

The role of Networking Capabilities During the Covid-19 Crisis: Lessons Learned From SMEs in an Emerging Market

O Papel das Capacidades de Networking Durante a Crise da Covid-19: Lições Aprendidas por PMEs em um Mercado Emergente

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Abstract

This paper aims to analyze how small and medium enterprises (SMEs) used their networking capabilities (NC) to initiate, develop, and terminate business relationships to reduce the negative impacts of the Covid-19 crisis. This study followed a qualitative approach and investigated six SMEs purposely selected based on the study's requirement. Data were obtained through internet searches and 13 interviews with firm owners and top managers from the SMEs. Our findings show six lessons regarding the role of NC's during the Covid-19 crisis. The lessons address topics such as starting collaborative partnerships, open communication between companies, among others. These lessons are useful for minimizing economic crisis impacts and managing inter-organizational relations during crisis periods.

Keywords: Business, Collaboration, Interorganizational relations, Pandemic, Partnership

Resumo

O objetivo do artigo é analisar como as pequenas e médias empresas (PMEs) usaram suas capacidades para iniciar, desenvolver e terminar relacionamentos organizacionais (networking capabilities) ao longo da crise causada pela Covid-19. O artigo é baseado em estudos de caso realizados em seis PMEs, selecionadas propositalmente com base nos requisitos do estudo. Os dados analisados foram obtidos por meio de 13 entrevistas com atores-chave dessas organizações (proprietários e gerentes gerais). Os resultados revelam seis lições aprendidas sobre as capacidades de networking. Essas lições podem ser úteis para minimizar os impactos econômicos das PMEs em futuras crises e para gerenciar os processos de relações interorganizacionais em tempos de crise.

Palavras-chave: Negócio, Colaboração, Relações Interorganizacionais, Pandemia, Parceria

1 Introduction

The coronavirus (Covid-19) pandemic has imposed difficulties for most companies worldwide, causing economic losses and bringing economic activity to a near-standstill. Remarkably, the outbreak caused by this pandemic was dramatic for small and medium enterprises (SMEs). Recent data show that especially small firms faced a severe reduction in revenues during the crisis (Deloitte, 2020, Schreiber *et al.*, 2021), and a large number of firms closed their business activities (Bartik *et al.*, 2020; OECD, 2020).

This situation may be even worse in developing countries such as Brazil, where small firms¹ must overcome a lack of resources (Bernardes *et al.*, 2020; Sebrae, 2020), and a hostile institutional environment (Botelho & Guissoni, 2016). For instance, public reports show that besides the array of problems that Brazilian small firms face in regular times, they have had difficulties in getting access to financial resources during the pandemic (Sebrae, 2020). Given this backdrop, collaboration with other organizations may be an important strategy for SMEs to minimize or overcome business difficulties.

The importance of collaboration to firms is not a new topic. The literature has plenty of studies showing how firms collaborate with clients, suppliers, competitors, and stakeholders through partnerships, alliances, and networks to access resources and generate relational rents (Dyer & Singh, 1998; Dyer *et al.*, 2018; Fang *et al.*, 2019; Segato & Raab, 2019; Torkkeli *et al.*, 2019). More recently, growing attention has been paid to the dynamic aspects of business networking capabilities, namely networking capabilities or NC's (Mitrega *et al.*, 2012). Previous studies show how firms that hold networking capabilities — a dynamic capability to initiate, develop, and finish inter-organizational relationships (Forkmann *et al.*, 2016; Mitrega *et al.*, 2017; Alinaghian & Razmdoost, 2018) — have more opportunities to develop successful collaborations. These capabilities have been identified in different contexts (Ajayi, 2016), and collaborative settings (Adomako *et al.*, 2018).

Although the literature has widely addressed the role of NC's (Fang *et al.*, 2019; McGrath *et al.*, 2019; Mitrega *et al.*, 2012; Mitrega *et al.*, 2017), there is scarce evidence about the role these capabilities play for firms during economic crises. Pananond (2007) is an example of changing dynamics of Thai multinationals after the Asian economic crisis, exploring technological capabilities and networking capabilities. However, to the best of our knowledge, there are no studies that analyze the role of NC's for SMEs during the crisis caused by the coronavirus pandemic.

1 In Brazil, the company size is measured through annual revenue, as follows: micro-enterprise (less than 360.000 BRL), small company (higher than 360.000 BRL and lower or equal than 4.800.000 BRL), and medium company (higher than 4.800.000 BRL and lower or equal than 300.000.000 BRL) (BNDES, 2020). Therefore, in this study, we refer to SMEs using annual revenue as a parameter. For international comparison, currently (March, 2021) 1 USD = 5.46 BRL.

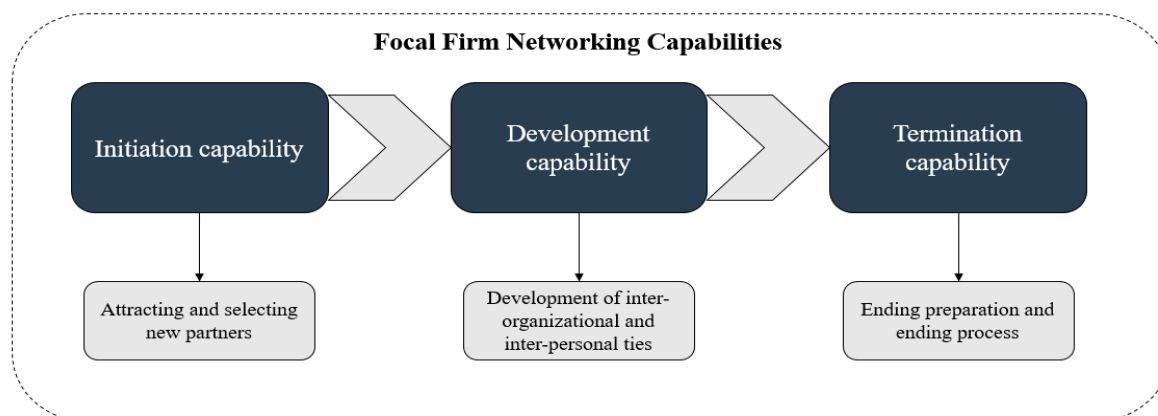
We address this gap by asking the following research question: whether and how networking capabilities support SMEs surpass the Covid-19 crisis? Therefore, this paper aims to analyze how small and medium enterprises used their networking capabilities to initiate, develop, and terminate business relationships to reduce the negative impacts of the Covid-19 crisis. Following Mitrega *et al.* (2012), we conceptualize NC's on the level of a focal company. We analyzed 13 interviews with representatives of six Brazilian companies of different business sectors from May 2020 to June 2020, a time in which Brazil was undergoing the coronavirus pandemic, and its businesses trying to surpass this crisis.

This paper contributes to the understanding of the role of NC's supporting businesses in a time of crisis. Specifically, our exploratory research allowed for identifying theoretical lessons learned about NC's in the pandemic context, specifically concerning different stages in the business relationship process (for initiation, development, and termination). The paper also explains how managers and policymakers may learn from the study to mitigate the crisis's impact.

2 Networking capabilities: concepts and empirical evidence in crisis contexts

Organizational capabilities that leverage external resources through networking relationships are key to increase competitive advantage (Ford *et al.*, 2018). There is a vast literature on business-to-business relationships that explain the importance of networking for a focal firm (Dyer & Singh, 1998; McGrath & O'Toole, 2014). Previous studies show how firms that hold NC has several competitive advantages compared to other firms (Mitrega *et al.*, 2012; Mitrega *et al.*, 2017; McGrath and O'Toole, 2014). NC's is a complex organizational capability used by a focal firm to manage business relationships with business partners (e.g., suppliers, customers, competitors) (Mitrega *et al.*, 2012; Mitrega *et al.*, 2017).

The core idea behind NC's is that interorganizational relationships are a relevant strategy to access and create resources (Dyer & Singh, 1998). They are unstable structures and can be a burden for a company, so the focal company must constantly monitor and shape its relationship portfolio to sustain relational rents (i.e., gains that can be achieved through interorganizational partnerships) (Cousins *et al.*, 2006; Dyer & Singh, 1998). According to Mitrega *et al.* (2012), NC's components are divided into three capabilities: initiation, development, and termination (Figure 1).

Figure 1. The three components of networking capabilities

Source: Based on Mitrega *et al.* (2012) and Mitrega *et al.* (2017).

The initiation capability refers to a focal firm's efforts to search for appropriate partners, attract, and select new partners (Mitrega *et al.*, 2017). This capability is important for kick-starting inter-firm relationships that offer access to new technologies and resources (Forkmann *et al.*, 2016), and attract and select new partners (Mitrega *et al.*, 2017). Activities of initiation involve identifying and negotiating with potential partners, assessing their characteristics, and selecting the best partners (Mitrega *et al.*, 2012). According to Mitrega *et al.* (2012), successful firms are continually searching for new relational partners. The ability to establish relationships rapidly and effectively with partners holding complimentary capabilities may produce large returns to early movers (Yang & Meyer, 2019).

The second NC's component is relationship development. It refers to actions to develop, manage, and strengthen relationships with partners (Mitrega *et al.*, 2012; Mitrega *et al.*, 2017) to enhance competitive advantage and minimize the likelihood of partnership failure. Managing conflicts and negotiating with existing business partners are examples of development NC's (Mitrega *et al.*, 2012). Interorganizational mechanisms (e.g., use of formal governance mechanisms to increase mutual coordination) and interpersonal ties (personal ties such as trust and commitment) are key factors for the development of inter-firm relationships, and contribute to a deeper level of interaction among firms (Forkmann *et al.*, 2016; Håkansson & Snehota, 2017; Mitrega *et al.*, 2017).

Termination or ending is the third NC's component (Forkmann *et al.*, 2016; Mitrega *et al.*, 2012). This capability refers to behavioral routines and a set of actions implemented to end a partnership (Mitrega *et al.*, 2012; Mitrega *et al.*, 2017). Negotiating with business partners that are no longer to be continued is a key issue in this step. While there are several studies on the importance of strengthening capabilities in inter-firm collaboration (see, for instance, Hedman & Orrensalo, 2018; Petersen *et al.*, 2005), there is evidence regarding ending non-performing supplier relationships (Forkmann *et al.*, 2016). Termination capability comprises the ending

preparation (i.e., to analyze and choose unfavorable relationships) and the ending process (i.e., to design procedures for ending the relationships) (Zaefarian *et al.*, 2017).

The knowledge about the role NC's may play in the context of economic crisis is limited. However, there are empirical pieces of evidence on the importance of NC's for focal firms, coping with the economic impacts of crisis time. For instance, analyzing the role of networking during crisis time, Saunders *et al.* (2014) identify that partnerships provide positive results for SMEs in the UK during crises. Besides, the study's findings show that crisis events are important to make the company stronger, because crisis events teach managers. Using data from Hungary companies, Mandják *et al.* (2017) find that the crisis's perception influences the companies' networking behavior. For instance, when managers perceive a crisis as harmful, the relationship strategy becomes more intensive.

The study of Dias *et al.* (2020) shows that the relationship among Portuguese firms in crisis time was important to minimize negative impacts. The importance of networking and mutual support was considered relevant for minimizing the impacts of unexpected occurrences and catastrophic events in Italy (Martinelli *et al.*, 2019). The empirical examples reinforce the importance of NC's during a crisis. The ties of the relationship among companies can be a strategic issue, influencing the firm's opportunities to acquire information about the competitors (Gulati & Gargiulo, 1999) and find suppliers and clients (Hakansson, 2006).

3 Research method

To explore how Brazilian SMEs used their capabilities to initiate, develop, and terminate business relationships during the Covid-19 pandemic, a qualitative study was performed. Qualitative studies focus on understanding three main objectives, "how people interpret their world, how they construct their worlds, and what meaning they attribute to their experiences" (Merriam, 2009 p. 23).

The research performed involved six Brazilian SMEs that continued their business activities during the pandemic caused by Covid-19. To select the cases, we used the following criteria: i) the firm must be a small or medium enterprise according to the Brazilian criteria; ii) the firm must have been affected by the crisis in some way; iii) the firm must have initiated, developed or ended partnerships with clients and/or suppliers during the crisis. These criteria were used to support the basic qualitative research logic, which complies in specifying the objective of interest, creating a boundary of the inquiry (Kahlke, 2014).

Given the selection criteria, invitations were sent to Brazilian companies, specifying what companies the research needed in the invitation letter. The SMEs invited to participate in the study are located in the state of Rio Grande do Sul

(Southern Brazil), a region where about 30.5 thousand companies had closed their businesses since the beginning of the pandemic (Jornal do Comércio, 2020). Through social media, e-mails, and internet sites, SMEs were contacted to verify if they met the criteria of interest in this study. Ten SMEs answered our contact and six of them accepted to participate in the research.

Phone calls were made to the companies that positively answered our invitation to confirm whether they adhere to the defined criteria. Thirteen interviews were conducted with firm owners and top management between May and June 2020, through digital platforms (e.g., Microsoft Teams, Google Meeting). The interviewees are firms' representatives who declared themselves as top managers or decision-makers (e.g. business owners, sales directors, general managers). The SMEs analyzed are from the food, metallurgical, and clothing sectors. Thus, this study is based on insights from several business sectors. To keep data confidential, each company was given a code from C1 to C6 (Table 1).

Table 1. General characteristics of companies analyzed and respondents of interviews

Company code	Business sector	N° of employees	N° of interviews	Interviewers position
C1	Metallurgical	50	3	E1 -Business owner E2 - Purchasing Manager E3 - Coordinator
C2	Food	7	1	E4 -Business owner
C3	Clothing	16	4	E5- Business owner E6 - Financial Manager E7 - Operation Manager E8 - Relationship Manager
C4	Paper packing industry	150	3	E9 - Financial Director E10 - Operations Director E11- Sales Director
C5	Food	100	1	E12 - Social Communication
C6	Metallurgical	35	1	E13 - CEO -Business owner

A semi-structured interview protocol based on NC's (Mitrega *et al.*, 2012; Mitrega *et al.*, 2017) was used to guide the interviews (Appendix 1). The interview protocol has NC's as a backdrop, and then, the questions focused on the initiation, development, and termination capabilities of the focal firm. Therefore, the goal was to understand how the network capabilities support SMEs in surpassing the Covid-19 crisis.

Interviews were carried out until the saturation point was reached. Given leaner structures, especially concerning partnerships, in the cases of C2, C5, and C6 only one interview was considered sufficient. Despite the small number of interviews, a comprehensive overview of the company's networking in the crisis was obtained, since the interviewed are top managers and key actors aware of the company situation.

Interviews time ranged from 22 minutes to 90 minutes. The total time of interviews was 542 minutes. To analyze the results, transcriptions of interviews were conducted in a more denaturalized way, that is, according to the formal language (Oliver *et al.*, 2005). This transcription technique allows greater clarity to analyze the transcripts when performing the content analysis method (Nascimento & Steinbruch, 2019).

We followed a content analysis technique, more precisely, the thematic content analysis technique (Bardin, 2016). It consists of filtering the data to divide the text into main analysis categories through the stages of pre-analysis, exploration, treatment of the results, and inference and interpretation of the findings (Bardin, 2016). From this, and through an iterative analysis of the data (Gioia *et al.*, 2013), the main insights were grouped into six categories of analysis. The categories are the lessons learned, explored in depth in the following section. Some parts of the interviews (quotes) were described along with the results and discussion to evidence the lessons.

In addition to the interviews, we analyzed the SMEs' websites and social networks (secondary data) to identify complementary evidence about their NC's in times of crisis. Given the need for social isolation in Brazil coming from the Covid-19 scenario, it was impossible to carry out on-site observations as a third collection technique. Moreover, triangulation of researchers was used (Bruning *et al.*, 2018), to minimize possible biases in the analyses. Each researcher analyzed the data in isolation and then, the different perspectives were grouped to generate reliable results. The findings of this study were presented to external researchers with expertise in thematic validation.

4 Lessons learned by SMEs regarding NC's in time of crisis

In this section, we provide and discuss the lessons found through the analysis of our empirical cases. Six lessons encompass the stages of relationship initiation, development, and termination: (1) starting collaborative partnerships is a relevant strategy to survive crises; (2) strong relationships with previous partners can influence the initiation of new partnerships during crises; (3) during a crisis, NC's helps in exploiting close partnerships by developing mutually beneficial responses to economic shortages; (4) emotional support is an important component of NC's in crisis time; (5) open communication among companies becomes important in crisis time as it reduces tensions regarding previous agreements and enables finding win-win solutions for all parties involved in partnerships; (6) SMEs' networking capability is strongly linked to its own leaders' ability during crisis times.

4.1 Starting collaborative partnerships is a relevant strategy to survive crises

Most governments worldwide have temporarily closed educational institutions to hold the spread of the Covid-19 pandemic. Businesses in or near college campuses are suffering, as campuses stay empty. From March 2020 to June 2020, a coffee shop (C2) located on a university campus took advantage of its capability to initiate and develop relationships to start seven new partnerships. One of these new partnerships is a collaboration with three nearby fitness centers, offering special discounts to customers. The small firm started partnerships with small food suppliers to personalize and diversify products, as well as with technology companies that supported the company in its digital positioning. These new partnerships were essential to maintain a certain revenue during the pandemic and the period when the campus was closed.

Developing new partnerships was an important strategy for a digital food delivery platform (C5). Covid-19 had a positive effect on the online food delivery and takeaway market (because the consumer is going to the supermarket less often) (Pedroso *et al.*, 2020), which is projected to display robust growth (Dannenberg *et al.*, 2020). Given this backdrop, several restaurants and bars contacted C5, seeking a partner to sell their products online. Due to those new partnerships, the company's revenue grew, and the company adapted its business, so that the effects are long lasting. One of the changes is market diversification, starting partnerships to sell floriculture products.

4.2 Strong relationships with previous partners can influence the initiation of new partnerships during crises

C2 states that it is through recommendations from current partners or due to ties developed on a personal level that it selects new business partners. This aspect is more evident in crisis times when there is an urgent need to develop new partnerships. This case corroborates with the statement that companies tend to select partners based on information spread through managers' personal ties (Mitrega *et al.*, 2012).

During the Covid-19 crisis, C1's solid relationship with partners in the supply chain positively influenced the initiation and development of new and important partnerships. These new partnerships helped to reduce costs and develop marketing actions. Therefore, there is evidence that the exchange of information among indirect ties can develop direct ties (Gulati *et al.*, 2009; Ozmel *et al.*, 2020).

4.3 During a crisis, NC's helps in exploiting close partnerships by developing mutually beneficial responses to economic shortages

According to Gronroos (1990), firms test the strength of their relationship ties in difficult times. Due to bonds based on trust, C1 and its business partners

reached important agreements, which helped these companies survive the crisis (e.g., flexibilization in suppliers' payment and renegotiation of debts). Therefore, besides enabling cooperative behavior, trust promotes effective responses to crises (Rousseau *et al.*, 1997). On the other hand, lack of trust in crisis times negatively affects the development of relationships and may break or suspend it. During the pandemic, one of the C1 suppliers changed its supply system, directly affecting the partnership between parties. C1's good payment history and their relationship background were not considered. According to E1: "this supplier threw the relationship away when the firm decided not to supply without immediate payment".

Flexibilization for payment and renegotiation of debts are two benefits of relationships based on trust. Other examples are close work, adapting products and services, adjusting cooperation, information and knowledge sharing, communication among partners, and joint decision-making (Mitrega *et al.*, 2012; Mitrega *et al.*, 2017). In this regard, due to the existence of strong trust ties, C6, a metallurgical firm, jointly decided with some partners to develop a new product to increase the revenues during the pandemic.

4.4 Emotional support is an important component of NC's in crisis times

In addition to providing relational rents for the partnered firms (Dyer & Singh, 1998), networking may provide other than economic gains. During the period of uncertainty brought about by the global Covid-19 pandemic, organizations experience a series of difficulties, ranging from financial to operational, as well as emotional. The result adds a new dimension to the networking capability approach (Håkansson & Snehota, 2017; Mitrega *et al.*, 2012; Forkmann *et al.*, 2016; Mitrega *et al.*, 2017) by demonstrating that relationship development must go beyond financial aspects in crisis times. Emotional support has been neglected as a relevant dimension of networking capabilities, and it seems to be relevant when partners face severe crises. They implicate support, reciprocity, and mutual gains. For the cases studied, implementing collaborative strategies was essential when coping with the coronavirus pandemic.

C2 identified early on that a network's support would be important to overcome this unpredictable period. In this way, it took the initiative to seek new partnerships with the purpose of "supporting one another at this very difficult moment" (E4). The first action taken was to start a regional association of companies, collaborating through the sharing of resources and ideas, as well as mutual emotional support. C2 did not seek only to start new partnerships, but also sought support in the existing ones, given that developing relationships requires intense interaction among all companies (Håkansson & Snehota, 2017). In this regard, the respondents of C4 believe doing actions that go beyond business activities will develop long-term partnerships. This made them stay even closer to their partners and suppliers during the pandemic so that there was mutual help and emotional support.

4.5 Open communication among companies becomes especially important in crisis times

Open communication among companies becomes important in crisis times as it reduces tensions regarding previous agreements and enables finding win-win solutions for all parties involved. Information sharing is vital to minimize information asymmetry, and reduce the likelihood of failure in collaborative partnerships (Park & Ungson, 2001). E9 stated that their company (C4) expects increased net profit for the second half of 2020. The positive outcome during a crisis is justified, among other reasons, mainly due to its clear communication with suppliers and business partners. At the beginning of the Covid-19 spread, one of their main suppliers faced financial and operational issues. To support their supplier and guarantee the necessary supply for the upcoming months, they placed an order four months in advance, going beyond the regular monthly purchase agreement.

Similar situations could be observed in other cases. C3, for example, reports that right at the beginning of the pandemic, still caught by surprise, there was a concern by its managers to establish clear communication between all stakeholders. Those actions demonstrate concern in maintaining agreements, even informal ones, to guarantee trust among the partners through information exchange (Dyer *et al.*, 2018). We identify in C3 a concern to establish criteria to understand possible unfavorable business relations. Communication was confirmed as a routine to identify unfavorable partners (Mitrega *et al.*, 2012).

Thus, communication involves all dimensions of networking capabilities (e.g., initiation, development, termination). It is linked with social competencies that entrepreneurs can use when interacting with partners (Baron & Markman, 2003). Effective and transparent communication is relevant to develop business relations and strengthen the commitment, and trust between parts to encourage collaboration (Świerczek, 2019). In crisis times, this is even more relevant for the cases studied.

4.6 SMEs' networking capability is linked to its own leaders' ability during crisis times

The entrepreneur's experience is essential for the success of initiating, developing, and ending relationships. To minimize the crisis's negative effects, E4 transformed its business model in a few months, making management changes and new partnerships, and promoting innovations. The entrepreneur inherent creativity and openness to new knowledge proved to be essential characteristics in this case. Moreover, the entrepreneur's communication skills and existing good relationships helped him build new contacts and look for new partners in crisis times. Communication among previously unconnected partners fosters the search for new solutions to crises (Cortez & Johnston, 2020).

Moreover, both managers from C1 and C2 believed in collaborative practices and tried to promote them through the company. In addition to being useful for initiating and developing current relationships (Mitrega *et al.*, 2012), our findings show that personal ties are useful for developing new partnerships. NC's are related to the manager profile and its networking ability (Ferris *et al.*, 2005). Thus, we noticed NC's are related that entrepreneurial capacity is important in establishing and seizing opportunities to access external resources using different relational ties (Faridian & Neubaum, 2019).

The scarce evidence regarding the ending component (Forkmann *et al.*, 2016) was found in our study. The importance of NC's for ending a partnership was evidenced in C6, a metallurgical firm. To reduce its costs, the company ended a relationship with a supplier and started with others. According to E13, "a good strategy to end a business relationship is relevant to keep the firm's door open for future negotiations". This was possible due to the existence of a friendship tie between the two firms' managers, highlighted as follows: "I showed that we needed to reduce costs, and explained that in the future we would like to negotiate again. They understood and said that the doors would be open in the future, because I always was transparent in the negotiations".

Table 2 presents summarized evidence sources of each lesson. These evidence sources are transcripts obtained from the interviews.

Table 2. Evidence from each lesson

Lessons	NC component	Evidence
Lesson 1 - Starting collaborative partnerships is a relevant strategy to survive crises	Initiation	<p>“Collaborative partnership during a crisis is important in giving strength to each other” (E4).</p> <p>“At the beginning of the crisis, about ten managers of restaurants or bars contacted us every day, intending to initiate a partnership, and marketing their products through our platform” (E12).</p>
Lesson 2 - Strong relationships with previous partners can influence the initiation of new partnerships during crises	Development	<p>“Strong previous relationships, the solid name, and brand of the company made it possible for us to get new partners” (E1).</p> <p>“I had a great relationship with a supplier’s representative when that representative changed companies; I also decided to change suppliers” (E1).</p>
Lesson 3 - During a crisis, NC’s helps in exploiting close partnerships by developing mutually beneficial responses to economic shortages	Development	<p>“Some suppliers were on our side and were more flexible during the crisis, and this relationship was certainly strengthened” (E1).</p> <p>“We will give preference to those that helped us during the Covid-19 crisis” (E3).</p>
Lesson 4 - Emotional support is an important component of NC’s in crisis times	Development	<p>“That is a moment to support each other (...) we will give preference to those that helped us during the Covid-19 crisis” (E3)</p>
Lesson 5 - Open communication among companies becomes especially important in crisis times	Initiation/ Development	<p>“We understood the situation of the customers when it comes to payment (...) even though it is also difficult for us, we sat down and said, no, we also have to think about our customers, because it is a difficult time for them” (E6) and (E7).</p>
Lesson 6 - SMEs’ networking capability is linked to its own leaders’ ability during crisis times	Initiation/ Development/ Termination	<p>“I am reading and studying a lot, as well as seeking support from a university group” (E4).</p> <p>“I always was transparent in the negotiations” (E13).</p>

5 Implications and conclusions

Crises are abnormal events that modify the business environment and require the managers' full attention. However, the impacts of crises on firms may be influenced by managers' actions (Mandják *et al.*, 2017). This study aimed to analyze how SMEs use their capabilities to initiate, develop, and terminate business relationships in times of crisis. A basic qualitative study was performed with Brazilian SMEs. Based on the research results, it is possible to understand the networking capabilities relevance for small and medium-sized businesses, from initiating to ending relationships. The use of these capabilities may happen in an unstructured or unformalized manner, closely related to the figure of the entrepreneur. However, the importance of networking capabilities is clear.

Our results contribute to the theory and the managerial practice by showing how SMEs use their networking capabilities in crisis times to overcome financial shortages and surpass the crisis. As a first theoretical contribution, the results show that relationship development includes emotional support to the partners. Emotional support has been neglected as a relevant dimension of networking capabilities, and it seems to be relevant when partners face severe crises. Second, our study shows that SMEs' networking capabilities are interconnected with their leaders' networking abilities. While large companies may have processes and routines to initiate, develop, and terminate business relationships, SMEs may rely on their entrepreneurs' relational and networking abilities to complement organizational routines. The result sheds new light on the literature on NCs and opens new research avenues by stimulating both research streams as interconnected.

As a managerial implication, our study offers six lessons that SMEs may consider to benefit from NCs in crisis times. Each lesson shows a specific strategy that entrepreneurs may use to initiate, develop, or terminate business relationships during economic crises. Although most small firms do not invest efforts in formalizing processes and routines, we believe that the strategies we describe can support them in working with partners, and overcoming the shortages caused by the current and future crises. Our findings reveal strategies SMEs may follow, such as starting new collaborative partnerships as a strategy to survive crises, seeking support - including emotional - through strong relationships with partners, as well as work on open communication among companies, which becomes even more relevant in crisis times. These are a few suggestions of what companies should do, based on the results found.

Before concluding, we have to recognize that our research involves some limitations. In terms of research design, we performed a study of firms in different business sectors. While this backdrop provides a general overview, studies that analyze specific business sectors are necessary to provide more evidence on NC's in crisis

times. Studies focused on a single sector may advance further on detailing the usage of networking capabilities in a more complex way than that achieved in this study.

The number of cases and interviews in each firm was also a limitation. However, field research is difficult to perform during crises. Future research could use other qualitative approaches (e.g., ethnography) to analyze how firms behave during crises, or quantitative methods (e.g., survey) to obtain statistical results. Further studies could analyze large firms and compare their results with SMEs' findings, presented here. Researchers may verify the difference between NC dynamics during the pandemic and normal times.

References

- Adomako, S., Danso, A., Boso, N., & Narteh, B. (2018). Entrepreneurial alertness and new venture performance: Facilitating roles of networking capability. *Small Business Research*, 36(5), 453–472.
- Ajayi, B. (2016). The impact of entrepreneurial orientation and networking capabilities on the export performance of Nigerian agricultural SMEs. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 2(1), 1–23.
- Alinaghian, L., & Razmdoost, K. (2018). How do network resources affect firms' network-oriented dynamic capabilities? *Industrial Marketing Management*, 71, 79–94.
- Banco Nacional do Desenvolvimento (BNDES). (2020). *Porte de empresa*. Available at <https://www.bndes.gov.br/wps/portal/site/home/financiamento/guia/porte-de-empresa>
- Bardin, L. (2016). *Análise de conteúdo*. São Paulo: Edições 70.
- Baron, R. A., & Markman, G. D. (2003). Beyond social capital: The role of entrepreneurs' social competence in their financial success. *Journal of Business Venturing*, 18(1), 41-60.
- Bartik, A. W., Bertrand, M., Cullen, Z. B., Glaeser, E. L., Luca, M., & Stanton, C. T. (2020). *How are small businesses adjusting to Covid-19? Early evidence from a survey*. Available at <http://www.nber.org/papers/w26989>
- Bernardes, J. R., Silva, B. L. D. S., Cristina, T., & Lima, F. (2020). Os impactos financeiros da Covid-19 nos negócios. *Revista da Faesf*, 4, 43-47.
- Botelho, D., & Guissoni, L. (2016). Varejo: competitividade e inovação. *Revista de Administração de Empresas*, 56(6), 596–599.
- Bruning, C., Godri, L., & Takahashi, A. R. W. (2018). Triangulação em estudos de caso: incidência, apropriações e mal-entendidos em pesquisas da área de administração, *Administração: Ensino e Pesquisa*, 19(2), 277-307.
- Cortez, R. M., & Johnston, W. J. (2020). The Coronavirus crisis in B2B settings: Crisis uniqueness and managerial implications based on the social exchange theory. *Industrial Marketing Management*, 88, 125-135.
- Cousins, P. D., Handfield, R. B., Lawson, B., & Petersen, K. J. (2006). Creating supply chain relational capital: The impact of formal and informal socialization processes. *Journal of Operations Management*, 24(6), 851–863.
- Dannenberg, P., Fuchs, M., Riedler, T., & Wiedemann, C. (2020). Digital transition by Covid-19 pandemic? The German food online retail. *Tijdschrift Voor Economische en Sociale Geografie*, 111(3), 543–560.
- Deloitte. (2020). *Covid-19 e os impactos nos setores econômicos: Um olhar atento às projeções*. Available at <https://www2.deloitte.com/content/dam/Deloitte/br/Documents/about-deloitte/Deloitte-Covid-Impacto-Setores-junho.pdf>

- Dias, Á. L., Manuel, E. C., Dutschke, G., Pereira, R., & Pereira, L. (2020). Economic crisis effects on SME dynamic capabilities. *International Journal of Learning and Change*, 13(3), 1-24.
- Dyer, J. H., & Singh, H. (1998). The relational view: Cooperative strategy and sources of interorganizational 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.
- Fang, G., Zhou, Q., Wu, J., & Qi, X. (2019). The relationship between network capabilities and innovation performance: Evidence from Chinese high-tech industry. *Industrial Management and Data Systems*, 119(8), 1638–1654.
- Faridian, P. H., & Neubaum, D. (2019). Ambidexterity in age of asset-sharing: development of dynamic capabilities in open source ecosystems. *Academy of Management Proceedings*, 99, 102125.
- Ferris, G. R., Treadway, D. C., Kolodinsky, R. W., Hochwarter, W. A., Kacmar, C. J., Douglas, C., & Frink, D. D. (2005). Development and validation of the political skill inventory. *Journal of Management*, 31(1), 126–152.
- Ford, J. A., Verreynne, M. L., & Steen, J. (2018). Limits to networking capabilities: Relationship trade-offs and innovation. *Industrial Marketing Management*, 74, 50–64.
- Forkmann, S., Henneberg, S. C., Naudé, P., Mitrega, M. (2016). Supplier relationship management capability: A qualification and extension. *Industrial Marketing Management*, 57, 185–200.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15–31
- Gronroos, C. (1990). Relationship approach to marketing in service contexts: The marketing and organizational behavior interface. *Journal of Business Research*, 20, 3–11.
- Gulati, R., & Gargiulo, M. (1999). Where do interorganizational networks come from? *American Journal of Sociology*, 104(5), 1439–1493.
- Gulati, R., Lavie, D., & Singh, H. (2009). The nature of partnering experience and the gains from alliances. *Strategic Management Journal*, 30, 1213–1233.
- Håkansson, H., & Snehota, I. (2006). No business is an island 17 years later. *Scandinavian Journal of Management*, 22(3), 271-274.
- Håkansson, H., & Snehota, I. (2017). Interactivity in business networks. In Håkansson, H., & Snehota, I. (Eds.), *No business is an Island*, Emerald Publishing Limited, Bingley, pp. 275–287.
- Hedman, I., & Orrensalo, T. P. (2018). Brand image as a facilitator of relationship initiation. *Developing insights on branding in the B2B context*, 97–112.

- Kahlke, R. M. (2014). Generic qualitative approaches: Pitfalls and benefits of methodological mixology. *International Journal of Qualitative Methods*, 13(1), 37–52.
- Mandják, T., Wimmer, Á., & Durrieu, F. (2017). The influence of economic crises on network behavior. *Journal of Business & Industrial Marketing*, 32(3), 445–456.
- Martinelli, E., Canio, F., & Tagliazucchi, G. (2019). Bouncing back from a sudden-onset extreme event: exploring retail enterprises' resilience capacity. *International Review of Retail, Distribution and Consumer Research*, 29(5), 568–581.
- McGrath, H., & O'Toole, T. (2014). A cross-cultural comparison of the network capability development of entrepreneurial firms. *Industrial Marketing Management*, 43(6), 897–910.
- McGrath, H., Medlin, C. J., & O'Toole, T. (2019). A process-based model of network capability development by a start-up firm. *Industrial Marketing Management*, 80, 214–227.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass.
- Mitrega, M., Forkmann, S., Ramos, C., & Henneberg, S. C. (2012). Networking capability in business relationships - Concept and scale development. *Industrial Marketing Management*, 41(5), 739–751.
- Mitrega, M., Forkmann, S., Zaefarian, G., & Henneberg, S. C. (2017). Networking capability in supplier relationships and its impact on product innovation and firm performance. *International Journal of Operations and Production Management*, 37(5), 577–606.
- Nascimento, L. S., & Steinbruch, F. K. (2019). The interviews were transcribed, but how? Reflections on management research. *RAUSP Management Journal*, 54(4), 413–429.
- OECD. (2020). *Coronavirus (Covid-19): SMEs policy responses*. Available at <http://www.oecd.org/coronavirus/policy-responses/coronavirus-covid-19-sme-policy-responses-044440101/>
- Oliver, D. G., Serovich, J. M., & Mason, T. L. (2005). Constraints and opportunities with interview transcription: Towards reflection in qualitative research. *Social Forces*, 84(2), 1273–1289.
- Ozmel, U., Yavuz, D., Trombley, T., & Gulati, R. (2020). Interfirm ties between ventures and limited partners of venture capital funds: Performance effects in financial markets. *Organization Science*, 31(3), 698–719.
- Pananond, P. (2007). The changing dynamics of Thai multinationals after the Asian economic crisis. *Journal of International Management*, 13(3), 356–375.
- Park, S. H., & Ungson, G. R. (2001). Interfirm rivalry and managerial complexity: A conceptual framework of alliance failure. *Organization Science*, 12(1), 37–53.
- Pedroso, M. T. M., Corcioli, G., & Foguesatto, C. R. (2020). A crise do coronavírus e o agricultor familiar produtor de hortaliças. *Gestão e Sociedade*, 14(39), 3740–3749.
- Petersen, K. J., Ragatz, G. L., & Monczka, R. M. (2005). An examination of collaborative planning effectiveness and supply chain performance. *Journal of Supply Chain Management*, 41(2), 14–25.

- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393–404.
- Saunders, M. N. K., Gray, D. E., & Goregaokar, H. (2014). SME innovation and learning: The role of networks and crisis events. *European Journal of Training and Development*, 38(1–2), 136–149.
- Schreiber, D., Moraes, M. A., & Stasiak, L. (2021). O impacto da crise pelo Covid-19 nas micro e pequenas empresas. *Revista Vianna Sapiens*, 12(1), 30.
- Sebrae. (2020). *Impactos da Covid-19 nos pequenos negócios*. Available at <https://m.sebrae.com.br/sites/PortalSebrae/artigos/impactos-da-covid-19-nos-pequenos-negocios,996cae-5378651710VgnVCM1000004c00210aRCRD>
- Segato, F., & Raab, J. (2019). Mandated network formation. *International Journal of Public Sector Management*, 32(2), 191–206.
- Swierczek, A. (2019). Manufacturer structural embeddedness and the network rent: The intervening role of relational embeddedness in the triadic supply chains. *Supply Chain Management*, 24(3), 334–354.
- Torkkeli, L., Kuivalainen, O., Saarenketo, S., & Puumalainen, K. (2019). Institutional environment and network competence in successful SME internationalization. *International Marketing Review*, 36(1), 31–55.
- Yang, W., & Meyer, K. E. (2019). Alliance proactiveness and firm performance in an emerging economy. *Industrial Marketing Management*, 82, 226-237.
- Yin, R. K. (2015). *Case study research: Design and methods*. Sage: London.
- Zaefarian, G., Forkmann, S., Mitreğa, M., & Henneberg, S. C. (2017). A capability perspective on relationship ending and its impact on product innovation success and firm performance. *Long Range Planning*, 50(2), 184–199.

Appendix 1. Interview guide

Research question: How do networking capabilities support SMEs in reducing the adverse effects of the Covid-19 crisis?

1. General information

1.1 Company name:

1.2 Size (revenue/number of employees):

1.3 Business sector:

1.4 Products/services:

1.5 Interviewee's name and position:

1.6 Phone/e-mail:

2. General information about the company's networking capability – The first part aims to identify whether the company uses processes and activities to initiate, develop, and terminate business relationships.

Think about all the different relationships your company has (i.e., with companies offering complementary products or similar products, which partner with you in given projects/situations; suppliers, customers, etc.). The following questions refer to the company's relationships with these partners.

2.1 Processes and activities your company uses to initiate a business relationship: Does your company have processes to identify attractive business partners? Could you please describe how do you do it?

2.2 Processes and activities your company uses to develop or maintain a business relationship. Does your company have processes and activities to develop or maintain a business relationship with a partner? Could you please describe how do you do it?

2.3 Processes and activities your company uses to terminate a relationship. Does your company have processes and activities to terminate a business relationship with a partner? Could you please describe how do you do it?

3. Networking capabilities during the Covid-19 crisis - The second part aims to identify how the company has been using processes and activities to initiate, develop, and terminate business relationships during the Covid-19 crisis

3.1 How has your company been dealing with its business partners during the Covid-19 crisis?

3.2 Has your company strengthened relationships with some partners during the Covid-19 crisis? Who are these partners? Do you have a formal or informal relationship with these partners? Are there power/size differences between your company and these partners? Explore each case.

3.3 Please describe the activities your company performed to strengthen the relationship with these partners.

3.4 What results have you achieved by performing these activities to strengthen the relationships?

3.5 Has your company finished relationships with some partners during the Covid-19 crisis? Who were these partners? Did you have a formal or informal relationship with these partners? Were there power/size differences between your company and these partners? Explore each case.

3.6 Please describe the activities your company performed to finish the relationship with these partners.

3.7 What results have you achieved by performing these activities to finish the relationships? Explore each case.

3.8 Has your company initiated relationships with new partners during the Covid-19 crisis? Who are these partners? Do you have a formal or informal relationship with these partners? Are there power/size differences between your company and these partners? Explore each case.

3.9 Please describe the activities your company performed to initiate a relationship with these new partners.

3.10 What results have you achieved by performing these activities to initiate the relationships? Explore each case.