Mapping the Nexus in the literature: The Influence of Entrepreneurial and Market Orientations on Supply Chain Agility

Mapeo del nexo en la literatura: la influencia de las orientaciones emprendedora y de mercado en la agilidad de la cadena de suministro

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Purpose – This study aims to map the relationship between entrepreneurial orientation (EO), market orientation (MO), and supply chain agility (SCA) from the operations perspective. An analysis of the most relevant manuscripts on the topic supposes a gap in the existing literature; thus, such an analysis was performed to evaluate consensus and discrepancies between scholars.

Design/methodology/approach – The literature review includes 13 papers published in Web of Science-indexed journals. These studies provide an overview of MO and EO on SCA. This review uses content analysis to map the nexus between these three capabilities.

Findings – The results indicate that the literature can be clustered in four areas: (a) MO and EO with supply chain agility, (b) MO and supply chain agility, (c) EO and supply chain agility, and (d) supply chain orientation and other orientations as a research niche. The literature confirms the dominance of EO and MO in achieving SCA and demonstrates their combined effect as a dual strategic orientation in an organization.

Originality/value – This study provides value to both researchers and policymakers in the areas of strategic management and supply chain by presenting the links between EO, MO, and SCA in a systematic and structured manner. In addition, it comprehensively identifies the gaps in previous research and provides avenues for future research.

Keywords: Systematic literature review, Entrepreneurial orientation, Market orientation, Supply chain orientation, Supply chain agility

Propósito – Este estudio tiene como objetivo mapear la relación entre la orientación emprendedora (OE), la orientación al mercado (OM) y la agilidad de la cadena de suministro (ACS) desde la perspectiva de las operaciones. Un análisis de los manuscritos más relevantes sobre el tema supone una brecha en la literatura existente; por lo tanto, se realizó dicho análisis para evaluar el consenso y las discrepancias entre los académicos.

Diseño/metodología/enfoque – La revisión bibliográfica incluye 13 artículos publicados en revistas indexadas en la base de datos Web of Science. Estos estudios proporcionan una visión general de la OE y la OM en la ACS. Esta revisión utiliza el análisis de contenido para trazar el nexo entre estas tres capacidades.

Hallazgos – Los resultados indican que la literatura puede agruparse en cuatro áreas: (a) OE y OM con ACS, (b) MO y ACS, (c) EO y ACS, y (d) orientación de la cadena de suministro y otras orientaciones como nicho de investigación. La literatura confirma el predominio de la OE y la OM en la consecución de la ACS y demuestra su efecto combinado como doble orientación estratégica en una organización.

Originalidad/valor – Este estudio aporta valor a los académicos y a los formuladores de políticas en los ámbitos de la gestión estratégica y la cadena de suministro al presentar los vínculos entre la OE, la OM y la ACS de forma sistemática y estructurada. Además, identifica las brechas de la investigación previa y proporciona vías para futuras investigaciones.

Palabras clave: Revisión sistemática de la literatura, Orientación emprendedora, Orientación al mercado, Orientación de la cadena de suministro, Agilidad de la cadena de suministro.

1. Introduction

Entrepreneurial orientation (EO) is an important and widely studied concept in the field of entrepreneurship (Wales et al., 2011), despite the efforts to build new equivalent constructs within strategic management research (Anderson et al., 2018). Thus, the conceptualization of EO (Covin & Slevin, 1989; Lumpkin & Dess, 1996; Miller, 1983) refers to a dynamic capability formed by multiple lower dimensions, which is highly influenced by the context and culture (Rauch et al., 2009). Research on EO has continuously expanded (Covin & Lumpkin, 2011) throughout different contexts, realities, industries, and cultures, especially given its effect on organizational performance (Rauch et al., 2009) and, more recently, on supply chain orientation (Aslam et al., 2020). Moreover, market orientation (MO) has become a key capability as it reflects the firm's ability to consider the rapid changes in market conditions and appropriately address them while sustaining performance. Consequently, it refers to a firm's set of activities to develop and interiorize market information, which serves as knowledge, reflecting current and predicted future needs of customers, across all functional units (Jaworski & Kohli, 1993; Gligor et al., 2020). Among different scholars, Gligor et al. (2016) support the view that there is a need to investigate the role of this orientation in achieving supply chain agility (SCA).

These capabilities have attracted the attention of operations scholars through their role as constructs, for instance, as moderators or direct variables affecting SCA (Müller et al., 2023). However, these studies still represent a minority in the existing literature. Indeed, a niche in the literature confirms that firms' SCA exhibits a high degree of EO and MO as dynamic capabilities that, consequently, can impact different aspects of competitive advantage, such as firm performance (Gligor et al., 2020), return on assets or ROA (Gligor et al., 2019), ad hoc supply chains (Müller et al., 2023), among others. In that regard, a firm's SCA is defined as the "capability of the firm, both internally and in conjunction with its key suppliers and customers, to adapt or respond speedily to marketplace changes as well as to potential and actual disruptions, contributing to the agility of the extended supply chain" (Braunscheidel & Suresh, 2009, p. 119). SCA enhances business performance by making a firm more sensitive to market changes, thus, rapidly meeting customers' demands. Eventually, this also impacts on customer satisfaction (Zhu & Gao, 2021). Recent works such as that of Susitha et al. (2024) recognize emerging areas in supply chain competitive performance, where the absence of agility in the supply chain can critically weaken a company's competitiveness (Baah et al., 2022). Despite its importance, there has been limited theory development regarding the background and the impact of supply chain agility at the firm level, given that most studies have been primarily at the operations level (Gligor et al., 2016).

The Dynamic Capability Perspective (DCP) has emerged as an important theoretical perspective that helps organizations develop capabilities to deal with uncertain environments (Teece et al., 1997; Gupta et al., 2021). Moreover, the Resource Based View (RBV) perspective has been suggested to help explain the competitive advantage of firms in changing environments (Barney, 1991; Teece & Pisano, 1994). Despite this growing interest in EO and MO, and its impact on supply chain agility, especially from the DCP, the manuscripts are primarily focused on a single orientation, while the analysis of the

aggregate orientations in different types of studies is a gap in the literature. Additionally, the literature on the effects of EO, its dimensions, and MO on SCA is not consistent throughout as it lacks systematization and further analysis. Consequently, given that organizations must deal with different challenges to improve their performance, especially given disruptive situations such as the previous COVID-19 pandemic (Müller et al., 2023), the importance of SCA in an increasingly uncertain and changeable world is highlighted in this study. In this regard, by understanding how the relationships between EO, MO, and SCA work, the research around EO and MO with regards to SCA can be clustered; hence, several research streams can be proposed.

Accordingly, the purpose of the following systematic literature review is to seek answers to the following research questions:

RQ1: What is the current state of literature on EO and MO in relation to SCA?

RQ2: How is the literature about EO and MO concerning SCA concentrated?

The remainder of the paper is organized as follows. First, the theoretical background is presented; then, the methodological approach used to conduct the literature review is detailed. Subsequently, the findings are presented to give answers to the research questions. Finally, these answers are discussed, and conclusions are proposed.

2. Theoretical background

EO reflects the processes that decision-makers follow to define strategies for achieving organizational purposes, maintaining the vision, and creating competitive advantages for the organization (Rauch et al., 2009). Among the many important authors in the EO literature, the key contributors are Lumpkin, Payne, Short, Covin, Dess, and Wiklund. Moreover, different streams of research are linked to the EO concept, such as strategy and entrepreneurship, family business, and miscellaneous works in marketing (Andrade-Valbuena et al., 2019). Coming from the three most accepted dimensions of EO, innovativeness is crucial to identify and make connections that others might overlook, enabling the creation and offering of products and services with a certain degree of novelty and uniqueness for society. Proactiveness enables individuals to plan on projects anticipating future problems, needs, or changes; and risk-taking, through more risky business models, pushes firms to be more receptive to external environment changes (Covin & Lumpkin, 2011; Martins et al., 2022).

A specific approach to EO is Green Entrepreneurial Orientation (GEO), which relates to firm behavior at risk-taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy (Covin & Miller, 2014), and has a positive impact on a firm's financial and environmental performance (Jiang et al., 2018). GEO refers to the predisposition to pursue opportunities with economic and ecological benefits through eco-friendly products and services (Dean & McMullen, 2007). As a strategic construct, it encompasses dimensions such as green innovativeness, proactiveness, and risk adoption, enabling a transformation of existing organizational capabilities (Jiang et al., 2018). Drawing from the DCP, GEO plays a pivotal role in navigating highly uncertain environments, aiming to generate both economic and ecological benefits (Meirun et al., 2020). While the traditional concept of EO encompasses sustainable and socially responsible practices (Covin & Wales, 2012),

the literature recognizes that EO—at the individual and organizational levels—can perform better as a determinant of sustainable change (Altantsetseg et al., 2020). Hence, the individual level of the EO construct—named Individual EO (IEO)—has gained increased attention for having a direct impact on the measurement of the traits and attitudes of entrepreneurs (Bolton & Lane, 2012). Similarly, International Entrepreneurial Orientation is another approach to EO, which refers to the exploration of the EO phenomenon in an international context (Covin & Miller, 2014). More recently, EO has been proven as the main category of the high strategic orientation called Sustainable Entrepreneurial Orientation (SEO) (Criado-Gomis et al., 2017; Hernández-Perlines & Rung-Hoch, 2017; Lazarte-Aguirre, 2024).

Regarding MO, this construct represents a higher-level dynamic capability, which can amplify the organization's sensing capacities (Kohli & Jaworski, 1990). As a firm's capability, MO empowers organizations to cultivate market intelligence, comprehending shifts in their business landscape. It also encompasses activities within the marketing process, focusing on three key pillars: intelligence generation, dissemination, and responsiveness (Kohli et al., 1993). Furthermore, MO is part of the organization's culture as it aggregates a set of three behaviors: customer orientation, competitor orientation, and inter-functional coordination (Narver & Slater, 1990). Slater and Narver (1995) define MO as "the culture that (1) places the highest priority on profitable creation and maintenance of superior customer value while considering the interests of other stakeholders; (2) provides norms for behavior regarding the organizational development and responsiveness to market information" (p. 67). By facilitating market intelligence generation, MO enables organizations to grasp changes in their business environment and mobilize internal resources accordingly (Foerstl et al., 2020). Consequently, organizations with MO can tap into extensive data and information on market dynamics.

3. Methodology

This study includes a literature review and a descriptive analysis of the manuscripts that complement the former; by using the Web of Science database, the inclusion of high-quality articles was ensured. This approach is especially advantageous in fields characterized by multi-dimensional and complex phenomena (Cobo et al., 2011). Consequently, to identify eligible studies, a specific search string was used. Only those articles that fell within the scope of the study definition and scope were considered. Thus, the request was limited to the specific words by the definition of the following search strategy: [("entrepreneurial orientation" OR "sustainable entrepreneurial orientation" OR "green entrepreneurial orientation") AND "market orientation" AND "supply chain agility"]. It is important to mention that, with the same query string, the results in the Scopus database were found in the Web of Science results. This concrete and delimited exploration helped concentrate the results on the specific construct focus of this paper. A preliminary data set of 30 entries was generated by the query. The articles were from Q1 to Q3 journals and included publications from 2009 to 2023.

The second step was conducting the systematic review through the PRISMA method, which focuses on a question formulated through systematic and explicit methods to identify, select, and analyze data from studies associated with a research topic. Thus, the identification phase was devoted to defining the inclusion criteria for the documents to be used in the systematic review, and then to perform the manual analysis and selection of each document. Moreover, all the articles were written in English. As the number of manuscripts with the complete theme of the search was scarce in this phase of the PRISMA process, it was decided to include not only articles but also editorial papers, which accounted for one. Next, the exclusion criteria were defined. Articles that could not be accessed were excluded, which was not the case in this study. In the screening phase, each article was thoroughly reviewed: title, abstract, and keywords, excluding seven articles. Finally, the full articles were reviewed, leaving ten of them. The entire process resulted in the inclusion of 13 articles for the literature review, the details of which are provided in Figure 1.

Figure 1. PRISMA flowchart



Source: Own elaboration

The third step entailed a rigorous, critical reading of each selected manuscript to develop a comprehensive understanding of the existing research landscape. To systematically organize and track the extracted information, an Excel template was created to catalog critical data points from each paper, such as author information, publication year, study objectives, theoretical perspectives, methods, and findings. This template functioned as an organized database, facilitating the summarizing of findings across multiple studies by enabling the identification of patterns, themes, and gaps in the literature. The fourth and final step involved a formal systematic literature review of the selected manuscripts, adhering closely to established guidelines as outlined by Liberati et al. (2009). This methodical approach ensured transparency and rigor, as each piece of structured information was systematically categorized and analyzed. Through this process, insights were extracted and grouped into coherent thematic clusters, which represent the core areas of interest within the literature. First, attention was given to the basic numerical analysis of the size and distribution of the studies (Section 4.1); then, the literature was organized into different clusters or categories as part of the content analysis (Section 4.2). The clustering approach allows for a deeper analysis of recurring themes and nuanced distinctions between studies, providing a robust framework for discussing cumulative knowledge and future research directions (Arksey & O'Malley, 2005). The specific findings and interpretations of these clusters offer a structured presentation of the literature's contributions and identify potential avenues for further investigation.

4. Findings

4.1. Descriptive analysis

Before the literature review, the manuscripts were analyzed in terms of journals, citations, and authors. For academic journals, the 13 articles were published in 12 different journals. The Journal of Operations Management has two publications, while the remaining journals each have one publication. Among all the articles published between 2009 and 2023, the most cited was the one by Michael Braunscheidel and Nallan Suresh, published in 2009, with 714 citations, entitled "The organizational antecedents of a firm's supply chain agility for risk mitigation and response". This study investigated the impact of two cultural antecedents—market orientation and learning orientation—and three organizational practices, all aimed at augmenting the supply chain agility of a firm. In terms of the number of publications, David M. Gligor contributed to three articles, while Mary C. Holcomb, Javad Feizabadi, and Michael Maloni each published two articles. The remaining authors each published one article. Most of the manuscripts are from the past five years, with a peak in publications in 2020, with no specific geographic focus.

4.2. Content analysis

The final part of this research comprises a literature review related to EO, MO, and SCA. Based on the reviewed literature, Figure 2 contains a figure that connects the different variables such as EO, MO, and SCA. From the analysis of the 13 manuscripts, four clusters emerged: (a) MO and EO with supply chain agility, (b) MO and supply chain agility, (c) EO and supply chain agility, and (d) supply chain orientation and other orientations as research niche. The systematic literature review helped clarify the content of each cluster, which will be explained as follows:

Figure 2. Connections between variables



Source: Own elaboration. The figure shows the connections between EO and its dimensions, MO, and other orientations related to SCA, as well as the impact of SCA on different organizational outcomes. The colors correspond to the associated reference displayed in the grey block.

4.2.1. EO and supply chain agility

Among the selected manuscripts, most articles belong to the first cluster, which aggregates works that discuss EO as an antecedent of SCA. Starting with the study of Chen (2019), the author explored and demonstrated that both IT integration and inter-organizational trust in supply chain members significantly enhance supply chain agility and innovativeness, a dimension of EO, and thus have a considerably positive effect on a firm's competitive advantage. While this study does not directly connect EO and SCA, it is one of the first approaches that proposed a novel perspective of one of the EO dimensions, along with the SCA, on performance. In addition, results showed that higher SCA-built by supply chain members through demand visibility, flexible and quick response, and synchronized operations, as well as the ability to effectively integrate the supply chain and forge long-term relationships with customers and suppliers-tends to encourage the growth of competitive advantage. Moreover, the higher the innovativeness, understood as trying new ideas, seeking creative methods, and introducing new processes in the supply chain context, the higher the competitive advantage. Then, in a rapidly changing environment, firms should foster supply chain agility, detect changes in market demands, strengthen market responseability, acquire resources and skills, lower production costs, seek customer satisfaction, and remove non-value-adding activities to maintain a competitive position.

In a revealing editorial commentary, Ketchen and Craighead (2020) explored how the boundaries of key entrepreneurship concepts, such as EO, could be extended to the supply chain context. By extending the EO concept to supply chain management, they wonder how supply chain activities should take advantage of autonomy, innovativeness, risk-taking, proactiveness, and competitive aggressiveness, which are the accepted dimensions of EO (Lumpkin & Dess, 1996). Following the previous study, Aslam et al. (2020) assessed dynamic supply chain capabilities such as market sensing, SCA, and supply chain adaptability, following previous works by Gligor et al. (2020). They proposed that EO, with its theoretical dimensions, impacts these dynamic capabilities, one of which is SCA. Innovativeness generates novel ideas from suppliers, which are then matched with the firms' knowledge. Proactiveness refers to a firm's forward-looking behavior and its efforts to gain the first-mover advantages that shape the marketplace by introducing new products; while risk-taking supposes devoting more resources to projects with uncertain results, as well as entering new markets given potential opportunities (Lumpkin & Dess, 1996). Consequently, a weak direct effect was found between EO and SCA, and, contrarily, a mediation effect of supply chain learning orientation (SCLO) was confirmed. The last cluster will further explain the relationship between SCLO and SCA.

In the only qualitative research, Müller et al. (2023) confirmed firms build ad hoc supply chains when they evidence SCA, with temporary orientation acting as moderator in this relationship. Moreover, SCA, in their proposed model, is triggered by specific internal and external capabilities using dynamic capabilities, when EO acts as a moderator. This study presents a different approach to dynamic capabilities compared to the supply chain dynamic capabilities proposed by Aslam et al. (2020). For the former, dynamic capabilities are valuable operational capabilities to develop tasks in a changing environment and contribute to firms reaching SCA by reconfiguring internal and external capabilities in response to what is required to build ad hoc supply chains. Meanwhile, for the latter, dynamic supply chain capabilities are "a learned pattern of cross-organizational activities that facilitate the creation of new static capabilities or the modification of existing capabilities across multiple supply chain members" (Defee & Fugate, 2010, p. 187). In other words, the criterion of Aslam et al. (2020) that considers SCA to be a dynamic capability was rejected by Müller et al. (2023), who claimed, based on empirical evidence for the conceptual distinction of constructs, that SCA enables a firm to respond quickly to an environmental change, whereas dynamic capabilities allow companies to change by reconfiguring operational capabilities.

Despite the previous explanation, Müller et al. (2023) affirm that there is a strong connection between dynamic capabilities and SCA, as noted by Teece et al. (2016). Dynamic capabilities aid in ad hoc problem-solving, especially under time constraints. Firms with entrepreneurial traits can swiftly deploy these capabilities through proactive, risk-taking, and aggressive behaviors, maximizing internal and external resources. This aligns with Khan et al. (2023), who found that proactiveness significantly impacts SCA. However, innovativeness and strategic autonomy do not contribute to this agility, contrary to Chen's (2019) findings. Khan et al. (2023) further explored international EO and found a positive link between SCA and export performance. Proactiveness, a key aspect of international EO, involves preemptive actions against competitors, highlighting the need for supply chain managers to make proactive decisions that enhance export operations and SCA, reducing lead times and improving product quality in new markets. From these findings, a hypothesis for future research can be proposed:

Proposition 1: Despite the divergent results, EO, with its different theoretical dimensions, can indeed have a positive impact on SCA, and, at the same time, this can influence firm performance. To this end, they do not only rely on EO, but they also rely on different dynamic capabilities as antecedents, even though the literature is not conclusive.

4.2.2. MO and supply chain agility

This cluster focuses on the impact of MO on SCA. SCA is crucial for firms to respond in real-time to changing customer needs, as seen during the COVID-19 pandemic (Müller et al., 2023). Braunscheidel and Suresh (2009) modeled the effects of MO and LO on SCA through organizational practices, finding that MO significantly influences internal integration, external integration, and flexible practices. Internal integration improves inter-departmental coordination, while external integration aligns firms with customers and suppliers to better meet market demands. External flexibility helps firms adapt to market changes efficiently. Among these practices, external integration was the strongest predictor of SCA, followed by flexibility and internal integration. Gligor et al. (2016) also found that increased MO enhances SCA, linking MO, SCO, and SCA. Their work highlights the importance of collaboration between supply chain and marketing managers to optimize SCA in line with MO.

Following the previous study, Gligor et al. (2019) evaluated MO and SCA in a resource framework that makes agility the key mediating variable that drives firm financial performance, measured by ROA. The results show that, despite all three dimensions interacting with MO within the framework, the dimensions of environmental uncertainty serve as moderators in the resource orchestration process. Indeed, environmental uncertainty is an adequate indicator of the necessity for firms to rely on MO. When a market is characterized by high environmental uncertainty, firms should make strategic investments in resources that capture market intelligence. Therefore, under sensitive levels of environmental uncertainty, MO can be leveraged more effectively to gather greater financial performance through orchestrating resources that enhance the firm's SCA. Munificence, defined as the environment's ability to support sustained growth-thus, in a munificent environment there is a capacity for growth (Aldrich, 1979)—is the only dimension of uncertainty that does not have a moderating effect when MO directs resources to orchestrate SCA. The findings suggest that when firms leverage MO to enhance the SCA, they benefit financially, regardless of whether they operate in munificent or less munificent environments. Consequently, there is no additional benefit in mobilizing resources from MO to leverage SCA in highly munificent environments.

In the third study by Gligor et al. (2020), they presented four recipes to achieve high levels of firm performance, including agility, adaptability, alignment, and MO, as well as agility, alignment, MO, and SCO. Each of these solutions often aligns with existing literature yet contradicts other studies. For instance, the first solution emphasizes the importance of a strategic foundation in MO for the triple-A supply chain, which is logical given how MO focuses on capturing demand-side intelligence to understand customer needs. This, at the same time, would directly support both short-term response (i.e., agility) and long-term response (i.e., adaptability). However, this solution lacks the need for SCO that establishes the importance of a system view of the chain both internally and with supply chain partners (Min et al., 2007). The second solution contradicts existing triple-A literature, revealing that all three A's are unnecessary for organizational performance. This explains that firms do not need adaptability, which could decrease from market conditions, but do need MO and SCO to underly agility and alignment capabilities. In this sense, further studies should assess which market conditions are necessary for this to be effective. Based on the analyzed articles, a hypothesis can be proposed to guide future research:

Proposition 2: MO in firms can positively impact SCA, and, at the same time, can improve financial performance. Overall, MO and SCO are necessary to underline agility and alignment capabilities, yet more studies are required to assess which market conditions are necessary for this combination to be effective.

4.2.3. MO and EO with supply chain agility

The third cluster aggregates the manuscripts on the simultaneous impact of EO and MO on SCA. Adopting a multi-unit study of different tourism supply chains, Mandal and Saravanan (2019) proposed that, from an EO perspective, risk-taking behavior helps firms to develop risk mitigation strategies, which, at the same time, can provide a rapid response to disruptions, i.e., agility. Moreover, this is the only study that assessed multiple strategic orientations, as it will be further explained in the next cluster. Given that EO primarily centers on ensuring business sustainability by taking necessary risks in launching new products and services, responding to customer demands, and ensuring uninterrupted client services, the study suggests that EO positively influences SCA. Furthermore, results showed that MO does enhance SCA as it provides an orientation to respond to customers' requirements and market changes positively.

Following a multilevel approach and a cross-disciplinary analysis of the literature, Golgeci et al. (2020) highlighted EO and MO as two critical triggers to achieve SCA in firms. The authors' proposals are based on the recent attention given to the role of these strategic orientations as precursors of SCA, in a manner similar to how Gligor et al. (2016) approach it. Notably, this contributes to the discussion around the firm's agility by introducing EO as a potential firm-level driver of SCA. The rationale stems from the shared characteristics of agility and entrepreneurship, notably alertness and dynamism, which have been somewhat overlooked in the individual research on these core concepts (Gligor, 2013; Rauch et al., 2009). By incorporating EO, the range of strategic orientations capable of catalyzing SCA has been broadened. This suggests that EO and MO may complement each other and are necessary in synergy, rather than relying on just one capacity, particularly in dynamic and hypercompetitive environments where customers hold increasing power and sophistication amidst unprecedented external turbulence.

Raj et al. (2023) introduced supply chain hyperagility (SCH), as an extension of SCA. This is conceptualized as a stage where, due to immense pressure, organizations' supply chains are completely disrupted, leading to the failure of operations if they fail to successfully reconfigure themselves to respond to these disruptions. For instance, the pandemic was considered a disruption that gave place to SCH as an extraordinary version of SCA. Consequently, a hyperagile supply chain can potentially accelerate design, production, and delivery processes within a very short timeframe to survive the time pressure, referring to the capability of a supply chain that fulfills immediate, time-limited, and extremely high demands, as Müller et al. (2023)—in the first cluster—proposed in their theoretical model. The findings of the study suggest that EO and MO are not directly linked with SCH; rather, they influence this capability through supply chain integration, which is a dynamic capability that encourages organizations to find new value-creation methods under unexpected situations (Jajja et al., 2018). Based on the analyzed articles, a hypothesis can be proposed to guide future research:

Proposition 3: EO and MO act as complements to achieve a firm's SCA. Therefore, their simultaneous use can help firms improve their agility in the supply chain process, which, at the same time, can foster competitive advantage as performance, for instance. Furthermore, a venue for future research relies on the evaluation of EO and MO on SCH, without the mediation role of supply chain integration.

4.2.4. Supply chain orientation and other orientations as research niche

Several studies from previous clusters were grouped here to emphasize the emerging concept of supply chain orientation (SCO). Defee and Fugate (2010) suggested that SCO and SCLO are key antecedents of dynamic supply chain capabilities, as studied by Aslam et al. (2020). SCLO refers to the mindset of firms, customers, and suppliers in managing learning processes and sharing knowledge on supply chain issues (Flint et al., 2008). SCO goes beyond a systems focus, requiring firms to align organizational structures, including design, people, systems, and incentives (Esper et al., 2010; Gligor et al., 2020). To achieve a high level of SCA, firms must develop SCO alongside market orientation (Gligor et al., 2016). Moreover, the literature suggests that SCO is essential for pursuing advanced supply chain competencies (Esper et al., 2010). In some cases, SCO alone can enhance organizational performance, as tied to operational, customer, and organizational outcomes (Gligor, 2014; Min et al., 2007), making SCO a key driver of high performance (Gligor et al., 2020).

Mandal and Saravanan (2019) supported SCO as a dominant orientation that fosters effective supply chain relationships, enabling firms to respond quickly to customer demands and develop risk mitigation strategies. SCO helps improve coordination and streamline activities through real-time information sharing. They also examined the impact of learning orientation (LO) and technology orientation (TO) on SCA. While LO was expected to help firms address challenges and environmental uncertainties, the study found it to be an insignificant enabler of SCA, but a key contributor to supply chain resilience, which relies on collaboration, agility, risk awareness, and flexibility. In contrast, TO was found to positively enhance SCA by supporting strategies for greater responsiveness to customer demands and disruptions. Similarly, Braunscheidel and Suresh (2009) found that LO significantly impacts internal integration, the third stage of supply chain integration, but not external integration or flexibility, highlighting its role in managing goods inputs and outputs efficiently (Stevens, 1989).

Gligor et al. (2019) confirmed that SCO is a key orientation that helps firms leverage resources to support SCA. In uncertain environments, SCO enhances financial performance by orchestrating resources to strengthen SCA. As noted earlier, MO determines the agility needed to meet customer expectations, while SCO informs the supply chain capabilities required. Together, they guide firms in optimizing agility for better financial results. Zhu and Gao (2021) found that both LO and TO positively impact SCA. Learning-oriented firms gain insights into customer preferences, competitors, and technologies, while technology-oriented firms focus on R&D to develop hard-to-imitate products, aligning with the RBV. These orientations enhance internal capabilities and adaptability, driving supply chain improvements. From these insights, a hypothesis for future research can be proposed:

Proposition 4: SCO is a potent orientation that is more crucial than other orientations, such as MO, for achieving SCA. Moreover, LO and TO can enhance SCA though not in all cases. Therefore, future research is needed to explain these inconsistencies.

5. Discussion

The findings of the systematic literature review confirmed the importance of evaluating the relationships between EO, MO, as well as other orientations, on SCA. Results from the systematic literature review stressed out that strategic orientations such as EO, MO, SCO, LO, and TO influence a firm's SCA or SCH, consequently impacting competitive advantage in different ways (i.e., export performance, financial performance, ROA, ad hoc supply chains, among others). Despite the number of studies assessing these complex relationships, as Figure 2 details, there are other interesting independent variables assessed in the manuscripts such as IT integration, trust, environmental orientation, and supply chain learning, as well as dependent variables such as organizational practices, market sensing, supply chain adaptability, flexibility, managers' decisiveness, and supply chain resilience, which can be translated into future streams of research.

Concerning the theoretical findings of the research, several interesting topics emerged as well. First, by exploring the antecedents of EO and MO concerning SCA, the understanding of how these organizational orientations influence the ability of firms to adapt and respond quickly to changes in the market and business environment has been enhanced. In that sense, as the literature confirms, EO refers to a firm's strategic orientation which leads to a propensity to engage in entrepreneurial activities, characterized by innovativeness, proactiveness, risk-taking, autonomy, and competitive aggressiveness. Firms with a high EO tend to be more innovative and proactive in identifying and exploiting new market opportunities. Furthermore, firms with a high EO are more willing to take risks and experiment with new approaches, technologies, and partnerships, which can translate into a more agile supply chain capable of quickly adapting to changing market conditions and customer demands.

MO emphasizes the importance of understanding and responding to customer needs and preferences, through its components of customer orientation, competitor orientation, and inter-functional coordination. Firms with a high MO continuously gather market intelligence, disseminate it internally, and respond to it effectively. MO also fosters closer collaboration with key supply chain partners, such as suppliers and distributors, enabling faster information sharing and coordinated responses to market changes or disruptions. Therefore, a market-oriented firm is better equipped to understand customer preferences, anticipate market trends, and align its supply chain processes accordingly. Thus, by continuously gathering market intelligence and feedback, firms can better forecast demand and adjust their supply chain activities in real-time, improving responsiveness and agility. In summary, both EO and MO can significantly contribute to SCA by fostering a culture of innovation, customer-centricity, and proactive decision-making within an organization. By leveraging these orientations effectively, firms can enhance their ability to sense and respond to changes in the market environment, gaining a competitive advantage in today's dynamic business landscape.

Second, as SCA involves flexibility, responsiveness, and adaptability in responding to market changes and disruptions, its antecedents extend beyond EO and MO. For example, LO fosters continuous learning, enabling firms to acquire new knowledge and skills, which, as confirmed by recent studies, positively impacts SCA by encouraging adaptive behavior. Similarly, TO drives firms to embrace technological advancements, enhancing agility through automation, real-time data sharing, and predictive analytics. In addition to LO and TO directly influencing SCA, SCA also mediates their relationship with business performance, as shown by Zhu and Gao (2021), acting as a bridge between strategic orientations and improved outcomes. Furthermore, the SCO-SCA relationship is crucial for understanding how firms structure and manage supply chains to respond to market shifts. By aligning processes, fostering collaboration, leveraging technology, and managing risks, SCO strengthens agility, providing a competitive edge in dynamic markets. In conclusion, EO, MO, LO, TO, and SCO are vital in shaping SCA, helping organizations navigate changing markets more effectively.

Third, it is possible to identify two emergent and novel findings regarding EO as a dynamic capability that can influence SCA, as proved throughout the present review. First, SCLO was found to be an outcome of EO with empirical data, thus, going beyond the traditional outcome of EO on firm performance (Aslam et al., 2020). Consequently, this contributes to the EO literature, which mostly has focused on the different configurations of EO to have a positive and significant effect on performance. Second, the study of Manda and Saravanan (2020) proved that EO is also an antecedent of supply chain resilience, which supposes a research opportunity because resilience is understood as an adaptive capacity of firms belonging to a supply chain to respond to disruptions proactively, and, at the same time, maintaining coordination and control over operations and infrastructure (Roy et al., 2016). Further research should consider other antecedents of supply chain resilience, outside the tourism industry of the above-mentioned study.

Fourth, research that assesses EO also evaluates its dimensions; thus, in doing so, some dimensions evidence a stronger impact on SCA, such as proactiveness (Khan et al., 2023). Although autonomy and innovativeness were not identified as variables of the moderating role of EO between dynamic capabilities and SCA (Müller et al., 2023), innovativeness was indeed found to have an impact on competitive advantage, together with SCA (Chen, 2019). In addition, larger efforts have been paid to the assessment of dynamic capabilities, such as EO and MO, on SCA, but only one study drifts apart from this statement and affirms that SCA is, in fact, another dynamic capability on its own (Aslam et al., 2020). Accordingly, for these authors (Aslam et al., 2020), SCA as a dynamic capability allows firms to change by reconfiguring operational capabilities, while for others, such as Müller et al. (2023), SCA enables a firm to respond quickly to an environmental change, using dynamic capabilities to that end. These contradictory results need to be further assessed to avoid divergence of research streams in the SCA literature from the DCP.

6. Conclusions and implications

To summarize, by identifying and reviewing the most influential manuscripts relating to EO, MO, and SCA, the existing knowledge has been systematized, clustered, and analyzed. This is the main theoretical contribution of this research. Hence, it was confirmed that three main clusters exist in the research on EO, MO, and SCA, and another one was identified regarding other strategic orientations that, in some way, mingle in different studies with the first two. From a practitioner-oriented standpoint, it is possible to conclude that supply chain managers, operation managers, and strategists should always monitor the organizational environment that surrounds firms to make the necessary changes and, therefore, deliver customer-wanted products or services, ensure customer satisfaction and, overall, avoid negative impacts on performance. Whether SCA is among the firms' strategies, decision-

makers should avoid finding themselves without market knowledge and customers' insights to develop new strategies, to cope with the demands of the globalized world.

The literature review highlights the clear dominance of EO and MO in achieving SCA and demonstrating a dual strategic orientation within organizations. Additionally, there is potential for further study on the antecedents of supply chain resilience, as this adaptive capacity enables firms to respond proactively to disruptions while maintaining coordination and control. A significant gap in the literature remains in the assessment of operational concepts and sustainability. For instance, Kazancoglu et al. (2022) are among the few to address sustainability and resilience in global supply chains, focusing on flexibility, agility, and responsiveness, yet lacking a distinct sustainability construct that could influence agility. Cantele et al. (2023) explored combinations of sustainability practices and SCA, confirming through resource orchestration theory that various paths to sustainability can lead to high performance. However, these studies often appear in environmental rather than operations journals, indicating a need for more research in this area. Ultimately, achieving sustainable supply chains amidst scarce resources can help firms optimize financial, social, and environmental performance.

From a practitioner-oriented standpoint, it is possible to conclude that decisionmakers, managers, and operations strategists should always monitor the alignment between EO, MO, and SCA, in any given context, especially those that are turbulent and uncertain. When EO and MO are among the firms' resources, decision-makers should avoid finding themselves without market knowledge and customer insights to develop new strategies, especially if they intend to keep up with the changes in the supply chain, as mentioned before. To enhance the effectiveness of risk-taking and entrepreneurial efforts, and to adapt or respond speedily to marketplace changes, businesses need to take into account context-specific elements when crafting their EO and MO strategies. Emphasizing logical decision-making processes through EO and MO along with fostering SCA can help promote rapid supply activities. Additionally, in the framework of the 2023 Agenda, firms should strategically incorporate social and environmental initiatives to maximize long-term advantages and rely on SCA to enable them to respond quickly to environmental change.

7. Limitations and future research agenda

Based on the research propositions derived from each of the clusters, the potential research questions are as follows: Along with EO, what other dynamic capabilities are needed to have a positive impact on SCA and on firm performance? How can the context in which the firms operate affect these relationships? Which market conditions are needed for MO and SCO to effectively underlie agility and alignment capabilities? To what extent do EO and MO simultaneously help firms to improve their agility in the supply chain process? How can EO and MO impact SCH, without the mediation role of supply chain integration? In what cases can LO and TO enhance SCA? In what way is SCO a more potent orientation to influence SCA? How does the literature and empirical studies expand this issue?

This research is not excluded from limitations that could potentially guide additional future research. First, to include studies from just the Web of Science database is a limitation because of the articles that it compiles. Future studies could include other sources such as the Scopus database or Dimensions. Second, the study sought to compare the literature regarding the EO and MO on SCA, thus neglecting other important orientations such as

the LO, TO, or SCO, which were identified in this study. Therefore, future research should include more orientations to assess trends in studies involving these variables across the literature. Finally, qualitative research accounts for a minor number of studies, reaffirming the need to move beyond quantitative approaches and explore the relationship between EO and MO on SCA through a qualitative lens.

Author's role:

ALA: conceptualization, methodology, investigation, data curation, writing – original draft preparation, writing – review and editing.

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