

IMPACT OF SUPPLY CHAIN DYNAMIC CAPABILITIES (SCDC) AND HORIZONTAL COLLABORATION OVER SUPPLY CHAIN RESILIENCE FOR SME'S SUSTAINABILITY IN EMERGING ECONOMIES

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Abstract: The aim of the research developed is to recognize the importance and impact of supply chain dynamic capabilities (SCDC) in the horizontal collaboration as a relevant factor to mitigate the risks in the supply chain, but also to contribute to sustainability in SME's that are located in emerging economies, even more face to the post-pandemic scenario. The methodology used to analyze the theoretical constructs related to the study was PRISMA declaration. It was applied using several databases (Scopus and Web of Science) and specific search equations investigating several lenses related to supply chain dynamic capabilities (SCDC) as an adjuvant to create and promote horizontal collaborative networks (HCN). It mitigates the risks through collaborative processes between actors in the supply chain, developing resilience. The lenses considered are dynamic capabilities view, supply chain resilience and collaborative networks. The study results reveal that collaborative networks could support the risk management in supply chains that develop this practice. In the same way, supply chain dynamic capabilities (SCDC) can be considered as a relevant factor in stimulating integration between different and exogenous actors of the supply chain in a horizontal collaboration, and also considering the collaboration as one of the most important supply chain dynamic capability (SCDC) to be developed for SME's as a good way to dynamize their supply chains, avoid the risk and as a good practice to improve the corporate sustainability in emerging markets.

Keywords: Supply chain dynamic capabilities, horizontal collaboration, supply chain resilience, risk management, dynamic capabilities ecosystem

DOI: 10.17512/pjms.2022.25.2.05

Article history:

Received April 11, 2022; *Revised* April 24, 2022; *Accepted* May 27, 2022

Introduction

Globalization has integrated societies, countries and economies through various channels. Prominent among these channels are supply chains. The dynamics of business environments require organizations to respond quickly and effectively to changing demands, and therefore companies must engage in continuous renewal activities to achieve a competitive advantage in their supply chains.

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The supply chain dynamic capabilities endow organizations with the ability to react to changes in the market, allowing them to reconfigure, adapt and create new capabilities; it enables them to be competitive and sustainable (Eisenhardt & Martin, 2000; Peteraf, 1993; Prahalad & Hamel, 1990; Storer & Hyland, 2011; Teece, Pisano, & Shuen, 1997). In this way, identifying the dynamic capabilities of supply chains becomes relevant, as their development generates value and competitiveness for organizations (Ketchen & Hult, 2007; Storer & Hyland, 2011).

On the other hand, in unstable economies like emerging markets, supply chains face different types of uncertainty and change that require different capabilities for effective and efficient organizational responses. These responses have been linked to dynamic capabilities and horizontal collaboration to manage the different risks faced by supply chains and increase the resilience of supply chains that can be highly exposed as small and medium-sized enterprises and farmers in emerging economies (Aslam et al., 2020; de Moura & Saroli, 2020; Hong et al., 2018; Rajaguru & Matanda, 2019; Weerawardena et al., 2007; Yuli Isnaini et al., 2020; Weerawardena et al., 2007).

Resilience is the ability to continue to achieve objectives despite disruptions and shocks. To develop resilient supply chains, the risks to which they are exposed must be managed through the development of knowledge-sharing capabilities and collaboration. A high level of collaboration between supply chain organizations is important to increase their resilience (Mandal et al., 2016; Pettit et al., 2010). Collaborative information activities, alignment of objectives, joint decision-making, resource sharing, collaborative communication and joint knowledge creation reduce the impact of supply chain disruption risks (Cao et al., 2010; Scholten et al., 2014). With the COVID 19 pandemic and its negative effects on the proper development of supply chains, especially those associated with small and medium-sized enterprises in emerging economies, the study of the supply chain dynamic capabilities and the identification of their importance in generating competitive advantage and the development of collaborative networks for risk management, promoting resilient supply chains becomes relevant and central in studies of internationalization and strategy (Abrantes et al., 2021; Duarte Alonso et al., 2020).

This paper studies supply chain dynamic capabilities (SCDC) as an adjuvant to create and promote horizontal collaborative networks and mitigate risks through collaborative processes among supply chain actors. This article presents a literature review that focuses specifically on the supply chain dynamic capabilities, identifying their importance in generating competitive advantage, developing collaborative networks for risk management, and promoting resilient supply chains.

Literature Review

Following, and in order to achieve what is proposed in this article, the literature review is presented in three parts, in which relevant concepts and theoretical foundations about the three main constructs addressed are presented and

summarized: 1) Dynamic Capabilities Theory and Supply Chain Dynamic Capabilities (SCDC); 2) Supply Chain Resilience; 3) Collaborative Networks.

Dynamic capabilities view and supply chain dynamic capabilities (SCDC)

For Teece, Pisano & Shuen (1997), the context of capabilities analyses the sources and methods of wealth creation and capture by private firms operating in changing environments, considering a competitive advantage in firms based on distinctive processes (ways of coordinating and combining), shaped by the firm's asset positions. However, this strategy is not sufficient to sustain a competitive advantage. It is also necessary to develop the dynamic capability to renew competencies to achieve congruence with the changing business environment, in line with the term capabilities, which emphasizes the key role of strategic management in adapting, integrating and reconfiguring organizational skills, resources and functional competencies. Thus, dynamic capabilities are finally defined as those that allow a company to integrate, build and reconfigure internally, with the intention of providing a coherent framework that integrates concepts and empirical knowledge in order to facilitate corporate adaptation to changing environments, including as a basis for eventual diversification into new product markets (Garzón, 2015).

Chengcheng & Congdong (2011) and Teece (2007) explain that, for an organization and its corporate governance, dynamic capabilities enable it to detect opportunities in its environment to materialize them in commercial benefits and decision-making in order to maintain its agility and continue to update the basis of its original success, generating, in addition, economic surpluses over time, making the organization sustainable. In this way, dynamic capabilities are established as the management and manipulation of resources and functional capabilities, which allow the company to develop sustainable competitive advantages, always in search of greater efficiency and effectiveness in the markets in which it operates.

In line with the exposed, Garzón (2015) mentions that dynamic capabilities are a source of competitive advantage in organizations, analyzing not only their positioning in the company but also their relationship between capabilities and business strategies, both from strategy to capabilities, as well as from capabilities to the strategies to be implemented. This is how the strategy is visualized from the cooperative and associative environment, where companies that have identified and assessed their level of depth and development of dynamic capabilities can conceive the strategic vision of association and cooperation as a tool either to boost their competitive advantages associated with the strongest dynamic capabilities or also to strengthen through the same association the dynamic capabilities that experience weakness, all this to be able to efficiently promote the business strategy of consolidation and conscious growth in the competitive market. This is why, for this 21st century and given the new realities of the markets, the framework of dynamic capabilities has received and should be given much attention from the fields of strategy, management and economics, not only to understand how companies face the changes in the environment but also to adapt to open markets and globalized economies.

The focus on dynamic capabilities is a function of their dynamism, considering rapidly changing business environments, as well as the prevailing need for companies to carry out continuous renewal activities that allow them to achieve adaptive coherence. Likewise, a characteristic element for these dynamic capabilities corresponds to the uniformity of common characteristics for several organizations, which allows for achieving coherence of attributes that involve developing them gradually through institutional routines (Garzón, 2015).

In the case of organizations operating in developing countries and emerging economies, two highly relevant factors must also be considered for the development of resilient supply chains that guarantee their sustainability, namely the combination of a highly turbulent environment and institutional gaps that put pressure on organizations to make disruptive decisions due to the uncertainty in which they are immersed (Silvestre, 2015), leading them to strengthen and develop the dynamic capabilities they possess intending to develop competitive advantages that will enable them to remain in the market.

In this way, CEPAL (Comisión Económica para América Latina y el Caribe) suggests promoting collaborative networks or associativity, as well as considering new alternatives for coordinating productive activities between small and medium-sized enterprises with the support of the government and other actors, such as academia, facilitating the transfer of knowledge, counteracting limitations in resources, diversifying the risks to which production chains are exposed and the high transaction costs (Padilla, 2017).

Focusing more on the supply chain domain, Chengcheng & Congdong (2011) indicate that the in-depth and detailed study of supply chain dynamic capabilities (from now SCDC), as well as the development of the firm in turbulent environments, will involve further development of resource theory. In fact, for these authors, after their theoretical and empirical analyses and their statistical validation, they synthesize that the dynamic capabilities of the supply chain refer to the capabilities that the organization identifies, builds and integrates with a dynamic environment within the supply chain, taking into consideration its internal and external resources and capabilities; all of this with the aim of obtaining and boosting its competitive and innovative advantages within the three main dimensions determined by the authors, such as flexibility, agility and coordination.

The theory of dynamic capabilities distinguishes SCDC as those developed through a process of integration with partners both within the organization (intra-organizational processes) and outside it (suppliers, customers, competitors, etc.), which allows the achievement and development of competitive advantages for the organization thanks to the satisfaction of consumers and participation in new markets. In addition, and by way of definition, it is important to highlight that SCDC is the ability to adjust the supply chain to changes in the environment, which implies a complex and close relationship between the internal and external aspects of the organization. SCDCs make organizations more flexible, resilient and easily adaptable to change (Aslam et al., 2020; Blome et al., 2013; Colicchia & Strozzi,

2012; Jiang & Li, 2011; Li et al., 2006; Olavarrieta & Ellinger, 1997; Rajaguru & Matanda, 2019; Storer & Hyland, 2011). This concept is comprehensively composed of different sub-capabilities categorized by different authors recognizing their importance in the sustainability of the supply chain and the organization. These are coordination, adaptability, agility, competitive Priorities, reconfiguration, collaboration, integration and flexibility.

It is recognized that at the individual level, many organizations do not have strict control of their resources and capabilities that allow them to compete effectively in the market and also support the development of sustainable competitive advantages, which added to the failure to strengthen and develop SCDC as primary factors that allow the organization to perceive, take advantage of and reconfigure its supply chains in the face of the risks and uncertainty to which it is continually exposed, a sensitive issue that should be of great relevance to any corporate governance (Aslam et al., 2020; Blome et al., 2013; Ju et al., 2016).

Thus, in line with the above, the knowledge and strengthening of SCDC should become an interest at all levels of the organization, not only at the management level or treated merely as a corporate governance issue, but also involving all internal and external actors with which the company is related and through which it can grow, be sustainable, develop competitive advantages and address the potential risks to which it is exposed. Thanks to a resilient supply chain, there is a strategic factor to be developed more specifically in SME's from emerging economies that could be more vulnerable to disruptive changes like a global pandemic.

Supply chain resilience

Although resilience in the supply chain has been described by many researchers, there is no consensus on the definition of its construct. A definition in line with the review conducted in this paper is Macfadyen et al. (2015), where resilience is considered the ability to continue to achieve objectives despite disturbances and shocks.

Zhiao et al. (2017) summarize 4 key factors for increasing resilience in supply chains. The first of these factors is traceability, which is the ability to trace all processes, from raw material procurement to production, consumption and disposal, in order to clarify when and where what was produced and by whom (Queiroz et al., 2021; van Rijswijk & Frewer, 2008). Applied integrated traceability systems positively affect the traceability of product characteristics. Supply chain visibility has a similar function to traceability, such as monitoring the supply chain in real-time. Regardless of which term is used, traceability or visibility both rely heavily on close collaboration between suppliers and customers and depend heavily on investment in information exchange (Ali et al., 2017; Christopher & Peck, 2004; Ivanov, Tsipoulanidis, & Schönberger, 2019; Kumar & Anbanandam, 2020; Pettit et al., 2010; Polater, 2021; Soni et al., 2014; Zsidisin & Henke, 2019).

The second key factor is inter-organizational knowledge management: Duarte Alonso et al. (2020) and Scholten & Schilder (2015) identify that horizontal and vertical collaboration, risk awareness, supply chain re-engineering and knowledge

management form the basis of supply chain resilience. Esper et al. (2010) suggest that customer value creation requires supply chain members to integrate the demand and supply processes through cross-organizational knowledge management. They also highlight that knowledge sharing capabilities positively affect reducing supply chain costs. Lingegard & Lindahl (2015) conclude that knowledge transfer between organizations can not only produce gains but also play an important role in reducing environmental impact and increasing costs (Rollins et al., 2011).

Another important factor is supply chain collaboration. A high level of collaboration between supply chain organizations is necessary to increase their resilience (Pettit et al., 2010). Collaborative information activities, alignment of objectives, joint decision-making, resource sharing, collaborative communication and joint knowledge creation between independent supply chain partners reduce the impact of supply chain disruption risks, especially to supply chains associated with small and medium-sized enterprises in emerging economies. This collaboration enables moderating and enhancing the resilience of supply chains to reconfigure in the face of disruptions, such as those caused by the COVID 19 pandemic (Al Naimi et al., 2020; Cao et al., 2010; Polyviou et al., 2020; Scholten et al., 2014).

Due to the risks faced by supply chains, especially the risks associated with unpredictable events, such as the COVID 19 pandemic, which intensely affects small and medium-sized enterprises in emerging economies, the study of resilience has gained interest and relevance in research, and from different approaches, the design of resilient supply chains is proposed (Abrantes et al., 2021; Duarte Alonso et al., 2020; Xiaoping, 2016; Zimmermann, 2016).

Information sharing, collaborative communication, mutually created knowledge and joint relationship efforts play an important role in increasing supply chain resilience, especially when these are associated with small and medium-sized companies and operate in emerging markets (Mishra et al., 2021). However, collaboration is highly affected by trust (Manos et al., 2007).

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Collaborative networks

A collaborative network is understood as a group of companies or organizations that have independent legal and juridical autonomy and are linked to carrying out coordinated actions to achieve common objectives, which may or may not be achieved during the collaboration (Bititci et al., 2004; Chaudhuri et al., 2020; Cheikhrouhou et al., 2010; Graça & Camarinha-Matos, 2017). Also, there is expected to evolve dynamically over time so that the companies involved receive benefits from it but equally manage their demand and other supply chain activities jointly and independently (Afsarmanesh & Camarinha-Matos, 2011; Blunden, 2015;

Camarinha-Matos & Afsarmanesh, 2005; Cheikhrouhou et al., 2010; Dangelico et al., 2013).

In the same way, Global Value Chain (GVC) theory emphasizes the relations that emerge from the chain interaction between several actors (e.g., suppliers, competitors and costumers) in the production processes. These could be vertical, horizontal and diagonal linkages that show up in dynamic and complex interactive networks (Lakhani et al., 2013). From the relational perspective and Global Value Chain Governance, cooperation or collaborative networks might develop a problem and challenge to orchestrating firms, particularly when existing several parties, including non-network parties, can absorb knowledge and profits. Also, the collaboration might integrate routines and problem-solving between members, aligning interests and goals of the actors that interact. It suggests that a perspective from GVC more holistic can support the interaction and coordination, standardizing objectives, procedures and policies having better transaction costs (Gereffi & Lee, 2014; Kano, 2017; Lakhani et al., 2013).

In general terms, the different forms of linkages between independent companies according to the number of participants and their position in the production chain to which they belong. Regarding the position in supply chain, there are two definitions generally used by several authors (Camarinha-matos & Afsarmanesh, 2006; Camarinha-Matos & Afsarmanesh, 2005; Cheikhrouhou et al., 2010; Muñoz-Villamizar et al., 2019):

Horizontal cooperation or collaboration

These are the forms of collaboration established between independent companies that develop the same product and voluntarily decide to interact to achieve a common goal that they could not achieve if they acted in isolation (Afsarmanesh & Camarinha-Matos, 2011; Graça & Camarinha-Matos, 2017).

Vertical cooperation or collaboration

These are the forms of collaboration established between independent companies belonging to adjacent links in the value chain of a given product (Camarinha-matos & Afsarmanesh, 2006; Tieman, 2017).

Too often, the network's success appears as a prerequisite to its viability. Notions of participants knowing 'full well' the equitable allocation of rewards, being 'confident' about adequate recognition of ideas, and users 'of course' crediting the originators of innovations, tend to create prescriptive and slightly uncritical rhetoric in the light of the barriers looming on the way to realizing collaborative multi-firm networks (Allred et al., 2011; Miles et al., 2005; Rethemeyer, 2005).

Some of the benefits of business collaboration and horizontal collaborative networks (Balcik et al., 2019; Bititci et al., 2004; Camarinha-Matos & Afsarmanesh, 2005; Cheikhrouhou et al., 2010; Rethemeyer, 2005; Singh, 2005):

- Developing new markets within the framework of the company's current activities
- Completing and extending the product range
- Mixed product/market motives
- Changing basic market structures

- Improvements in the speed of market access
- Improvements in the capacity to negotiate and obtain resources on better terms.
- Increased efficiency in the use of resources
- Expanding resources and reducing risks
- Improving the capacities and skills of the organization

Nowadays, companies are very concerned about sustaining themselves in the market and achieving stability under the principle of collaboration so that the benefits generated in the chain can be shared jointly. In general terms, some studies have shown that the benefits and their distribution among the agents are achieved depending on the modality of collaboration and cooperation (Acevedo Chedid & Herrera Vidal, 2012).

Collaborative supply chain practices emerge as a business initiative for which academia must develop a unified theoretical framework to build a common language and concrete models for measuring the impact of different types of practices on the performance of different supply chains. While there are widely accepted and widely used general models for assessing logistics practices, future research can be oriented towards developing models in specific business contexts (Balza-Franco, Paternina-Arboleda, & Cardona-Arbelaez, 2019).

Research Methodology

This literature review was developed under the guidelines of the methodology called PRISMA declaration. This is a method with rigorous guidelines that orient the researcher in conducting a review based on a clearly formulated problem and research question in order to identify, select and evaluate the theoretical approaches to the object of study related to the constructs analyzed (Liberati et al., 2009; Moher et al., 2010). Likewise, this methodology contributes to improving the construction of systematic literature reviews in terms of clarity and transparency in the management of information and research carried out by different disciplines (Pérez, 2012).

To develop this article, a systematic literature review is carried out on the associated theoretical concepts through the use of the PRISMA Statement tool, which incorporates articles published over a period of approximately 30 years (1991 - 2021) in multiple renowned management and business journals, which provide in their early years, seminal articles and foundations of the constructs addressed, followed by the advancement and maturity of the theories, more so with the introduction of the concept of dynamic supply chain capabilities, the latter being narrowed down by authors at the end of the first decade of the 2000s.

The authors listed below in Table 1 are recognized as the most representative in light of the literature on the theory of dynamic capabilities, supply chain dynamic capabilities, and some references on issues of supply chain resilience and collaborative networks.

Table 1. Theoretical references.

Dynamic Capabilities	Supply chain dynamic capabilities	Supply chain resilience	Collaborative networks
Grant (1996)	Ketche & Hult (2007)	Christopher & Peck (2004)	Teece (1986)
Teece, Pisano & Shuen (1997)	Storer & Hyland (2011)	Pettit, Fiksel & Croxton (2010)	Nielsen (1988)
Eisenhardt & Martin (2000)	Jiang & Li (2011)	Scholten & Schilder (2015)	Goyal & Gupta (1989)
Zahra & George (2002)	Zhu et al. (2017)	Soni, Jain & Kumar (2014)	Antonelli (1992)
Wu, Melnyk & Flynn (2010)	Hong et al. (2018)	Ho, Zheng, Yildiz & Talluri (2015)	Cooper, Lambert & Pagh (1997)
Pisano (2017)	Rajaguru & Matanda (2019)	Kamalahmadi & Parast (2016)	Spekman, Kamauff Jr & Myhr (1998)
Garzón (2015)	Sandberg, Kindstrom & Haag (2019)	Zsidisin & Henke (2019)	Coleman (1998)
	Isnaini et al. (2020)	Ivanov, Tsipoulaidis & Schönberger (2019)	Putnam (2004)
	Aslam et al. (2020)		Camarinha-Matos & Afsarmanesh (2005)
	Kareem & Kummitha (2020)		Camarinha-Matos & Afsarmanesh (2006)
			Afsarmanesh & Camarinha-Matos (2011)

Source: Own elaboration (2022).

It also seeks to outline some relevant elements in the literature review that are of value in understanding the importance of dynamic supply chain capabilities (SCDC) in horizontal collaboration as a contributory factor in organizational risk management.

We build two specific equations to search in Scopus and Web of Science databases for the constructs from the light study:

-Equation 1: “supply chain dynamic capabilities” AND “horizontal collaboration” AND “risk management” – Scopus 0 documents – WoS 0 documents – Springer 0 documents

-Equation 2: “supply chain dynamic capabilities” OR “horizontal collaborative networks” AND “risk management” – Scopus 8 documents – WoS 5 documents – Springer 0 documents

-Equation 3: “supply chain dynamic capabilities” AND “horizontal collaboration” AND “resilience” – Scopus 0 documents – WoS 0 documents – Springer 0 documents

There is a research gap to establish a future research agenda and contribute to this line to improve the literature related to these constructs.

Below, Figure 1 depicts the most important keywords related to the study, and it was found in the search process developed in the Scopus database:

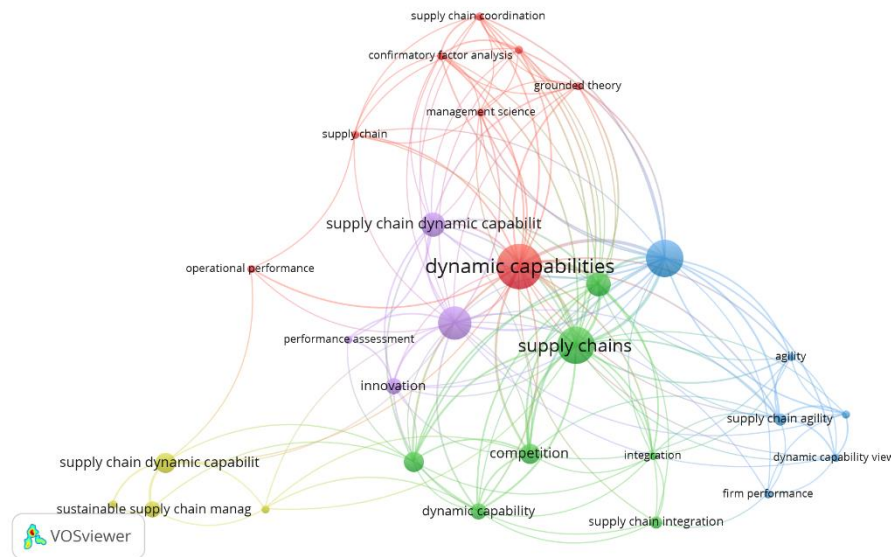


Figure 1: Principal keywords.
 Source: Own elaboration (2022) with Vosviewer

Research Results and Discussion

Supply chain is inherently complex and possesses different behaviors given their resources, capabilities and routines, which directly affect how they manage risk, as well as the collaborative interaction with other companies that arise in response to risk mitigation (Beamon, 1998; Choi & Wu, 2009; Friday et al., 2017). This organizational complexity, even more so at the supply chain level, challenges any corporate governance to consider collaboration and strengthen its dynamic supply chain capabilities to contribute to risk management, making it a resilient supply chain (Friday et al., 2018).

Although dynamic capabilities do not have a consolidated and comprehensive theoretical system to explain their application to organizations, it is not possible to deny their continuous application within organizations, whether at the organizational or supply chain level. It is, therefore, necessary to study the resources (tangible and intangible) and dynamic capabilities that the organization possesses from the point of view of reconfiguring and detecting competencies, capturing internal capabilities or even within an area as fundamental as the supply chain. Being partly unexplored, it is in contrast to the leading role of external resources and their alignment with the company's strategy (Lonial & Carter 2015).

According to Hendry, Stevenson, MacBryde, Ball, Sayed & Liu (2019), firms with dynamic capabilities can innovate to build resilience and improve their competitive position around a common issue. An example of this may be Brexit for the UK, or the possibility of overcoming tariff and non-tariff barriers, in addition to international certifications in the case of producers wishing to export agricultural products; leveraging the organization's opportunities and threats, dynamically transforming or reconfiguring business models and operations, while strengthening its dynamic supply chain capabilities. All within a changing and fluctuating ecosystem can be documented through the study of individual corporate stories and the analysis of case studies, which are useful tools for understanding the process that drives the development of dynamic capabilities within the organizational environment, including within the supply chain.

In addition to the exposed, Friday et al. (2018) state that supply chain risk management should be considered as a more holistic issue for the organization and that, from the perspective of collaborative risk management, six key capabilities, as the authors call them, or determining factors for collaborative risk management, should be considered: sharing risk information, standardization of procedures, joint decision-making, shared risks and benefits, integration of processes and a collaborative performance system (joint management indicators).

In line with Kampstra, Ashayeri & Gattorna (2006), there are sometimes misunderstandings in the process of collaboration, and the definition of "collaboration" can come in various formats. On the one hand, collaboration is a continuous process that depends on the business roles of the entities involved in the supply chain, generating a significant impact on the types of constraints it may experience. Likewise, equitable collaboration is not a necessity in all relationships, in fact, not all channels must necessarily be collaborative. Furthermore, it must consider that any firm can undertake a horizontal or vertical collaboration to work with their supply chain partners or their direct competitors to facilitate the development and reinforcement of skills and capabilities (Awaysheh & Klassen, 2010; Klassen & Vachon, 2003). Through this article, the authors seek to emphatically expose the importance of the continued use of supply chain dynamic capabilities (SCDC) in horizontal collaboration at the enterprise level, seen as an ecosystem that efficiently assists organizations in risk management policies.

In the same way, negotiation processes are a key aspect in establishing relational networks with economic and social agents, as in mechanisms that ensure the quality of these relationships and their stability and lasting trust over time (Burt, Johansson & Dawson, 2015). This is how dynamic capabilities must facilitate an environment of flexibility and adaptation to changes in the environment in which an organization operates, whether at the level of consumers, institutions or even networks in the target markets (Fayos-Gardó et al., 2017). Thus, in this post-pandemic era, the supply chain must migrate from being a rigid, stable and globally defined structure to an adaptable structural arrangement, permeable to the influences of a changing market

with the help of an internal ecosystem of dynamic organizational and supply chain capabilities.

There are several trends that show many challenges lie ahead as the world becomes more complex to operate logistically and moreover, because the organization is immersed in a constantly uncertain environment. In this way, companies are often forced to collaborate with partners both vertically and horizontally in their extended supply chain network, integrating their processes and systems; in this sense, companies are "forced" to adopt network thinking, rather than enterprise thinking, all this to increase the efficiency of logistics, an important development in modern conditions, especially for developing economies (Al-Ababneh et al., 2021; Sabadka, 2015).

One aspect that has been driven by the post-pandemic vision is the reconfiguration of capabilities from an organizational perspective. For Garcia-Madurga et al. (2021), the severity of the recession requires a rethinking of the supply chain, thanks to the effects brought about by the pandemic, which has accelerated the process of de-globalization, has discouraged trade but at the same time has encouraged collaborative research alliances between international and regional (George, Lakhani & Puranam, 2020). Thus, focusing on Miranda (2014), the collaboration between organizations and organizational learning, whether at the individual, group or even inter-organizational level, where dynamic capabilities enter as the ability of the organization to innovatively recombine resources and technologies to generate adaptive environments, is proposed as a potential adjuvant for risk management (Gagalyuk & Hanf, 2013).

In this way, and in order to ensure the sustainability of organizations, especially small and medium-sized enterprises in countries with fluctuating economies such as emerging ones, governments should make efforts to reactivate markets, such as encouraging the creation of collaborative networks on issues related to the supply chain, such as production, distribution and logistics activities in general, distribution and logistics activities in general, together with a conscious work from the organization to strengthen the value chain in order to make supply chains more resilient, capable of facing possible restrictions and reacting to possible disruptions (FAO & CEPAL, 2020).

For FAO & CEPAL (2020) and the implementation of recovery plans, associativity and collective work should be encouraged as a strategy to mitigate risk, encourage economies of scale, and alleviate the high transaction costs to which SMEs may be subject. To this end, in the medium and long term, the strengthening of the relationship between government, private sector, community institutions, producer associations or cooperatives and, finally, academia should be encouraged to work together to strengthen the dynamic capacities of organizations in order to better respond to potential threats and systemic risks in the environment, benefiting a resilient approach and promoting the sustainability of organizations through multisectoral strategies (FAO & CEPAL, 2020; United Nations, 2020).

Conclusion

The premise of analyses of the usefulness of dynamic capabilities is that organizations must use, renew and reconfigure their range of resources to sustain competitive advantage in changing environments (Vivas-Lopez, 2013). Under this premise, the most specialized dynamic capabilities in supply chain issues must be recognised in order to strengthen the organization from the internal to the external. Some of these capabilities are networking capabilities, interconnection capabilities and, finally, alliance capabilities through which the organization can develop and expand its advantages in a coordinated manner through synergies of cooperation and mutual assistance between the companies involved in the value chain, but also with actors outside the chain, such as competitors, thus achieving a horizontal type of collaboration.

One of the best strategies that SME's should implement is to learn to work in collaborative networks through partnerships, in such a way that knowledge, experience, equipment, raw materials, work and efforts are shared, adopting a proactive and communitarian vision, facing the challenges of a globalised world in a much more competitive way (Arras et al., 2010). Supply chain design must incorporate resilience and progressive development of a dynamic capabilities ecosystem, thus requiring greater investment in market-based approaches to risk management and integration of several strategies such as collaborative networks of different ways (vertical and horizontal). This kind of strategy should be considered necessary to improve competitiveness and realise economic, environmental and social benefits (Friday et al., 2021; George et al., 2020).

The process of consolidating a horizontal network is slow and complex. There are no precise statistics, but experience shows that it is difficult for a network to reach an operational level before six to seven months and that it rarely succeeds in launching its pilot project before two/three years of activity. The main advantages of horizontal networks are that, on the one hand, through this collective experience, a profound transformation process takes place in the participating companies, radically modifying their way of seeing business and relating to the environment. On the other hand, once a network reaches its strategic maturity, it becomes a generator of innovative initiatives and a powerful stimulus for the development of its economic and institutional environment (Dini, 2010). Collaborative information activities, alignment of objectives, joint decision-making, resource sharing, collaborative communication and co-creation of knowledge between independent supplier chain partners reduce the impact of supply chain disruption risks (Cao et al., 2010; Scholten et al., 2014); thus, making them resilient supply chains. The COVID-19 crisis has pressed to evaluate the resilience of many small and medium-sized enterprises (SMEs) around the world, as they have been forced to adapt to the pandemic induced changes and adjust their business models swiftly in order to survive. This rapid and forced transition has held many challenges for SMEs. This is because they tend to be more vulnerable to external shocks due to resource

constraints and a limited capacity to plan for crisis events (Herbane, 2013; Smallbone et al., 2012). Nevertheless, due to their adaptability and flexibility, SMEs often demonstrate remarkable resilience (Fath et al., 2021; Smallbone et al., 2012).

This article covers a specific literature review and aims to provide the reader with a better understanding of the advantages of different supply chains to working in a horizontal network so that each participant in the network enhances its supply chain dynamic capabilities and the whole chain itself is much more resilient to adverse events and generates higher profits. Future research is expected to document empirical and case studies that put into practice all the concepts presented here in such a way as to contribute to the strengthening of different sectors of the economy, thanks to the alliance of academia, companies and state institutions. To identify the research gap between the constructs of supply chain dynamic capabilities, horizontal collaboration, and risk management oriented toward developing supply chain resilience, the present study recommends applying several types of research from different areas and disciplines to improve the literature related.

References

- Abrantes, B.F., Preto, M.T. and António, N., (2021). Toward a dynamic capabilities' diffusion model for international business headway of SMEs: evidence from the metallurgic and metal-mechanic (MMI) sectors. *Review of International Business and Strategy*, 32(2), 204-227.
- Acevedo Chedid, J., Herrera Vidal, G., (2012). Analysis of the Production Planning Problem in Collaborative Supply Chains: A Literature Review in the Game Theory Approach. *Megaprojects: Building Infrastructure by fostering engineering collaboration, efficient and effective integration and innovative planning* (pp. 1-11).
- Al-Ababneh, H. A., Dumanska, I., Derkach, E., Sokhetska, A. and Kemarska, L., (2021). Integration of logistics systems of developing countries into international logistics channels. *Acta Logistica*, 8(4), 329-340.
- Allred, C. R., Fawcett, S. E., Wallin, C. and Magnan, G. M., (2011). *A Dynamic Collaboration Capability as a Source of Competitive Advantage Subject Areas: Collaboration, Dynamic Capability, Multimethod, Multi-period Study, and Resource-based View*, 42(1), 129-161.
- Al Naimi, M., Faisal, M.N., Sobh, R. and Uddin, S.M.F., (2020). Antecedents and consequences of supply chain resilience and reconfiguration: an empirical study in an emerging economy. *Journal of Enterprise Information Management*, 34(6), 1722-1745.
- Aslam, H., Blome, C., Roscoe, S. and Azhar, T. M., (2020). Determining the antecedents of dynamic supply chain capabilities. *Supply Chain Management*, 25(4), 427-442.
- Arras Vota, A. M., Fierro Murga, L. E., Jáquez Balderrama, J. L. and López Díaz, J. C., (2010). Collaborative Networks, A Business Strategy For Insertion Into Value Chains. *Revista Mexicana de Agronegocios*, 215-225.
- Awaysheh, A., Klassen, R. D., (2010). The impact of supply chain structure on the use of supplier socially responsible practices. *International Journal of Operations & Production Management*, 30(12), 1246-1268.

- Balcik, B., Silvestri, S., Rancourt, M. È. and Laporte, G., (2019). Collaborative Prepositioning Network Design for Regional Disaster Response. *Production and Operations Management*, 28(10), 2431–2455.
- Balza-Franco, V., Paternina-Arboleda, C. and Cardona-Arbelaes, D., (2019). Collaborative practices in the supply chain: a conceptual review. *SABER, SCIENCE AND Freedom*, 77-101.
- Beamon, B. M., (1998). Supply chain design and analysis: Models and methods. *International Journal of Production Economics*, 55(3), 281-294.
- Bititci, U. S., Martinez, V., Albores, P. and Parung, J., (2004). Creating and managing value in collaborative networks. *International Journal of Physical Distribution and Logistics Management*, 34(3/4), 251–268.
- Blome, D., Schoenherr, T. and Rexhausen, C., (2013). Antecedents and enablers of supply chain agility and its effect on performance: A dynamic capabilities perspective. *International Journal of Production Research*, 51(4), 1295-1318.
- Burt, S., Johansson, U. and Dawson, J., (2016). International retailing as embedded business models. *Journal of Economic Geography*, 16(3), 715-747.
- Cao, M., Vonderembse, M., Zhang, Q. and Ragu-Nathan, T.S., (2010). Supply Chain Collaboration: Conceptualization and Instrument Development. *International Journal of Production Research*, 48, 6613-6635.
- Camarinha-matos, L. M., Afsarmanesh, H., (2006). Collaborative networks: Value creation in a knowledge society. In *IFIP International Federation for Information Processing* (Vol. 207, pp. 26–40). Springer.
- Camarinha-Matos, L. M., Afsarmanesh, H., (2005). Collaborative networks: A new scientific discipline. *Journal of Intelligent Manufacturing*, 16, 439–452.
- Cheikhrouhou, N., Piot, G. and Pouly, M., (2010). A multi-criteria model for the evaluation of business benefits in horizontal collaborative networks. *Journal of Intelligent Manufacturing*, 21(3), 301–309.
- Chengcheng, J., Congdong, L., (2011). Study on the Components of Supply Chain's Dynamic Capabilities. In *International Conference on Management and Service Science* (pp. 1-4).
- Christopher, M., (2016). *Logistics and Supply Chain Management* (5ta. Edición ed.). London: Prentice Hall.
- Christopher, M., Peck, H., (2004). Building the Resilient Supply Chain. *International Journal of Logistics Management*. 15, 1-13.
- Christopher, M., Lowson, R. and Peck, H., (2004). Creating agile supply chains in the fashion industry. *International Journal of Retail & Distribution Management*, 32(8), 367-376.
- Choi, T. Y., Wu, Z., (2009). Triads in supply networks: theorizing buyer-supplier-supplier relationships. *Journal of Supply Chain Management*, 45(1), 8-25.
- Colicchia, C., & Strozzi, F. (2012). Supply chain risk management: A new methodology for a systematic literature review. *Supply Chain Management*, 17(4), 403-418.
- Cooper, M. C., Lambert, D. M. and Pagh, J. D., (1997). Supply Chain Management: More Than a New Name for Logistics. *The International Journal of Logistics Management*, 1-14.
- de Moura, G. B., Saroli, L. G., (2020). Sustainable value chain management based on dynamic capabilities in small and medium-sized enterprises (SMEs). *International Journal of Logistics Management*.
- Dini, M., (2010). *Competitiveness, business networks and business cooperation*. Santiago de Chile: United Nations.

- Duarte Alonso, A., Kok, S. and O'Brien, S., (2020). Brexit, the wine sector and organisational resilience: an exploratory study of Spanish Wineries. *Review of International Business and Strategy*, 30(3), 301-322.
- Eisenhardt, K., Martin, J., (2000). Dynamic Capabilities: What Are They? *Strategic Management Journal*, 21(10-11), 1105-1121.
- Esper, T., Ellinger, A., Stank, T., Flint, D. and Moon, M., (2010). Demand and Supply Integration: A Conceptual Framework of Value Creation Through Knowledge Management. *Journal of Academy Marketing Science*, 38, 5-18.
- Fath, B., Fiedler, A., Sinkovics, N., Sinkovics, R. R. and Sullivan-Taylor, B., (2021). International Relationships and Resilience of New Zealand SME Exporters during COVID-19. *Critical perspectives on international business*, 359-379.
- FAO., (2015). Desarrollo de Cadenas de valor alimentarias Sostenibles - Principios rectores. In *Desarrollo de cadenas de valor*. <http://www.fao.org/3/a-i3953s.pdf>
- FAO, & CEPAL., (2020). *Análisis y respuestas de América Latina y el Caribe ante los efectos del COVID-19 en los sistemas alimentarios*.
- Fayos-Gardó, T., Calderón, H. and Almanzar, M., (2017). Dynamic capabilities in the internationalisation of agri-food companies and cooperatives embedded in clusters. *CIRIEC-España, Revista de Economía Pública, Social y Cooperativa*, 89, 5-31.
- Friday, D., Ryan, S., Sridharan, R. and Collins, D., (2018). Collaborative risk management: a systematic literature review. *International Journal of Physical Distribution & Logistics Management*, 48(3), 231-253.
- Friday, D., Savage, D.A., Melnyk, S.A., Harrison, N., Ryan, S. and Wechtler, H., (2021). A collaborative approach to maintaining optimal inventory and mitigating stockout risks during a pandemic: capabilities for enabling health-care supply chain resilience. *Journal of Humanitarian Logistics and Supply Chain Management*, 11(2), 248-271.
- Gagalyuk, T., Hanf, J. H., (2013). Framework of successful management of food supply chain networks in Central and East-European countries. *Management & Marketing*, 8(2), 283.
- Gai, P., Jenkinson, N. and Kapadia, S., (2007). Systemic Risk in Modern Financial Systems: Analytics and Policy Design. *Journal of Risk Finance*. 8(2), 156-165.
- García-Madurga, M.-Á., Esteban-Navarro, M.-Á. and Morte-Nadal, T., (2021). Covid Key Figures and New Challenges in the HoReCa Sector: The Way towards a New Supply-Chain. *Sustainability*, 13(12), 6884.
- Garzón Castrillón, M. A., (2015). Modelo De Capacidades Dinámicas. *Dimensión Empresarial*, 13(1), 111-131.
- Gereffi, G., Lee, J., (2014). *Economic and Social Upgrading in Global Value Chains and Industrial Clusters : Why Governance Matters*.
- George, G., Lakhani, K. and Puranam, P., (2020). What has changed? The Impact of Covid Pandemic on the Technology and Innovation Management Research Agenda. *Journal of Management Studies*.
- Graça, P., Camarinha-Matos, L. M., (2017). Performance indicators for collaborative business ecosystems — Literature review and trends. *Technological Forecasting and Social Change*, 116, 237–255.
- Hendry, L. C., Stevenson, M., MacBryde, J., Ball, P., Sayed, M. and Liu, L., (2019). Local food supply chain resilience to constitutional change: the Brexit effect. *International Journal of Operations and Production Management*, 39(3), 429-453.

- Herbane, B., (2013). Exploring Crisis Management in UK Small- and Medium-Sized Enterprises. *Journal of Contingencies and Crisis Management*.
- Ho, W., Zheng, T., Yildiz, H. and Talluri, S., (2015). Supply chain risk management: a literature review. *International Journal of Production Research*, 53(16), 5031-5069.
- Hong, J., Zhang, Y. and Ding, M., (2018). Sustainable supply chain management practices, supply chain dynamic capabilities, and enterprise performance. *Journal of Cleaner Production*, 172, 3508–3519.
- Isnaini, D. B. Y., Nurhaida, T. and Pratama, I., (2020). Moderating effect of supply chain dynamic capabilities on the relationship of sustainable supply chain management practices and organizational sustainable performance: A study on the restaurant industry in Indonesia. *International Journal of Supply Chain Management*, 9(1), 97-105.
- Ivanov, D., Tsipoulanidis, A. & Schönberger, J., (2019). *Global Supply Chain and Operations Management*. Switzerland: Springer, Cham.
- Jiang, C., Li, C., (2011). Study on the Components of Supply Chain's Dynamic Capabilities. *2011 International Conference on Management and Service Science*, 2011, 1-4.
- Ju, K. J., Park, B. and Kim, T., (2016). Causal relationship between supply Chain dynamic capabilities, technological innovation, and operational performance. *Management and Production Engineering Review*, 7(4), 6-15.
- Kampstra, R. P., Ashayeri, J. and Gattorna, J. L., (2006). Realities of supply chain collaboration. *The International Journal of Logistics Management*, 17(3), 312-330.
- Kano, L., (2017). Global value chain governance : A relational perspective. *Journal of International Business Studies*, 49(6), 684-705.
- Ketchen, D. J., Hult, G. T. M., (2007). Bridging organization theory and supply chain management: The case of best value supply chains. *Journal of Operations Management*, 25(2), 573-580.
- Klassen, R. D., Vachon, S., (2003). Collaboration And Evaluation In The Supply Chain : The Impact On Plant-Level Environmental Investment. *Production and Operations Management*, 12(3), 336–352.
- Lakhani, T., Kuruvilla, S. and Avgar, A., (2013). From the firm to the network: Global value chains and employment relations theory. *British Journal of Industrial Relations*, 51(3), 440-472.
- Leat, P., Revoredo-Giha, C., (2013). Risk and resilience in agri-food supply chains: the case of the ASDA PorkLink supply chain in Scotland. *Supply Chain Management*, 18(2), 219-231.
- Li, G., Lin, Y., Wang, S. and Yan, H., (2006). Enhancing agility by timely sharing of supply information. *Supply Chain Management*, 11(5), 425-435.
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., Clarke, M., Devereaux, P. J., Kleijnen, J. and Moher, D., (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate healthcare interventions: explanation and elaboration. *BMJ (Clinical Research Ed.)*, 339(1), 57–58.
- Lingegard, S., Lindahl, M., (2015). Integrated product service offering for rail infrastructure benefits and challenges regarding knowledge transfer and cultural change in a Swedish case. *Journal of Cleaner Production*, 98, 166-174.
- Lonial, S. C., Carter, R. E., (2015). The Impact of Organizational Orientations on Medium and Small Firm Performance: A Resource- Based Perspective. *Journal of Small Business Management* 53(1), 94-113.

- Macfadyen, S., Tylanakis, J., Letourneau, D., Benton, Y., Tiftonell, P., Perring, M., Gómez-Creutzberg, C., Baldi, A., Holland, J., Broadhurst, L et al. (2015). The role of food retailers in improving resilience in global food supply. *Global Food Security*, 7, 1-8.
- Mandal, S., Sarathy, R., Korasiga, V.R., Bhattacharya, S. and Dastidar, S.G., (2016). Achieving supply chain resilience: The contribution of logistics and supply chain capabilities. *International Journal of Disaster Resilience in the Built Environment*, 7(5), 544-562.
- Manos, B., Manthou, V., Vlachoupoulo, M. and Matopoulos, A., (2007). A Conceptual Framework for Supply Chain Collaboration: Empirical Evidence from The Agri-Food Industry. *Supply Chain Management*, 12, 177-186.
- Miles, R. E., Miles, G. & Snow, C. C., (2005). *Collaborative Entrepreneurship: How Communities of Networked Firms Use Continuous Innovation to Create Economic Wealth*. Palo Alto: Stanford University Press.
- Miranda Torrez, J., (2015). The Model of Dynamic Capabilities in Organizations. *Administrative Research*, 44(116), 1-18.
- Min, C., (2005). *Logistics and supply chain management: Creating value-added networks*. Pearson education.
- Mishra, R., Singh, R.K. and Subramanian, N., (2021). Impact of disruptions in agri-food supply chain due to COVID-19 pandemic: contextualised resilience framework to achieve operational excellence. *The International Journal of Logistics Management*.
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G. and The Prisma Group. (2010). Preferred reporting items for systematic reviews and meta-analyses : The PRISMA statement. *International Journal of Surgery*, 8, 336–341.
- Muñoz-Villamizar, A., Quintero-Araújo, C. L., Montoya-Torres, J. R. and Faulin, J., (2019). Short- and mid-term evaluation of the use of electric vehicles in urban freight transport collaborative networks: a case study. *International Journal of Logistics Research and Applications*, 22(3), 229–252.
- Olavarrieta, S., Ellinger, A. E., (1997). Resource-based theory and strategic logistics research. *International Journal of Physical Distribution & Logistics Management*, 27(9-10), 559-587.
- Padilla, R., (2017). *Política industrial rural y fortalecimiento de cadenas de valor Gracias por su interés en esta*. CEPAL.
- Pérez, C., (2012). Las revisiones sistemáticas: declaración PRISMA. *Revista Española de Nutrición Comunitaria*, 18(1), 57-58. Obtenido de Sitio web de Revista Española de Nutrición Comunitaria.
- Pettit, T.J., Fiksel, J. and Croxton, K., (2010). Ensuring Supply Chain Resilience: Development of A Conceptual Framework. *Journal of Business Logistics*. 31, pp: 1-21.
- Peteraf, M. (1993). The Cornerstones of Competitive Advantages: A Resource-Based View. *Strategic Management Journal*, 14, 179-191.
- Pisano, G., (2017). Toward a prescriptive theory of dynamic capabilities: Connecting strategic choice, learning, and competition. *Industrial and Corporate Change*, 26(5), 747-762.
- Polater, A., (2021). Dynamic capabilities in humanitarian supply chain management: a systematic literature review. *Journal of Humanitarian Logistics and Supply Chain Management*, 11(1), 46–80.

- Polyviou, M., Croxton, K.L. and Knemeyer, A.M., (2020). Resilience of medium-sized firms to supply chain disruptions: the role of internal social capital. *International Journal of Operations & Production Management*, 40(1), 68-91.
- Prahalad, C., Hamel, G., (1990). The core competence of the corporation. *Harvard Business Review*, 68, 79-91.
- Queiroz, M.M., Fosso Wamba, S. and Branski, R.M., (2021). Supply chain resilience during the COVID-19: empirical evidence from an emerging economy. *Benchmarking: An International Journal*.
- Rajaguru, R., Matanda, M. J., (2019). Role of compatibility and supply chain process integration in facilitating supply chain capabilities and organizational performance. *Supply Chain Management*, 24(2), 315-330.
- Rethemeyer, R. K., (2005). Conceptualizing and Measuring Collaborative Networks. *Public Administration Review*, 65(1), 117-121.
- Rollins, M., Pekkarinen, S. and Mehtälä, M., (2011). Inter-Firm Customer Knowledge Sharing In Logistics Services: An Empirical Study. *International Journal of Physical Distribution & Logistics Management*, 41(10), 956-971.
- Sabadka, D., (2015). New trends and challenges in automotive industry logistics operations. *Acta logistica*, 2(1), 15-19.
- Scholten, K., Schilder, S., (2015). The Role of Collaboration in Supply Chain Resilience. *Supply Chain Management*, 20, 471-484.
- Scholten, K., Sharkey, P. and Fynes, B., (2014). Mitigation Process: Antecedents for Building Supply Chain Resilience. *Supply Chain Management*, 19(2), 211-228.
- Silvestre, B. S., (2015). Sustainable Supply Chain Management in Emerging Economies: Environmental Turbulence, Institutional Voids and Sustainability Trajectories. *Intern. Journal of Production Economics*.
- Smallbone, D., Deakins, D. and Battisti, M., (2012). Small business responses to a major economic downturn: empirical perspectives from New Zealand and the UK. *Strategy Enterprise & Innovation*, 754-777.
- Soni, U., Jain, V. and Kumar, S., (2014). Measuring Supply Chain Resilience Using A Deterministic Modelling Approach. *Computers and Industrial Engineering*. 74, 11-25.
- Storer, M., Hyland, P., (2011). Reconfiguration or innovation in supply chains? *International Journal of Technology Management*, 56(2-4), 188-207.
- Teece, D. J., (1986). Profiting from technological innovation. implications for integration, collaboration and public policy. *Research Policy*. , 285-305.
- Teece, D. J., (2007). Explaining dynamic capabilities: The nature and micro-foundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319-1350.
- Teece, D. J., Pisan, G. and Shuen, A. M. Y., (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(March), 509-533.
- Tieman, M., (2017). Halal risk management: combining robustness and resilience. *Journal of Islamic Marketing*, 8(3), 461-475.
- United Nations Industrial Development Organization., (2001). *DEVELOPMENT OF CLUSTERS AND NETWORKS OF SMEs*. Vienna: The UNIDO Programme.
- Van Rijswijk, W., Frewer, L.J., (2008). Consumer perceptions of food quality and safety and their relation to traceability. *British Food Journal*, 110, 1034-1046.
- Vivas-Lopez, S., (2013). Implications of dynamic capabilities for competitiveness and innovation in the 21st century. *Cuadernillos admon.ser.organ Rev Javeriana*, 119-139.

- Weerawardena, J., Mort, G.S., Liesch, P.W. and Knight, G., (2007). Conceptualizing accelerated internationalization in the born global firm: a dynamic capabilities perspective. *Journal of World Business*, 42(3), 294-306.
- Wu, S., Melnyk, S. and Flynn, B., (2010). Operational Capabilities: The Secret Ingredient. *Decision Sciences*, 41(4), 721-754.
- Xiaoping, W., (2016). Food Supply Chain Safety Risk Evaluation Based on AHP Fuzzy Integrated Evaluation Method. *International Journal of Security and Its Applications*, 10, 233-244.
- Yuli Isnaini, D. B., Nurhaida, T. and Pratama, I., (2020). Moderating effect of supply chain dynamic capabilities on the relationship of sustainable supply chain management practices and organizational sustainable performance: A study on the restaurant industry in Indonesia. *International Journal of Supply Chain Management*, 9(1), 97-105.
- Zimmermann, R., Ferreira, L.M. and Carrizo, A., (2016). The Influence of Supply Chain on the Innovation Process: A Systematic Literature Review. *Supply Chain Management*, 21(3), 289-304.
- Zhiao, G., Liu, S. and Lopez, C., (2017). A Literature Review on Risk Sources and Resilience Factors in Agri-Food Supply Chains. *International Federation for Information Processing*, 739-752.
- Zsidisin, G., Henke, M., (2019). *Revisiting Supply Chain Risk*. Switzerland: Springer, Cham.

WPLYW ZDOLNOŚCI DYNAMICZNYCH ŁAŃCUCHA DOSTAW (SCDC) I WSPÓLPRACY POZIOMEJ NA ODPORNOŚĆ ŁAŃCUCHA DOSTAW NA ZRÓWNOWAŻONY ROZWÓJ MŚP W GOSPODARKACH WSCHODZĄCYCH

Streszczenie: Celem opracowanych badań jest rozpoznanie znaczenia i wpływu zdolności dynamicznych łańcucha dostaw (SCDC) we współpracy horyzontalnej jako istotnego czynnika łagodzenia ryzyka w łańcuchu dostaw, ale także przyczyniania się do zrównoważonego rozwoju MŚP zlokalizowanych w gospodarce wschodzącej, jeszcze bardziej w obliczu scenariusza po pandemii. Metodologia zastosowana do analizy konstruktywnej teoretycznych związanych z badaniem to deklaracja PRISMA. Zastosowano go przy użyciu kilku baz danych (Scopus i Web of Science) oraz konkretnych równań wyszukiwania, badając kilka soczewek związanych z dynamicznymi zdolnościami łańcucha dostaw (SCDC) jako adiuwant do tworzenia i promowania poziomych sieci współpracy (HCN). Zmniejsza ryzyko poprzez procesy współpracy między podmiotami w łańcuchu dostaw, rozwijając odporność. Rozważane soczewki to dynamiczny widok możliwości, odporność łańcucha dostaw i sieci współpracy. Wyniki badania pokazują, że sieci współpracy mogą wspierać zarządzanie ryzykiem w łańcuchach dostaw, które rozwijają tę praktykę. W ten sam sposób zdolności dynamiczne łańcucha dostaw (SCDC) można uznać za istotny czynnik stymulujący integrację między różnymi i egzogennymi aktorami łańcucha dostaw we współpracy horyzontalnej, a także uznając współpracę za jedną z najważniejszych dynamik łańcucha dostaw (SCDC) jako dobry sposób na zdynamizowanie ich łańcuchów dostaw, uniknięcie ryzyka i dobrą praktykę poprawy zrównoważenia korporacyjnego na rynkach wschodzących.

Słowa kluczowe: Dynamiczne możliwości łańcucha dostaw, współpraca pozioma, odporność łańcucha dostaw, zarządzanie ryzykiem, dynamiczny ekosystem możliwości

供应链动态能力 (SCDC) 和横向合作对供应链弹性对新兴经济体中小 企业可持续性的影响

抽象的。所开展研究的目的是认识到供应链动态能力 (SCDC) 在横向合作中的重要性
和影响, 作为降低供应链风险的相关因素, 同时也有助于促进位于中小型企业的可
持续发展。新兴经济体更面临疫情后的情况。用于分析与研究相关的理论结构的方法
是 PRISMA 声明。它使用多个数据库 (Scopus 和 Web of Science) 和特定搜索方程
来应用, 调查与供应链动态能力 (SCDC) 相关的几个镜头, 作为创建和促进横向协作
网络 (HCN) 的辅助手段。它通过供应链中参与者之间的协作过程来降低风险, 发展
弹性。考虑的镜头是动态能力视图、供应链弹性和协作网络。研究表明, 协作
网络可以支持发展这种做法的供应链中的风险管理。同样, 供应链动态能力 (SCDC
) 可以被认为是在横向协作中刺激供应链的不同和外生参与者之间整合的相关因素
, 也可以将协作视为最重要的供应链动态之一为中小企业开发能力 (SCDC), 作为
使其供应链活力化、规避风险的好方法, 并作为提高新兴市场企业可持续性的良好
做法

关键词: 供应链动态能力、横向协作、供应链弹性、风险管理、动态能力生态系统