritter and Lund Pedersen (2020) noted the importance of decision-makers reviewing their business models, focusing on custo-

mers, value propositions, value demonstrations, and capabilities, together with the connections between these issues. They add that decision-makers need to define realistic objectives for their organisations, during and after the crisis. In fact, a number of firms (e.g., Coca-Cola, Chevron, and Ford) have changed their business models, through producing aspects of personal protective equipment (as opposed to their normal products) to contribute to the global effort to fight COVID-19 (Fortune, 2020).

Another noticeable way that firms have changed their business models is through the amount of cooperation between competing organisations (coopetition) that has occurred because the COVID-19 outbreak has had such a profound effect on the world economy (Independent, 2020; The Guardian, 2020). Indeed, even policy-makers have engaged in coopetition activities (e.g., through contact tracing between rival government agencies in New York, Connecticut, and New Jersey), given the impact of the pandemic and the need to balance economic and health-related goals (National Post, 2020). Coopetition is defined as "a paradoxical relationship between two or more actors, regardless of whether they are involved in horizontal or vertical relationships, simultaneously involved in cooperative and competitive

E-mail address: dcrick@uottawa.ca (D. Crick).

^{*} Corresponding author.

interactions" (Bengtsson & Kock, 2014, p. 180). Coopetition strategies pertain to companies sharing resources (e.g., equipment and funds) and capabilities (e.g., knowledge and experience) for mutually-beneficial outcomes1 (Bengtsson & Kock, 2000; Gnyawali, Madhavan, He, & Bengtsson, 2016; Park, Srivastava, & Gnyawali, 2014; Pattinson, Nicholson, & Lindgreen, 2018). In fact, although discussing network relationships more broadly than coopetition, Ritter, Wilkinson, & Johnston (2002) note that an ability to effectively deal with the interactions among network relationships is a core competence of a firm, proceeding to add this has a direct bearing on a firm's competitive strength and performance. Consequently, while there are some drawbacks associated with these inter-firm activities not being managed effectively, ranging from tensions, through to opportunistic behaviours (Crick, Crick, & Chaudhry, 2020; Czakon & Czernek, 2016; Luo, Rindfleisch, & Tse, 2007; Raza-Ullah, Bengtsson, & Kock, 2014), a large volume of research surrounds the performance-enhancing benefits of coopetition (Felzensztein, Stringer, Benson-Rea, & Freeman, 2014; Ritala, 2012; Velu, 2016).

To date, a research focus involving the implementation of coopetition activities during times of crisis remains under-researched. Therefore, it is unclear how practitioners within organisations (small and large) can manage the interplay between cooperation and competition to cope with the potentially devasting effects of widespread emergencies (e.g., COVID-19). This is a concern because it is difficult to make recommendations to scholars and practitioners about whether coopetition is (or is not) a performance-driving business-to-business marketing strategy in these volatile circumstances. Specifically, a need exists for research to offer illustrations of the implementation of different forms of coopetition taking place throughout a pandemic crisis, as well as the advantages and disadvantages for the companies involved (together with their customers and other key stakeholders). Collectively, these insights highlight the risks and rewards of cooperating with industry rivals in these extraordinary settings. Hence, guided by resource-based theory and the relational view (Barney, 1991; Dyer, Singh, & Hesterly, 2018; Lavie, 2006), the objective of this paper is to examine how decision-makers can adapt their business models through implementing coopetition strategies during times of crisis (concentrating on COVID-19). By achieving this research objective, three important contributions follow to strengthen the business-tobusiness marketing literature:

- Insights feature coopetition being a multi-faceted set of firm-level behaviours used to help companies (that otherwise may not collaborate) to operate within a volatile crisis (building upon Pangarkar, 2007; Medrano & Olarte-Pascual, 2016).
- (2) The barriers to engaging in coopetition activities are illustrated to demonstrate how certain political, bureaucratic, and legal forces can hinder organisations from working with industry rivals during a health-related emergency (responding to Neuwirth & Svetlicinii, 2015; Schiavone & Simoni, 2019).

(3) The delicate nature of the coopetition paradox is evaluated to develop a stronger understanding of how firms can collaborate with their competitors throughout (and potentially after) a pandemic crisis (following Luo et al., 2007; Raza-Ullah et al., 2014; Crick, 2019).

To make these three contributions, this article is structured as follows. First, the framing literature regarding coopetition is reviewed. Second, some practitioner-focused news stories are discussed in relation to core issues within the business-to-business marketing literature. These pertain to how certain organisations have pivoted their business models to use coopetition strategies in response to the COVID-19 outbreak. Third, some actionable managerial implications and recommendations are outlined. Fourth, several directions for future research are described. Fifth, the paper is concluded.

2. Review of the pertinent literature

2.1. Resource-based theory and the relational view

The resource-based view examines the link between organisations' resources and capabilities and their performance (Barney, 1991). A fundamental assumption of this lens is that larger companies, with a greater volume of resources and capabilities, can typically out-perform smaller-sized firms, with fewer assets at their disposal (Barney, 1991; Nason & Wiklund, 2018). To create a competitive advantage, firms' utilisation of resources and capabilities can manifest in assets that are well organized; also, of value, rare, inimitable, and non-substitutable (Kozlenkova, Samaha, & Palmatier, 2014). Nevertheless, owner-managers' possession of resources and capabilities does not necessarily lead to a competitive advantage; instead, strategic flexibility in decisionmaking is often important (Priem & Butler, 2001). Consistent with the resources and capabilities - performance-enhancing relationship of resource-based theory, earlier research evidences the benefits of employing coopetition as a business-to-business marketing strategy (Gnyawali & Charleton, 2018; Hannah & Eisenhardt, 2018). As an illustration, Rindfleisch & Moorman (2003) highlighted that if organisations collaborate with their competitors (what they referred to as inter-firm cooperation), they can obtain new resources and capabilities (combined with their own assets) to yield higher-levels of performance compared to if they operated under an individualistic business model.

However, although the resource-based view helps explain how these resource and capability-sharing activities positively impact company performance, it inadequately considers the nature of relationships within the coopetition strategies, namely, in terms of which rivals that firms cooperate with and how this takes place (as noted by Crick, 2019). The relational view focuses on how high-quality inter-organisational relationships (potentially including with competitors) can positively affect company performance (Dyer & Singh, 1998). In fact, recent work by Barney (2018) extended the resource-based view to encapsulate a stakeholder dimension, recognising circumstances in which decision-makers should work closely with key partners (e.g., competitors in this current study) to be more successful in their markets. It follows that resource-based theory and the relational view can be integrated to examine the cooperative and competitive aspects of the coopetition construct, including how decision-makers need to work with rivals that are trustworthy for mutually-beneficial outcomes (building on Lavie, 2006; Barney, 2018; Dyer et al., 2018). Henceforth, guiding this current investigation was an infusion of resource-based theory and the relational view to evaluate the implementation of coopetition strategies in response to the COVID-19 pandemic.

2.2. The origins of the coopetition construct

Coopetition gained some attention among business-to-business marketing scholars in the 1990s, with the emergence of two schools-of-

¹ Earlier studies use terms, like inter-firm cooperation and alliances instead of "coopetition" (Cui et al., 2018; Rindfleisch & Moorman, 2003). While coopetition is a business-to-business marketing strategy, earlier investigations highlight that these inter-organisational relationships can have wider outcomes; for example, firms might cooperate with their competitors to create value for their final customers in superior ways, compared to if they utilised their own resources and capabilities (Felzensztein et al., 2018; Rindfleisch & Moorman, 2003). Accordingly, in this current investigation, coopetition is conceptualised as a set of cooperative relationships among rivals that can benefit the competing firms, their customers, and other key stakeholders (building on, for example, Ritter, Wilkinson, & Johnston, 2004; Lacoste, 2012; Gnyawali & Charleton, 2018). Nonetheless, the core business-to-business marketing relationships associated with the coopetition construct remain the focus of this study. The authors thank the Guest Editors for requesting more information on the dynamics of coopetition activities.

thought. On the one hand, Brandenburger & Nalebuff (1996) viewed coopetition as being an organisation-wide mind-set pertaining to managers and functional-level employees believing in the importance of cooperating with industry rivals. On the other hand, Bengtsson and Kock (1999) argued that coopetition is a set of firm-level behaviours, whereby, organisations share resources and capabilities with their competitors to improve their performance within their markets. In fact, this latter perspective has led to a continuing interest that involves decision-makers' resource and capability-sharing activities and the relationship with aspects of company performance (see Bouncken & Kraus, 2013; Crick & Crick, 2019; Hoffmann, Lavie, Reuer, & Shiplov, 2018: Luo et al., 2007). Furthermore, Bengtsson & Kock (1999) did not formally define the coopetition construct; rather, they focused on cooperation with competitors. One year later, Bengtsson & Kock (2000) described coopetition activities as being the interplay between cooperation and competition, in which two rival firms collaborate. Subsequently, they extended their conceptualisations to acknowledge that coopetition can be implemented in horizontal and vertical channels, as well as between multiple rivals (see Bengtsson & Kock, 2014). This current paper used these developments to explore the heterogeneity of the coopetition construct (horizontal and vertical activities) that apply to a potentially large number of industry rivals (not just two competitors). More specifically, how various forms of coopetition relate to respective practitioners' responses to the COVID-19 pandemic.

2.3. The coopetition paradox

Although coopetition has evolved as a business-to-business marketing construct over the last twenty-five years (Brandenburger & Nalebuff, 1996; Felzensztein et al., 2014; Hannah & Eisenhardt, 2018; Lascaux, 2020; Luo, 2007; Luo, Slotegraaf, & Pan, 2006), existing studies largely views this as a paradoxical strategy. Indeed, in their seminal work, Bengtsson & Kock (2000) noted that there can be situations where the degree of cooperation is outweighed by the magnitude of competition within a market (and vice-versa), or these paradoxical forces are equally matched. In other words, in all coopetition partnerships, any collaborative behaviours will interact with some form of rivalrous actions (see Czakon & Czernek, 2016; Gnyawali & Charleton, 2018; Park et al., 2014). In fact, some researchers have viewed the coopetition construct as a Yin and Yang concept, whereby, if the opposing cooperative and competitive forces are balanced, they are advantageous; for example, if decision-makers work with complementary partners and manage potential tensions (Gnyawali et al., 2016; Mattsson & Tidstrom, 2015; Raza-Ullah et al., 2014). Alternatively, if these paradoxical forces are unhinged by excessive forms of rivalry, there can be harmful performance outcomes (see Crick & Crick, 2020).

2.4. Antecedents of coopetition

An emerging body of literature surrounds the antecedents (or drivers) of coopetition strategies. For instance, Gnyawali & Park (2011) used case study data from Sony and Samsung Electronics to explain how larger-sized corporations (as opposed to under-resourced entities) are equipped with the mechanisms to engage in coopetition. They proposed that a critical driver of coopetition strategies is a coopetition-oriented mind-set. In other words, Gnyawali & Park (2011) argued that if managers and functional-level employees believe in the importance of cooperating with their competitors, these values and assumptions should manifest into behavioural forms of coopetition, such as sharing resources and capabilities with rival entities (reinforced by Gnyawali & Charleton, 2018; McGrath, O'Toole, & Canning, 2019). Another antecedent of coopetition is associated with the magnitude of competition within a market. That is, for coopetition

to exist, organisations require rival firms to collaborate with (Bengtsson & Kock, 2000; Bouncken & Kraus, 2013; Hoffmann et al., 2018). Thus, certain researchers have explored how competitive forces (like competitive intensity) provide the market-level conditions for coopetition strategies to be implemented (e.g., Ang, 2008; Bengtsson, Raza-Ullah, & Vanyushyn, 2016; Park et al., 2014). Yet, for coopetition to be effective, owner-managers need to engage in relationships with trustworthy rivals for mutually-beneficial outcomes, including potentially targeting complementary product-markets (Czakon & Czernek, 2016; Felzensztein, Gimmon, & Deans, 2018; Lascaux, 2020).

Under resource-based theory and the relational view, the competitive business environment can affect the performance outcomes of organisational resources and capabilities, as well as determining which particular strategies that decision-makers implement (Crick & Crick, 2020; Priem & Butler, 2001). Indeed, from an outside-in perspective, recognition exists of the need for decision-makers to be market-led (Day, 2014; Mu, Bao, Sekhon, Qi, & Love, 2018). To illustrate, Day (2014, p. 28) offers suggestions of typical questions resulting from an outside-in perspective. "How and why are customers changing? What new needs do they have? What can we do to solve their problems and help them make more money? What new competitors are lurking around the corner, and how can we derail their efforts?" In the context of this current study, the latter question is pertinent, since coopetition activities can assist decision-makers to sense and seize opportunities by collaborating with competitors rather than derailing them as part of their business models (following Ritala, Golnam, & Wegmann, 2014; Velu, 2016). Nevertheless, in later sections of this paper, some of the barriers to engaging in coopetition activities are illustrated, since political, bureaucratic, and legal forces that can hinder companies from working with their industry rivals throughout global emergencies (Neuwirth & Svetlicinii, 2015; Schiavone & Simoni, 2019). If lifted (or relaxed), these environmental barriers can serve as antecedents of coopetition during a pandemic crisis, like COVID-19, providing that decisions-makers exhibit strategic flexibility in reacting to changing circumstances (as per Priem & Butler, 2001).

2.5. Coopetition and company performance

Business-to-business marketing researchers have helped to explain the nature of the relationship between coopetition activities and company performance (Crick, 2019; Ritala, 2012). To illustrate, certain studies have noted that while coopetition might lead to higher-levels of performance (e.g., sales in a linear manner), a non-linear (inverted Ushaped) association might exist (Crick & Crick, 2020; Luo et al., 2007). That is, with "too little" coopetition, organisations might struggle to achieve their objectives due to possessing an insufficient volume of resources and capabilities (Dahl, 2014; Rusko, 2011; Velu, 2016). Yet, with "too much" coopetition, there might be a range of dark-sides, including tensions (e.g., conflict, power imbalances, and opportunistic behaviours), lost intellectual property, and diluted competitive advantages (Tidstrom, 2014; Lacaux, 2020). Consequently, decision-makers are faced with the challenge of engaging in an "optimal-level" of coopetition to avoid these harmful effects on their performance (Bengtsson et al., 2016; Raza-Ullah et al., 2014). It is recognised that this "inflection point" could be difficult to anticipate, in which decisionmakers cannot plan for the exact stage where cooperation ends and rivalry resumes (Bouncken, Fredrich, Ritala, & Kraus, 2018). However, managers and functional-level employees should consider that coopetition might not always lead to improved performance if they engage in minimal or excessive degrees of these activities (Ang, 2008; Cui, Yang, & Vertinsky, 2018; Luo et al., 2007).

Additionally, there have been several calls for research to address the moderating factors that might affect the association between coopetition and company performance (see Czakon, Srivastava, Le Roy, & Gnyawali, 2020; Hoffmann et al., 2018; Shu, Jin, & Zhou, 2017). In fact, certain studies have shown that there are prominent market-level forces (e.g., competitive intensity) that can moderate this relationship (e.g., Crick & Crick, 2020; Luo et al., 2007; Park et al., 2014). To emphasise an earlier point, coopetition strategies are comprised of the paradoxical forces of cooperativeness and competitiveness, meaning that regardless of the extent to which managers and functional-level employees share resources and capabilities with their partners, they are industry rivals (as noted by Mattsson & Tidstrom, 2015; Bengtsson & Raza-Ullah, 2016). Through these moderating effects, it appears that aspects of the competitive business environment (like competitive intensity) can distort the delicate nature of the coopetition paradox and negatively impact company performance (Ang. 2008). Consequently, decision-makers must collaborate with appropriate competitors (such as those that are trustworthy and/or are targeting complementary product-markets) to mitigate the dark-sides of coopetition activities (Felzensztein & Deans, 2013; Czakon & Czernek, 2016; Lacaux, 2020). In turn, these moderators have identified situations where coopetition is (and is not) a performance-enhancing business-to-business marketing strategy. This current investigation extends these conceptualisations to highlight the advantages and disadvantages of engaging in coopetition within a worldwide pandemic crisis.

2.6. Measurement of the coopetition construct

There have been various operationalisations of the coopetition construct throughout the broader business-to-business marketing literature (including studies underpinned by resource-based theory and the relational view), such as single-indicators, survey-based instruments, dummy variables, archival proximities, and multi-dimensional scales (Ang, 2008; Crick & Crick, 2019; Cui et al., 2018; Luo et al., 2007: Ritala, 2012). While limitations exist in all construct measures (Lee & Cadogan, 2013), coopetition is best-captured in a way that reflects how cooperative and competitive dimensions underpin these business-to-business marketing strategies (see Bengtsson & Raza-Ullah, 2016; Gnyawali & Charleton, 2018). This explains why certain operationalisations of the coopetition construct in existing studies have involved a multiplication of cooperation and competition (as per Bengtsson et al., 2016; Shu et al., 2017). In other words, to accurately measure coopetition activities, academics must establish a tool that captures the propensity of these cooperative and competitive behaviours, or the extent to which firms collaborate with their competitors (Bouncken et al., 2018; Bouncken & Kraus, 2013).

This is not a simple task to achieve, as there are differing views on how to capture the variance of coopetition activities. Therefore, this current study draws on practitioner-based insights to illustrate varying 'collaborative' changes in firms' business models in response to the COVID-19 pandemic. Furthermore, when conducting quantitative research involving the operationalisation of the coopetition construct, scholars must find a suitable setting for their investigations. An ideal empirical context for coopetition-based research is a sector that hosts high-degrees of cooperativeness and competitiveness (as noted by Dahl, 2014; Velu, 2016). For example, earlier work has utilised data from agricultural businesses (Felzensztein et al., 2018; Rusko, 2011), sporting organisations (Crick & Crick, 2019), high-tech firms (Ang, 2008; Gnyawali & Park, 2011), alcohol producers (Felzensztein & Deans, 2013; McGrath et al., 2019), and automotive manufacturers (Akpinar & Vincze, 2016; Andersson & Nyberg, 1998). Hence, when evaluating coopetition during times of crisis (as per this current investigation), not only does there need to be these cooperative and competitive forces at play, but also, there should be a crisis that has evidently negatively impacted a sector (following Pangarkar, 2007; Medrano & Olarte-Pascual, 2016). The link between coopetition and COVID-19 is discussed in the next section.

3. Coopetition and COVID-19

3.1. Marketing in times of crisis

There have been numerous studies examining broader marketing activities in times of crisis. These have included firms dealing with a shortage of goods and services (Kotler, 1974), businesses managing marketing strategies during a recession (Naidoo, 2010), advertising throughout a product-harm crisis (Gao, Xie, Wang, & Wilbur, 2015), and multinational corporations struggling to resolve problems associated with the global financial crisis (Williams & Martinez, 2012). In the marketing domain, a crisis can take many forms, but ultimately, it surrounds a large-scale situation where an event has involved a drastic and negative impact on an organisation, its customers, competitors, employees, and other relevant stakeholders (see Clark, 1988; Grewal & Tansuhaj, 2001). However, a limited body of knowledge surrounds marketing in a pandemic crisis offering an opportunity to contribute to the business-to-business marketing literature. Existing research has focused on public policy decisions or business-to-consumer marketing activities – as opposed to business-to-business marketing relationships (e.g., Kennedy, Harris, & Lord, 2004). Furthermore, there have been many investigations associated with health marketing in dealing with crises, but these investigations are typically focused on hospitals and care providers managing resources and capabilities to treat patients (as noted by Schiavone & Simoni, 2019).

3.2. Coopetition activities and large-scale emergencies

There is scarce research surrounding how coopetition might help to overcome the effects of a worldwide emergency (see Medrano & Olarte-Pascual, 2016). For example, Pangarkar (2007) found that engaging in alliances assisted organisations to improve their survival prospects during the global financial crisis, Pangarkar (2007) highlighted that alliances helped these organisations to lower their operating costs, boost productivity, and create value for their customers (supplementing Rindfleisch & Moorman, 2003; Ritala, 2012; Hannah & Eisenhardt, 2018). Therefore, this current paper investigates how coopetition has been implemented by certain organisations in response to the COVID-19 outbreak. These issues complement the recent work that has examined other business-to-business marketing strategies related to this global pandemic (e.g., Cortez & Johnston, 2020). The subsequent news stories are related to pertinent issues within the business-to-business marketing literature to demonstrate the heterogeneity of the coopetition construct and its benefits for the companies involved, together with their customers, and other key stakeholders. These extend, through a coopetition perspective, the topical points made by other scholars regarding how firms might adapt their business models in response to COVID-19 (Chesborough, 2020; Lund Pedersen & Ritter, 2020).

3.3. British supermarkets sharing resources and capabilities

In March 2020, like various other countries, the British government instructed its citizens to remain at home (where possible) to minimise the spread of COVID-19 (United Kingdom Government, 2020). Yet, public health officials allowed members of the public to leave their homes to purchase essential items, like food and medical supplies, as well as getting exercise within a close geographic proximity. Therefore, supermarkets have been in high-demand, with consumers engaged in panic-buying goods, such as canned food, toilet paper, dairy products, meat, and vegetables (Daily Mail, 2020). Amidst this "new reality", competition laws in the United Kingdom have been relaxed to allow retailers to share data about stock levels, coordinate closure times (to allow cleaning and inventory replenishment), access supply chain networks, and loan employees between rival stores (Independent, 2020). There can be certain legal, political, and bureaucratic regulations that prevent organisations from engaging in coopetition activities during a

pandemic (as noted by Neuwirth & Svetlicinii, 2015). In this instance, by allowing competing retailers to share these resources and capabilities, they have been able to operate more efficiently, like having higher-levels of stock to meet an unprecedented demand. Interestingly, Neuwirth & Svetlicinii (2015) focused on health care providers, as opposed to privately-owned businesses (e.g., retailers) affected by a large-scale emergency.

The example of British retailers engaging in coopetition relates to vertical and horizontal channels (Lacoste, 2012; Velu, 2016). Furthermore, these supermarkets are still being regulated to ensure that collusion does not occur, but to a lesser extent than before the COVID-19 outbreak (Independent, 2020). Accordingly, there are two issues that connect these behavioural forms of coopetition with the business-tobusiness marketing literature. One factor is that coopetition helps firms to improve their performance, but only up to a fixed point, since there are environmental-level forces (e.g., the prior-mentioned political, bureaucratic, and legal regulations) that can limit their performance (following Luo et al., 2007; Raza-Ullah et al., 2014). Another area to consider is that under resource-based theory and the relational view, there are environmental conditions that can affect the strategies that organisations implement (Crick & Crick, 2020; Priem & Butler, 2001). From a market-led perspective, these forces can drive decision-makers to seek support from external stakeholders (e.g., rivals) to survive and grow within their markets (Day, 2014; Mu et al., 2018). Thus, coopetition in the British retailing sector provides an illustration of how changing market conditions can cause companies to adapt their business models to engage in coopetition strategies. In doing so, it offers improved insights into the aspects of the competitive business environment that can affect the coopetition paradox in times of crisis. This expands earlier work that has focused on factors, like competitive intensity, and their effect on these activities (Ang, 2008; Cui et al., 2018; Park et al., 2014).

3.4. Pharmaceutical companies working together for health-related outcomes

According to the New York Times (2020), pharmaceutical companies from the United States, China, and Germany have been working together by sharing knowledge and equipment to develop a vaccine for COVID-19, as well as manufacturers producing medical supplies (e.g., ventilators, masks, and other breathing devices). These rivals have been sharing scientific data, such as from experiments and clinical trials to expedite the process of finding treatment options for the disease. As already noted, there are often bureaucratic, political, and legal factors that serve as barriers for the implementation of coopetition strategies during pandemics (Neuwirth & Svetlicinii, 2015; Schiavone & Simoni, 2019). In this situation, the facilitation of inter-country-level coopetition has taken place through not only relaxed laws on cooperation versus competition, but also, a common incentive to develop a cure, or at least treatment options as quickly as possible. To stress an important consideration mentioned earlier, during all coopetition partnerships, there needs to be a mutually-beneficial outcome, which is typically higher-levels of performance (Bouncken & Kraus, 2013; Czakon et al., 2020). Here, that shared outcome is the greater good for human health (and the associated economic benefits), offering a new, but large-scale reason for engaging in coopetition as a business-to-business marketing strategy (building upon Rusko, 2011; Ritala, 2012; Crick, 2019).

These organisations have demonstrated that despite there being institutional differences at play (Williams & Martinez, 2012), there are short-term cooperative factors that outweigh certain rivalrous behaviours. This news story relates to Bengtsson & Kock's (2000) seminal paper on coopetition having varied degrees of cooperation, vis-à-vis, competition. That is, there are situations where firms are more collaborative than competitive (see Bengtsson et al., 2016; Hoffmann et al., 2018). This news story from the New York Times (2020) shows how companies that normally exhibit high-degrees of rivalry have used this

global pandemic to collaborate for the greater good. Furthermore, there has been scarce research pertaining to coopetition in an international arena (e.g., Felzensztein et al., 2014; Shu et al., 2017). This intercountry-level coopetition arrangement illustrates how companies can pool resources and capabilities across national borders for mutually-beneficial outcomes. In fact, it supports Luo's (2007) argument that globalisation allows competitors to collaborate to achieve shared performance outcomes, even if they are located across large distances.

3.5. Technological collaboration for the greater good

A group of rival technological businesses has joined forces to combat the cybersecurity threats associated with the pandemic (namely, the COVID-19 CTI League), including senior professionals from Microsoft and Amazon (Security, 2020). The reason being is that during the heightened uncertainty, together with the larger number of people working from home and using the internet for online shopping, there is an increased chance of cyberattacks, such as phishing attempts. The COVID-19 CTI League contains approximately 400 members from competing firms focused on reducing these electronic threats. In the case of the COVID-19 CTI League, these high-tech firms already possessed the beliefs and assumptions that cooperating with rival firms is likely to help them to perform better than if they competed under an individualistic business model (as evidenced by Security, 2020). This supports earlier studies that have found that a coopetition-oriented mind-set is a key driver of behavioural forms of coopetition (e.g., Gnyawali & Charleton, 2018; Gnyawali & Park, 2011; McGrath et al., 2019). As such, they were ready to engage in these collaborative business-to-business marketing strategies in this time of crisis. It appears that the members of the COVID-19 CTI League were equipped with the resources and capabilities required to foster their coopetitionoriented mind-sets into coopetition strategies to play an important role in helping consumers and organisations during the pandemic. Hence, it is important that organisations can develop their coopetition strategies by investing value-adding tangible and intangible assets to obtain mutually-beneficial outcomes from their business-to business relationships (reinforcing Ritala et al., 2014; Czakon & Czernek, 2016).

Technological collaboration has taken place in other capacities related to COVID-19. As an example, Apple and Google have been working together to enhance tracking technology to calculate the number of infected people, individuals that have been in close contact with those contracting the disease, and the number of cases and deaths in certain regions (The Guardian, 2020). Currently, the data-sharing aspects of the Apple i-phone system are not compatible with androids something that this coopetition partnership is designed to overcome. By engaging in this form of coopetition, several benefits are evident. First, this business-to-business marketing strategy means companies are creating value for society by monitoring who has the disease and potentially saving lives (building upon Milne, Iyer, & Gooding-Williams, 1996). Second, there is a corporate social responsibility initiative by appearing to be organisations employing their resources and capabilities to help end this pandemic (in line with Neuwirth & Svetlicinii, 2015). Third, talented employees can increase their productivity by possessing new assets and information, resulting in these companies working with improved data that allows them to produce superior goods and services in the future (extending Lacoste, 2012). Collectively, through the COVID-19 outbreak, these large-scale technologically-oriented coopetition strategies emphasise that there can be numerous advantages of these business-to-business marketing relationships (Gnyawali & Charleton, 2018; Gnyawali & Park, 2011). These processes do not simply pertain to higher-levels of performance (as per Ang, 2008; Ritala, 2012; Crick, 2019), but also, include other success factors like social outcomes that signify that coopetition is a beneficial strategy in times of crisis (Medrano & Olarte-Pascual, 2016; Pangarkar, 2007).

3.6. Non-profit organisations forming alliances for a joint cause

Turning to the non-profit sector, a small cluster of competing charities in the United Kingdom have been working together in a businessto-business marketing capacity through joint fundraising efforts, borrowing equipment (e.g., call centres and vehicles), and sharing members of staff and volunteers to respond to COVID-19 (Wyllie, 2020). Charities operate towards improving awareness of (or eliminating) a certain issue (e.g., homelessness, cancer research, heart disease, and animal welfare), meaning that it can be appropriate for them to collaborate with competing firms to achieve their "social" objectives (O'Shaughnessy, 1996). Concerning a rationale for charities engaging in coopetition in response to this pandemic, there have been increasedlevels of homelessness and hunger due to individuals losing their employment and companies declaring bankruptcy (CNN, 2020). This has meant that charities are facing higher-degrees of pressure, in terms of needing to help vulnerable populations. The societal-level contribution of this business-to-business marketing strategy towards the COVID-19 pandemic relates to the mutually-beneficial non-profit outcome of coopetition activities that charities aim to fulfil, as opposed to sales and profitability, which is of greater interest to private companies (see Milne et al., 1996). In other words, the employment of this form of coopetition has taken place to tackle the devastating consequences of the pandemic, whereby, these non-profit organisations have put aside their competitive differences (regarding the need for donations) to work together for this joint cause (Wyllie, 2020). Over and above the "social" value of these business-to-business marketing relationships, this form of coopetition symbolises that these activities assist under-resourced organisations to yield higher-levels of performance, alongside other mutually-beneficial outcomes (following Bengtsson & Kock, 2000; Rusko, 2011; Hannah & Eisenhardt, 2018). Furthermore, these charities have shown how changing market-level forces can alter the cooperative and competitive dynamics within a sector, driving these non-profit organisations to collaborate with their rivals (building upon Priem & Butler, 2001; Crick, 2019). Some managerial implications and recommendations follow.

4. Managerial implications and recommendations

This paper offers the following implications for practitioners. First, if decision-makers are operating in times of crisis, they should utilise certain market-level conditions that allow them to collaborate with their competitors. For instance:

- If competition laws are relaxed, firms should capitalise on the increased freedom to share resources and capabilities with their trustworthy and complementary industry rivals for mutually-beneficial outcomes.
- In a worldwide emergency, organisations are recommended to explore the potential mutual benefits of using coopetition strategies to yield higher-levels of performance, meeting unprecedented demand, operating efficient supply chains, or indeed, simply surviving within a volatile market.

Second, following on, owner-managers should be aware of the extent to which they are permitted (by law) to engage in coopetition partnerships. That is:

- Businesses should cooperate with their competitors to enhance their
 performance, but not in ways that government rules do not allow,
 such as forming monopolies, charging extortionate prices, or driving
 prices down to affect the performance of certain smaller-sized rivals
 that are not part of their coopetition partnerships.
- While coopetition might be allowed to cope with a crisis (e.g., COVID-19), many countries still have regulations that penalise firms that engage in collusive competitive practices. Accordingly,

companies must not engage in these illegal forms of coopetition.

Third, coopetition is comprised of cooperative and competitive dimensions, meaning that although it involves organisations working with their rivals, there will always be some form of competitiveness at play (no matter how small). Consequently:

- Decision-makers should avoid depending on their coopetition partners to survive within their markets by having some provisions that allow them to compete under an individualistic business model via their own resources and capabilities.
- Owner-managers are encouraged to acknowledge that once this
 global pandemic is over (and the regulation of certain forms of
 coopetition are potentially enforced), it might be challenging to end
 their partnerships with rivals. Thus, they should agree on the extent
 to which they will cooperate, vis-à-vis, compete with their rivals in
 advance of changing circumstances.

Fourth, owner-managers and functional-level employees must acknowledge that coopetition is a risky business-to-business marketing strategy, as there can be negative outcomes. Hence:

- Decision-makers should engage in complementary coopetition activities with trustworthy partners, but avoid negative situations that lead to tensions (e.g., conflict, power imbalances, and opportunistic behaviours), lost intellectual property, and diluted competitive advantages.
- To minimise the dark-sides of coopetition from occurring, it is recommended that owner-managers and functional-level employees should be vigilant for situations that involve coopetition partners behaving opportunistically. This will indicate when it is time to exit from these relationships.

Collectively, these managerial implications serve as actionable considerations for practitioners when implementing coopetition strategies during times of crisis, such as the COVID-19 outbreak. For clarity, coopetition has the potential to be a rewarding (performance-enhancing) business-to-business marketing strategy, but there are risks associated with companies working with untrustworthy competitors. Following these guidelines, if managed correctly, coopetition activities can be advantageous throughout a global emergency. Some directions for future research follow in the next section.

5. Directions for future research

While a body of knowledge exists on the notion of coopetition throughout the broader business-to-business marketing literature (Bengtsson & Kock, 2000; Crick & Crick, 2019; Czakon et al., 2020; Pattinson et al., 2018), there are several directions for future research. First, empirical research should take place to evaluate the implementation of coopetition activities in times of crisis, such as those in response to COVID-19 (building upon Pangarkar, 2007; Medrano & Olarte-Pascual, 2016). That is:

RQ1.: Under what circumstances did companies (across different industry and national contexts) cooperate with their rivals during the COVID-19 outbreak?

RQ2. : What were the antecedents of these coopetition strategies throughout this pandemic crisis (e.g., critical resources and capabilities)?

RQ3.: What were the outcomes of these coopetition activities within this large-scale emergency (e.g., improvements in company performance)?

Second, since cooperative and competitive forces underpin behavioural forms of coopetition (Bengtsson & Raza-Ullah, 2016; Lascaux,

2020; Luo et al., 2007; Mattsson & Tidstrom, 2015) it is of interest to evaluate what will happen once the COVID-19 emergency has ended. For clear reasons, it is not possible to explore these issues until this global pandemic is over, but some research questions to consider are:

RQ4.: Will companies continue to engage in coopetition, or will they pursue individualistic business models by utilising their own resources and capabilities?

RQ5.: If firms terminate certain coopetition partnerships, what does this process look like in practice (such as withdrawing key tangible and intangible assets)?

RQ6.: How long will it take owner-managers and functional-level employees to separate from their coopetition arrangements?

RQ7. : Can organisations (small and large) survive under an individualistic business model once the COVID-19 outbreak has ended?

Third, future research should address some of the dark-sides of coopetition during (and after) a pandemic if effective management does not occur. Under ordinary (non-crisis) circumstances, coopetition activities can be harmful for company performance, including yielding tensions (e.g., conflict, power imbalances, and opportunistic behaviours), lost intellectual property, and diluted competitive advantages (Crick & Crick, 2020; Raza-Ullah et al., 2014; Tidstrom, 2014). Therefore:

RQ8.: Are there any dark-sides of coopetition activities during (and after) a pandemic crisis (such as harmful performance consequences)?

RQ9. : If coopetition is implemented throughout a large-scale emergency, is there a positive or negative association with company performance, or is this association more complex (e.g., non-linear – inverted U-shaped – with moderating effects)?

RQ10.: How can managers and functional-level employees manage coopetition partnerships within a global crisis to mitigate these potentially devastating outcomes?

In short, instead of focusing on public policy issues or business-to-consumer marketing decisions (e.g., Gao et al., 2015; Neuwirth & Svetlicinii, 2015; Schiavone & Simoni, 2019), these directions for future research highlight how business-to-business marketing scholars can contribute to knowledge surrounding the role of coopetition strategies during (and after) a pandemic crisis (e.g., COVID-19). These complement the earlier implications and recommendations for practitioners. Conclusions follow to end this paper.

6. Conclusions

Guided by resource-based theory and the relational view, the objective of this paper was to examine how organisations can adapt their business models through implementing coopetition strategies during times of crisis (concentrating on COVID-19). To achieve this research objective, various scholarly and practical sources were reviewed, which in turn, yield the following three conclusions. The first conclusion is that coopetition can be an effective business-to-business marketing strategy in a pandemic - having the potential to benefit the organisations involved in such partnerships (as well as their customers and other key stakeholders). The second conclusion is that coopetition activities are comprised of cooperative and competitive forces, whereby, decision-makers should be careful about which competitors they collaborate with, as there can be harmful outcomes on their performance. The third (and final) conclusion is that once the COVID-19 outbreak has ended, there are questions surrounding whether these existing coopetition strategies will continue, or be terminated in the future. In this current study, these questions were formulated into some interesting directions for future research that business-to-business marketing scholars are encouraged to pursue.

References

- Akpinar, M., & Vincze, Z. (2016). The dynamics of coopetition: A stakeholder view of the German automotive industry. *Industrial Marketing Management*, *57*(1), 53–63.
- Andersson, P., & Nyberg, A. (1998). Marketing cooperation in automotive strategic alliances. *Journal of Business-to-Business Marketing*, 4(3), 43–74.
- Ang, S. H. (2008). Competitive intensity and collaboration: Impact on firm growth across technological environments. Strategic Management Journal, 29(10), 1057–1075.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Barney, J. B. (2018). Why resource-based theory's model of profit appropriation must incorporate a stakeholder perspective. Strategic Management Journal, 39(13), 3305–3325.
- Bengtsson, M., & Kock, S. (1999). Cooperation and competition in relationships between competitors in business networks. *Journal of Business & Industrial Marketing*, 14(3), 179, 104
- Bengtsson, M., & Kock, S. (2000). Coopetition in business networks: To cooperate and compete simultaneously. *Industrial Marketing Management*, 29(5), 411–426.
- Bengtsson, M., & Kock, S. (2014). Coopetition quo vadis? Past accomplishments and future challenges. *Industrial Marketing Management*, 43(2), 180–188.
- Bengtsson, M., & Raza-Ullah, T. (2016). A systematic review of research on coopetition: Toward a multi-level understanding. *Industrial Marketing Management*, 57(1), 23–39.
- Bengtsson, M., Raza-Ullah, T., & Vanyushyn, V. (2016). The coopetition paradox and tension: The moderating role of coopetition capability. *Industrial Marketing Management*, 53(1), 19–30.
- Bouncken, R. B., Fredrich, V., Ritala, P., & Kraus, S. (2018). Coopetition in new product development alliances: Advantages and tensions for incremental and radical innovation. *British Journal of Management*, 29(3), 391–410.
- 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.
- Brandenburger, A. M., & Nalebuff, B. J. (1996). *Co-opetition*. New York, NY: Doubleday Dell Publishing Group Inc.
- Chesbrough, H. (2020). To recover faster from COVID-19, open up: Managerial implications from an open innovation perspective. *Industrial Marketing Management (forthcoming)*.
- Clark, T. (1988). The concept of a marketing crisis. Journal of the Academy of Marketing Science, 16(1), 43–48.
- CNN (2020). Detroit mom-and-pop restaurants, forced to close due to Coronavirus, now cook meals for homeless. Retrieved from https://edition.cnn.com/2020/03/29/us/detroit-coronavirus-chefs-restaurants-homeless-iyw-trnd/index.html.
- Cortez, R. M., & Johnston, W. J. (2020). The Coronavirus crisis in B2B settings: Crisis uniqueness and managerial implications based on social exchange theory. *Industrial Marketing Management (forthcoming)*.
- Crick, J. M. (2019). Moderators affecting the relationship between coopetition and company performance. *Journal of Business & Industrial Marketing*, 34(2), 518–531.
- Crick, J. M., & Crick, D. (2019). Developing and validating a multi-dimensional measure of coopetition. *Journal of Business & Industrial Marketing*, 34(4), 665–689.
- Crick, J. M., & Crick, D. (2020). The Yin and Yang nature of coopetition activities: Nonlinear effects and the moderating role of competitive intensity for internationalised firms. *International Marketing Review (forthcoming)*.
- Crick, J. M., Crick, D., & Chaudhry, S. (2020). The dark-side of coopetition: It's not what you say, but the way that you do it. *Journal of Strategic Marketing (forthcoming)*.
- Cui, V., Yang, H., & Vertinsky, I. (2018). Attacking your partners: Strategic alliances and competition between partners in product-markets. Strategic Management Journal, 39(12), 3116–3139.
- Czakon, W., & Czernek, K. (2016). The role of trust-building mechanisms in entering into network coopetition: The case of tourism networks in Poland. *Industrial Marketing Management*, 57(1), 64–74.
- Czakon, W., Srivastava, M. K., Le Roy, F., & Gnyawali, D. R. (2020). Coopetition strategies: Critical issues and research directions. *Long Range Planning (forthcoming)*.
- Dahl, J. (2014). Conceptualizing coopetition as a process: An outline of change in cooperative and competitive interactions. *Industrial Marketing Management*, 43(2), 272–279.
- Day, G. S. (2014). An outside-in approach to resource-based theories. Journal of the Academy of Marketing Science, 42(1), 27–28.
- Di Benedetto, C. A., Lindgreen, A., Storgaard, M., & Clarke, A. H. (2019). Editorial: How to collaborate really well with practitioners. *Industrial Marketing Management*, 82(1), 1–8.
- Dyer, J. H., & Singh, H. (1998). The relational view: Cooperative strategy and sources of inter-organizational competitive advantage. Academy of Management Review, 23(4), 660–679.
- Dyer, J. H., Singh, H., & Hesterly, W. S. (2018). The relational view revisited: A dynamic perspective on value creation and value capture. *Strategic Management Journal*, 39(12), 3140–3162.
- Felzensztein, C., & Deans, K. R. (2013). Marketing practices in wine clusters: Insights from Chile. *Journal of Business and Industrial Marketing*, 28(4), 357–367.
- Felzensztein, C., Gimmon, E., & Deans, K. R. (2018). Coopetition in regional clusters: Keep calm and expect unexpected changes. *Industrial Marketing Management*, 69(1), 116–124.
- Felzensztein, C., Stringer, C., Benson-Rea, M., & Freeman, S. (2014). International marketing strategies in industrial clusters: Insights from the southern hemisphere. *Journal of Business Research*, *67*(5), 837–846.
- Fortune (2020). How Global 500 companies are utilizing their resources and expertise during the Coronavirus pandemic. Retrieved from https://fortune.com/2020/04/13/global-500-companies-coronavirus-response-covid-19-pandemic/ [12.5.2020].

- Gao, H., Xie, J., Wang, Q., & Wilbur, K. C. (2015). Should ad spending increase or decrease before a recall announcement? The marketing-finance interface in product-harm crisis management. *Journal of Marketing*, 79(5), 80–99.
- Gnyawali, D. R., & Charleton, T. R. (2018). Nuances in the interplay of competition and cooperation: Towards a theory of coopetition. *Journal of Management*, 44(7), 2511–2534.
- Gnyawali, D. R., Madhavan, R., He, J., & Bengtsson, M. (2016). The competition–cooperation paradox in inter-firm relationships: A conceptual framework. *Industrial Marketing Management*, 53(1), 7–18.
- Gnyawali, D. R., & Park, B. J. R. (2011). Coopetition between giants: Collaboration with competitors for technological innovation. *Research Policy*, 40(5), 650–663.
- Grewal, R., & Tansuhaj, P. (2001). Building organizational capabilities for managing economic crisis: The role of market orientation and strategic flexibility. *Journal of Marketing*, 65(2), 67–80.
- Hannah, D. P., & Eisenhardt, K. M. (2018). How firms navigate cooperation and competition in nascent ecosystems. Strategic Management Journal, 39(12), 3163–3192.
- Hoffmann, W., Lavie, D., Reuer, J. J., & Shiplov, A. (2018). The interplay of competition and cooperation. Strategic Management Journal, 39(12), 3033–3052.
- Independent (2020). Coronavirus: Supermarkets can now share staff, depots and data to help feed the nation. Retrieved from https://www.independent.co.uk/news/business/ news/coronavirus-supermarkets-uk-staff-depots-food-a9413146.html [29.3.2020].
- Kennedy, C. R., Harris, F. H. B., & Lord, M. (2004). Integrating public policy and public affairs in a pharmaceutical marketing program: The AIDS pandemic. *Journal of Public Policy & Marketing*, 23(2), 128–139.
- Kotler, P. (1974). Marketing during periods of shortage. *Journal of Marketing*, 38(4), 20–29
- Kozlenkova, I. V., Samaha, S. A., & Palmatier, R. W. (2014). Resource-based theory in marketing. Journal of the Academy of Marketing Science, 42(1), 1–21.
- Lacoste, S. (2012). Vertical coopetition: The key account perspective. *Industrial Marketing Management*, 41(4), 649–658.
- Lascaux, A. (2020). Coopetition and trust: What we know, where to go next. *Industrial Marketing Management*, 84(1), 2–18.
- Lavie, D. (2006). The competitive advantage of inter-connected firms: An extension of the resource-based view. Academy of Management Review, 31(3), 638–658.
- Lee, N., & Cadogan, J. W. (2013). Problems with formative and higher-order reflective variables. *Journal of Business Research*, 66(2), 242–247.
- Lund Pedersen, C., & Ritter, T. (2020). Preparing your business for a post-pandemic world. Harvard Business Review Digital Articles (forthcoming).
- Luo, X., Rindfleisch, A., & Tse, D. K. (2007). Working with rivals: The impact of competitor alliances on financial performance. *Journal of Marketing Research*, 44(1), 73–83.
- 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.
- Luo, Y. (2007). A coopetition perspective of global competition. *Journal of World Business*, 42(2), 129–144.
- Daily Mail (2020). Revealed: The most popular items snapped up by panic-buyers includes pasta, shower gel and tissues as sales soared by £60 million in first week of March. Retrieved from https://www.dailymail.co.uk/news/article-8131441/Panic-buying-shoppers-spent-60million-stockpiling-products-week-March.html [29.3.2020].
- Mattsson, L.-G., & Tidstrom, A. (2015). Applying the principles of Yin-Yang to market dynamics: On the duality of cooperation and competition. *Marketing Theory*, 15(3), 347–364
- McGrath, H., O'Toole, T., & Canning, L. (2019). Coopetition: A fundamental feature of entrepreneurial firms' collaborative dynamics. *Journal of Business & Industrial Marketing*, 34(7), 1555–1569.
- Medrano, N., & Olarte-Pascual, C. (2016). The effects of the crisis on marketing innovation: An application for Spain. *Journal of Business & Industrial Marketing*, 31(3), 404–417.
- Milne, G. R., Iyer, E. S., & Gooding-Williams, S. (1996). Environmental organization alliance relationships within and across non-profit, business, and government sectors. *Journal of Public Policy & Marketing*, 15(2), 203–215.
- MSN. (2020). Industries performing best and worse during the Coronavirus and how they're responding. Retrieved from: https://www.msn.com/en-us/money/markets/ industries-performing-best-and-worst-during-the-coronavirus—and-how-theyre-responding/ss-BB12CWOe?ocid=spartanntp (2020) [20.4.2020].
- Mu, J., Bao, Y., Sekhon, T., Qi, J., & Love, E. (2018). Outside-in marketing capability and firm performance. *Industrial Marketing Management*, 75(1), 37–54.
- Naidoo, V. (2010). Firm survival through a crisis: The influence of market orientation, marketing innovation and business strategy. *Industrial Marketing Management*, 39(8), 1311–1320.
- Nason, R. S., & Wiklund, J. (2018). An assessment of resource-based theorizing on firm growth and suggestions for the future. *Journal of Management*, 44(1), 32–60.
- Neuwirth, R. J., & Svetlicinii, A. (2015). Law as a social medicine: Enhancing international inter-regime regulatory coopetition as a means for the establishment of a global health governance framework. *Journal of Legal Medicine*, 36(3–4), 330–366.
- New York Times (2020). Search for Coronavirus vaccine becomes a global competition.

- Retrieved from https://www.nytimes.com/2020/03/19/us/politics/coronavirus-vaccine-competition.html [29.3.2020] .
- O'Shaughnessy, N. (1996). Social propaganda and social marketing: A critical difference? *European Journal of Marketing*, 30(10-11), 54-67.
- Pangarkar, N. (2007). Survival during a crisis: Alliances by Singapore firms. British Journal of Management, 18(3), 209–223.
- Park, B. J. R., Srivastava, M. K., & Gnyawali, D. R. (2014). Walking the tightrope of coopetition: Impact of competition and cooperation intensities and balance on firm innovation performance. *Industrial Marketing Management*, 43(2), 210–221.
- Pattinson, S., Nicholson, J., & Lindgreen, A. (2018). Emergent coopetition from a sensemaking perspective: A multi-level analysis. *Industrial Marketing Management*, 68(1), 25–35
- National Post (2020). New York to launch tri-state virus tracing program with Michael Bloomberg's help. Retrieved from https://nationalpost.com/pmn/health-pmn/new-york-to-launch-tri-state-virus-tracing-program-with-michael-bloombergs-help.
- Priem, R. L., & Butler, J. E. (2001). Is the resource-based view a useful perspective for strategic management research? Academy of Management Review, 26(1), 57–66.
- 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.
- Rindfleisch, A., & Moorman, C. (2003). Inter-firm cooperation and customer orientation. *Journal of Marketing Research*, 40(4), 421–436.
- 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.
- Ritter, T., & Lund Pedersen, C. (2020). Assessing Coronavirus' impact on your business model. Harvard Business Review Digital Articles (forthcoming).
- Ritter, T., Wilkinson, I. F., & Johnston, W. J. (2002). Measuring network competence: Some international evidence. *Journal of Business & Industrial Marketing*, 17(2–3), 119–138.
- Ritter, T., Wilkinson, I. F., & Johnston, W. J. (2004). Managing in complex business networks. *Industrial Marketing Management*, 33(3), 175–183.
- Rusko, R. (2011). Exploring the concept of coopetition: A typology for the strategic moves of the Finnish forest industry. *Industrial Marketing Management*, 40(2), 311–320.
- Schiavone, F., & Simoni, M. (2019). Strategic marketing approaches for the diffusion of innovation in highly-regulated industrial markets: The value of market access. *Journal of Business & Industrial Marketing*, 34(7), 1606–1618.
- Security (2020). Cybersecurity experts come together to fight Coronavirus-related cyberattacks. Retrieved from https://www.securitymagazine.com/articles/92004cybersecurity-experts-come-together-to-fight-coronavirus-related-cyberatacks [29.3.2020]
- Shu, C., Jin, J. L., & Zhou, K. Z. (2017). A contingent view of partner coopetition in international joint ventures. *Journal of International Marketing*, 25(3), 42–60.
- The Guardian (2020). Apple and Google team up in bid to use smartphones to track

 Coronavirus spread. Retrieved from https://www.theguardian.com/world/2020/apr/
 10/apple-google-coronavirus-us-app-privacy [11.4.202020].
- Tidstrom, A. (2014). Managing tensions in coopetition. *Industrial Marketing Management*, 43(2), 261–271.
- United Kingdom Government (2020). Staying at home and away from others (social distancing). Retrieved from https://www.gov.uk/government/publications/full-guidance-on-staying-at-home-and-away-from-others.
- Velu, C. (2016). Evolutionary or revolutionary business model innovation through coopetition? The role of dominance in network markets. *Industrial Marketing Management*, 53(1), 124–135.
- Washington Post (2020). U.S. becomes first country to report 100,000 confirmed Coronavirus cases; Trump Defence Production Act. Retrieved from https://eu.usatoday.com/story/news/nation/2020/03/27/scientists-track-coronavirus-strains-mutation/5080571002/ [28.3.2020].
- Williams, C., & Martinez, C. A. (2012). Government effectiveness, the global financial crisis, and multinational enterprise internationalization. *Journal of International Marketing*, 20(3), 65–78.
- Wyllie, J. (2020). Coronavirus: North-east charities unite for Feed the City campaign to help those affected by outbreak. Retrieved from: https://www.pressandjournal.co. uk/fp/news/aberdeen/2088556/coronavirus-north-east-charities-unite-for-feed-the-city-campaign-to-help-those-affected-by-outbreak/ [28.3.2020].
- **James M. Crick** is a Lecturer in Marketing at the Business School, Loughborough University, UK. His current research interests involve work in Entrepreneurial Marketing and International Strategy; particularly work that addresses competitiveness.
- **Dave Crick** is the Paul Desmarais Professor of International Entrepreneurship and Marketing in the Telfer School of Management at the University of Ottawa, Canada. His current research interests involve work at the Marketing/International Entrepreneurship interface and particularly work that addresses a more effective public/private sector interaction.