


Review

# Collaboration among Small and Medium-Sized Enterprises as Part of Internationalization: A Systematic Review

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**Abstract:** This article performs a systematic review of the research literature on the forms of collaboration among small and medium-sized enterprises (SMEs) so that they reach the foreign market, since there is a lack of research focusing on the collaborative relationship between national companies as a strategic option for accessing the foreign market. In addition, we analyzed the articles to conceptually synthesized the elements that make up the business models of these collaborative forms of operating in the foreign market. Likewise, we analyzed real cases of collaborative processes among SMEs for the foreign market and highlight the contributions of governments in promoting actions to support these collaborations. We also show some directions for future research that were pointed out by the articles.

**Keywords:** alliance; business model; cluster; collaboration; cooperation; export; governance; internationalization; network; small and medium enterprises



**Citation:** Guimarães, Luciana Gondim de Almeida, Pierre Blanchet, and Yan Cimon. 2021. Collaboration among Small and Medium-Sized Enterprises as Part of Internationalization: A Systematic Review. *Administrative Sciences* 11: 153. <https://doi.org/10.3390/admsci11040153>

Received: 9 November 2021

Accepted: 10 December 2021

Published: 14 December 2021

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## 1. Introduction

Small and medium-sized enterprises (SMEs) are the backbone of many national economies, since they are part of a very important economic sector on the development agendas of most governments in developed or developing countries (Costa et al. 2015; Ale Ebrahim et al. 2010; Hashim 2015; OECD 2019; Thomas et al. 2012; Zulu-Chisanga et al. 2020). In OECD countries, SMEs account for around 60% of employment and are, in many cities and regions, the main drivers of productivity (OECD 2019). SMEs are responsible for creating jobs (Maurel 2009; Waite and Williams 2009), providing consumers with a diversity of innovative products and services, increasing business competitiveness and collaborating for economic growth in developed and developing areas (Havierníková and Mynarzová 2018; Kottaridi and Lioukas 2017; Zulu-Chisanga et al. 2020).

For many SMEs, the ability to internationalize their activities has become a competitive requirement for their survival (Antoldi et al. 2013; Costa et al. 2015; Costa et al. 2017). Nevertheless, many SMEs find it difficult to expand their activities to the foreign market, as some aspects are restrictive, such as access to information, know-how, and capital, mainly in the internationalization process (Antoldi et al. 2013; Costa et al. 2015; Kaufmann 1995). Research has shown that due to their limited resources and difficulties in reaching markets, the establishment of collaborative relationships by SMEs is an important factor in the internationalization process (Anopchenko and Ostrovskiy 2018; Costa et al. 2017; Gancarczyk and Gancarczyk 2018; Jaklič 1998; Kaufmann 1995; López-Navarro et al. 2013; Morais and Franco 2018; Nordman and Tolstoy 2016).

In this perspective, since SMEs do not necessarily choose the same business models to operate in foreign markets as those used in their domestic ones, the business models must be adjusted to international markets. To enter in the foreign market, companies must define how they want to conduct business across national borders. In addition, an adaptation of

their business models can impose different institutional and competitive conditions for the domestic market depending on the foreign market situation (Child et al. 2017; Nunes and Steinbruch 2019).

Therefore, the business model can be used as a management tool to diagnose and plan different scenarios for existing businesses. The international business models of SMEs can identify the potential architecture of their value and how to adapt it to the context in which they will operate. Each identified international model designs a unique combination of resources, capabilities, and associated essential transactions for its execution (Child et al. 2017).

Each company uses a specific business model, explicitly or implicitly. The business model presents the structure of creation, delivery, and capture of value by the company (Osterwalder and Pigneur 2010; Teece 2010). Thus, a business model explores the different elements of the value chain as it deals with the perception of the customer's needs and the profit obtained by the company (Teece 2010). Then, business models can be indispensable tools for analyzing, implementing, and communicating strategic options. They have, in fact, a strong action in the management of firms (Ouerghi 2010; Child et al. 2017).

In the context of a business model, Osterwalder and Pigneur (2010) present the concept of a value proposition which describes the set of products and/or services that create value for a specific customer niche. They argue that this is the reason customers turn to one company over another. The value proposition responds to a need or resolves a customer's difficulty. Thus, the value proposition is a combination or set of advantages that a company offers to its customers. Some value propositions can be innovative and represent a totally different offer from what exists on the market. Others may be similar to what already exists on the market, with only incremental innovation (Osterwalder and Pigneur 2010).

So, business models are how companies commercialize new ideas and technologies. Even though companies invest in and have processes to explore new ideas and technologies, they often have great difficulty innovating their business models. Two different business models will work differently even if they have the same idea or the same technology as a basis. Thus, companies should consider the possibility of innovation in their business models (Chesbrough 2010).

When it comes to the innovative business model, it turns out that the emphasis on partnerships and external collaboration is particularly effective for companies that are already established in the market. Network-driven business models provide businesses with greater flexibility as they can operate more efficiently through new acquisitions and alliances. The established company can thus promote its brand, increase its production scale, and take advantage of its distribution channels or other essential resources through collaborations. In this way, the business model becomes a competitive advantage of the company in the market (Giesen et al. 2007).

Literature review papers of collaborations and internationalization of SMEs are limited (Batista Franco et al. 2011; Costa et al. 2016; Zahoor et al. 2020). Costa et al. (2016) studied the internationalization of SMEs from different aspects, such as information, knowledge, and collaboration. In turn, Zahoor et al. (2020) identified the theories that support research on the internationalization of SMEs through collaborative relationships and the factors that influence the results of the internationalization of SMEs.

Although these reviews have addressed the collaborative relationships of SMEs in different stages of the internationalization process of their activities, there is a lack of research focusing on the collaborative relationship between national companies as a strategic option for accessing the foreign market. In addition, they have not focused on how the business model is configured in a collaboration among SMEs in an international context (López-Navarro et al. 2013).

Within this context, this article aims to critically review, analyze, and synthesize the current state of research on the collaborative forms used in the internationalization of SMEs. In doing so, we make three important contributions. First, we identify the collaborative processes used by SMEs in their internationalization process, analyzing and categorizing

the articles identified from specific topics. Second, we look at how the type of collaborative relationship shapes the elements of these organizations' business models. Finally, we identify gaps in the literature and point out potential areas for future studies.

The remainder of the paper is organized into four sections. The next section shows the literature review strategy. The following section presents a synthesis of some theories found in works that deal with collaboration among SMEs when used in the context of internationalization and their entry modes. In addition, we show the collaborative forms found in the literature and how these forms affect SMEs business models when used in internationalization, and we also show what the articles discuss concerning government support for SMEs. The penultimate section discusses our findings and provides guidance advice for future research as well as advice for professionals. Finally, the last section summarizes the conclusions.

## 2. Literature Review Strategy

The systematic review aims to improve the quality of the review process by synthesizing research in an organized, transparent, and reproducible way. Additionally, establishing a systematic procedure mitigates the effects of author bias and ensures the transparency of the revision process is also ensured (Anaya-Arenas et al. 2014). The following research questions will guide this systematic review: Q1. What forms of collaboration among SMEs are used when these companies enter the international market? Q2. How do these collaborations between SMEs shape their business models?

In the article selection process, three relevant databases were selected as search engines. Two of them were in the business sciences: ABI/Inform Global and Business Source Premier, and one multidisciplinary database was also included: ISI's Web of Science. The content of the multidisciplinary Web of Science (WoS) and Scopus databases are known to overlap strongly. However, although Scopus is also known to index a greater number of titles as a whole, the extent of this content overlap varies widely across disciplines. Thus, a search of the number of titles in the Business and Management category reveals that Scopus indexes 1702 journal titles, compared to WOS which indexes some 1337 in the same category. This difference in the number of titles is largely offset by querying the two databases specializing in business: ABI/Inform Global and Business Source Premier, which were the main databases in this research.

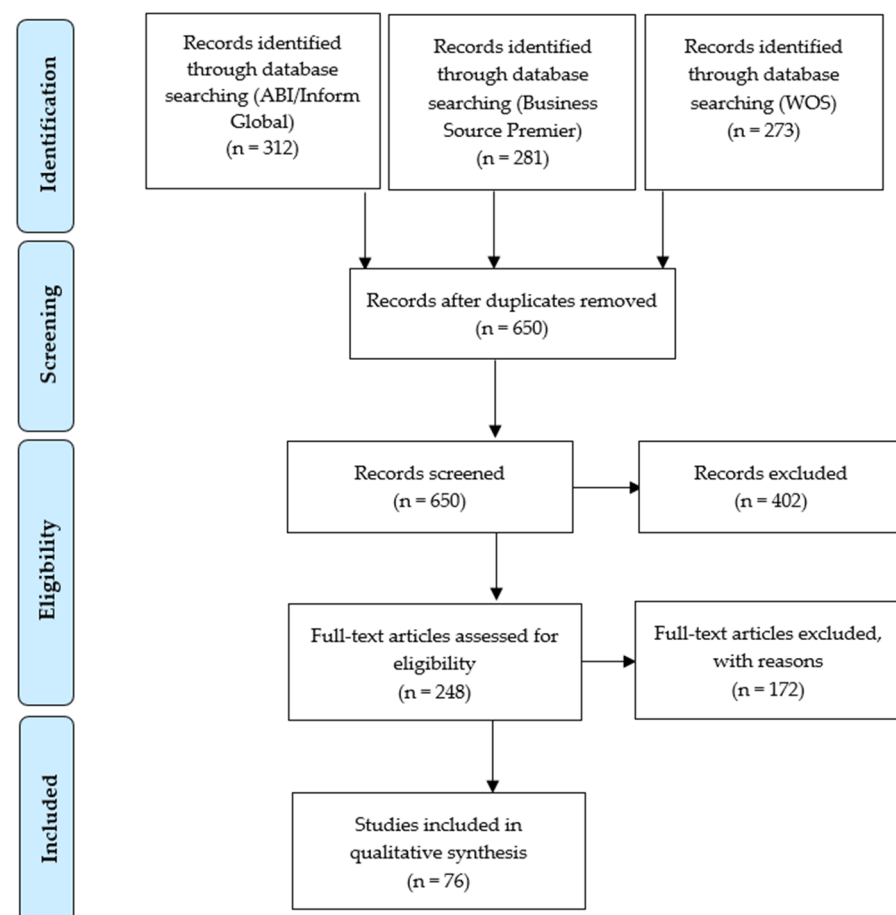
The search keywords (co-opetition, partnership, alliance, collaboration, cooperation, SME, small medium enterprises, export\*, internationalization, and foreign market entry) have been used adopting a specific syntax (for example, using AND and OR) until the data in the three databases above was saturated in order to select the scientific documents. The combinations used were as follows: ((co-opetition OR partnership OR alliance OR collaboration OR cooperation) AND (SME OR small medium enterprises) AND (export\* OR internationalization OR foreign market entry)). In addition, articles from the gray literature are not considered in the search. We limited our search results by choosing a time period to consider. We considered documents published between January 1990 and November 2020. The research interest was to analyze three decades of publication to identify the collaborative relationships among SMEs when they internationalize. We established the year 1990 as the initial period in the search for articles, as it was in the 1990s that the first journal article that discussed the collaborative internationalization of SMEs was published, according to Zahoor et al. (2020). In the same way, Ribau et al. (2018) affirm that, before 1990, most studies carried out on internationalization did not explicitly mention SMEs.

The inclusion and exclusion criteria that were applied to the search results are detailed in Table 1.

**Table 1.** Inclusion and exclusion criteria assumed for the literature review.

Inclusion Criteria	Exclusion Criteria
Full journal/conference proceedings	Lectures, grey literature, presentations, policy documents
English and French language	Non-English or Non-French language
Peer-reviewed	Not peer-reviewed
Focus on collaboration among SMEs	Focus on collaborations beyond the scope of SMEs
Focus on collaboration for the purpose of internationalization	Focus on collaboration for any purpose other than internationalization

We followed the PRISMA flow, as proposed by [Moher et al. \(2009\)](#), for data screening as shown in Figure 1. Thus, for the purposes of this paper, we were interested in finding and analyzing collaboration as a mutual decision adopted by two or more independent companies in order to exchange or share resources and/or skills for mutual benefit. As we dealt with collaborative SMEs, we specified the terminology as “collaboration”. This concept refers to both informal agreements and, depending on the degree of commitment, formal/contractual agreements without and with shared risks and benefits ([Todeva and Knoke 2005](#)). We preferred to use this broad term in this research, as we intended to find out which collaborative forms are used by SMEs in the context of internationalization.

**Figure 1.** PRISMA flow diagram.

To analyze articles regarding business models, we used the framework of [Zott and Amit \(2010\)](#), who described that the design elements of a business model are content, structure, and governance. Content refers to how information and goods are exchanged and the resources and capacities needed to carry out such exchanges. The structure is

related to the size of the network and how the parties are related and the exchanges carried out, the market mechanism, the order and timing of the exchanges, and the agility and adaptability of the transaction structure. Governance is related to the place of control of information, finance, and asset flows. This includes control mechanisms such as incentives and trust. Governance designates who performs the activities. The term 'governance' refers to combinations of legal and social control structures to arrange and secure the participation of the companies that make up the resource alliance, administrative responsibilities, and the sharing of the benefits of their joint activities. Thus, we decided to focus our analysis on only one of the elements of the business model proposed by [Zott and Amit \(2010\)](#), which is governance, since different collaboration configurations evoke different approaches that partner firms take to control their dependence on the alliance and other partners ([Todeva and Knoke 2005](#)).

We used the NVivo software package version 13 to perform the analysis. NVivo made it possible to highlight and label sets of concepts from different articles so that they could be combined into main categories at any time ([Gosselin 2018](#)).

### 3. Results

This section presents the analysis results of the articles selected by the PRISMA protocol. We present some theories found in papers that deal with collaboration among SMEs and also the entry modes used by SMEs in the context of internationalization. We present the different forms of collaboration that SMEs participate in when aiming at internationalization, which we found in the articles. These types of collaboration among SMEs have been analyzed from different perspectives. Furthermore, we showed how the business model was configured in the different forms of collaboration. We present the governance modes of the collaborative process in which they find themselves, and we also present some articles about government support for SMEs in that context.

#### 3.1. Theories and Internationalization

##### 3.1.1. Resource-Based View (RBV)

From the perspective of the RBV, companies understand that having differentiated resources is decisive for obtaining a competitive advantage. As such, SMEs face major obstacles to exports, due to their limited resources and capacity constraints ([Brache and Felzensztein 2019](#)).

The resources that generate competitive advantages are those that are valuable, rare, difficult to imitate, and not substitutable ([Barney 1991](#)). On the other hand, [Grant \(1991\)](#) states that resources are the source of capabilities and these, in turn, are the source of competitive advantage. The cluster of resources and specific competencies of the company forms the strategy of a company and, thus, how it intends to operate in the international market, which is implied in the way that these resources and competences are exploited ([Antoldi et al. 2013](#)).

Even though the RBV initially focused only on the company's own resources and capabilities as a source of competitive advantage, RBV updates supported the fact that services from the resources of member companies in the network can be a source of competitive advantage ([Antoldi et al. 2013](#); [Aureli and Del Baldo 2013](#); [Boehe 2013](#); [Brache and Felzensztein 2019](#)).

In this way, networks and RBV were integrated and incorporated into the term "network resources". Network resources are those from partner companies, which can be obtained by the focal company through its network connections with the partner companies. Research shows that the main network resources are access to information and personal references, which can trigger new business opportunities. Furthermore, networks can promote access to a wide variety of resources, from political influence, equipment, reputation ([Antoldi et al. 2013](#)), capabilities, mutual trust, and emotional support ([Boehe 2013](#); [Zulu-Chisanga et al. 2020](#)).

On the other hand, [Gancarczyk and Gancarczyk \(2018\)](#) hold a different view from the same theory. They say that resources that are valuable must be integrated into the company as an essential competence, and only non-essential resources should be outsourced to network partners.

### 3.1.2. Transaction Costs Economics

From the Transaction Costs Economics (TCE) model, interfirm collaborations are seen as a means of overcoming the financial and personnel restrictions that individual companies have as an impediment in the internationalization process. Interfirm collaboration also provides the best alternative to international transaction costs and coordination costs linked to foreign direct investments ([Aureli and Del Baldo 2013](#); [Biswas and Roy 2007](#); [Gajowiak 2013](#)).

We can provide some examples of how collaboration between companies can be seen as a justification for reducing transaction costs. Hiring joint labor, sharing local suppliers so as not to use remote suppliers and, thus, reducing import costs and delays, carrying out joint exploratory investments in the same destination are some of these examples. As seen in these cases, the group makes it possible to make more profitable investments, which are essential for development but very costly for an individual company ([Arslan 2020](#); [Boutary et al. 2012](#)).

Another relevant aspect of TCE is related to governance. As the TCE model explains, relational governance mitigates the contractual risks that occur in complex buyer–supplier arrangements ([Mesquita and Lazzarini 2008](#)).

### 3.1.3. The Uppsala Model Revisited

The Uppsala internationalization model was published in 1977 and has been used ever since when it comes to the process of market expansion by companies ([Johanson and Vahlne 1977, 1990](#); [Forsgren 2002](#)). The Uppsala model understands the company's internationalization process as something that evolves dynamically. It shows how the company gradually expands its international involvement. Although the proposed model was already adjusted to SMEs, it did not consider that these companies could participate in a collaborative relationship (among SMEs or with large enterprises) in the local market or even in the foreign market to facilitate the internationalization process of these companies.

So, an update was inserted since there were several changes in business practices. In the current model, the market is perceived as a network with a tangle of relationships, rather than a market with many independent suppliers and customers. The core of uncertainty is the relationship with the network, rather than the psychic distance. Furthermore, in the 2009 model, trust-building and knowledge creation have been added, the latter to show the importance of new knowledge being expanded by relationships ([Johanson and Vahlne 2009](#)).

Based on this theory, internationalization is the result of the company's actions to strengthen the network in which it is part and to develop or safeguard its position in the market. Due to the lack of network limits, there is no difference between expansion and market entry. While the previous model emphasized the need to overcome barriers to entry, the current model highlights the importance for the company to consolidate its position in the network. The model considers both local and international partners, as the emphasis is placed on the partnership relationship within the network that conducts business through internationalization ([Johanson and Vahlne 2009](#)).

Another important aspect that differentiates the 2009 model from the previous one is the relevance of access to information. The authors stated that access to information was more relevant for large companies. The Uppsala model would therefore be more suitable for smaller companies. However, in the current, revised model, they rectify this statement by saying that knowledge is very particular to the context. In this way, the Uppsala model is now equally suitable for large and small companies ([Johanson and Vahlne 2009](#)).

### 3.1.4. Network Theory

Finally, network theory also explains the internationalization of SMEs in collaborative relationships. According to this approach, the strategic decisions of SMEs that are related to entering the international market, i.e., which market should be inserted and which mode of entry would be the most appropriate, would be linked to the opportunities that would come from their networks more than to strategic decisions taken individually by their managers (Aureli and Del Baldo 2013; Morais and Franco 2018; Torkkeli et al. 2019).

This theory is based on the principle that international business takes place in a networked environment, where organizations are connected to each other through commercial relations. Thus, it suggests that the company's strategies are influenced by different network relationships, with different stakeholders, such as suppliers, customers, distributors, the industry, and public regulatory bodies, in addition to other members of the market (Aureli and Del Baldo 2013). Moreover, this theory emphasizes the importance of connections, trust, legitimacy, and the link between all organizations, in addition to pointing out social capital as an essential characteristic of the formation of the network (Franco et al. 2020).

Based on this approach, business networks are analyzed from the perspective of their national and foreign relations (Torkkeli et al. 2019). Besides that, Havierníková and Mynarzová (2018) show that this theory for internationalization is appropriate, as it explains the internationalization of SMEs through the network and allows companies to overcome restrictions such as a lack of knowledge, technology, or capital.

Table 2 shows the number of articles that address each theory of internationalization.

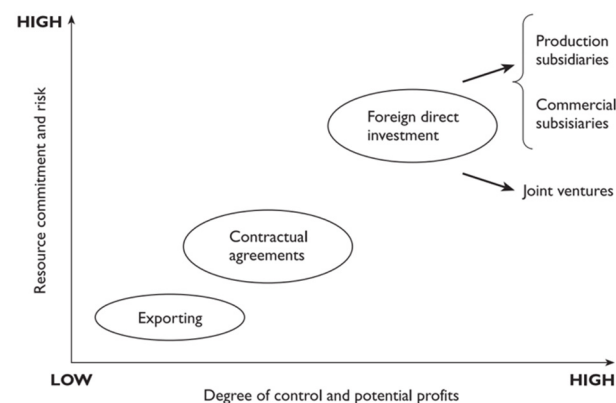
**Table 2.** Internationalization theories.

Theory	Resource-Based View (RBV)	Transaction Costs Economics	Uppsala Model	Network Theory
Number of articles	20	11	13	20

### 3.2. Entry Modes

Internationalization can be defined as the process of being involved in international operations (Ribau et al. 2018). This process can be considered as a reactive strategy to escape concentrated and fragmented sectors or as a response to a plan to expand activities in the foreign market (Aureli and Del Baldo 2013). In this way, internationalization contributes not only to the company, to enable it to obtain opportunities in the foreign market, but also protects it from global competitors (Paul and Sánchez-Morcilio 2019).

There are different modes of internationalization that SMEs can use, such as export, trade, international collaborations, cross-border clusters, alliances, joint ventures, subsidiaries, and affiliates (Ribau et al. 2018). The ways of entering the foreign market differ in terms of the use of resources, the degree of risk aversion, and the level of control desired in international operations, as shown in Figure 2 (Claver et al. 2007).



**Figure 2.** Entry strategies.

In turn, [Osarenkhoe and Fjellström \(2017\)](#) affirm that to refer to the mode of SMEs' internationalization, the most appropriate expression to use would be that of entry node instead of entry mode, because, if these companies enter the foreign market from their collaborative networks that are based on other networks and relationships, they could be interacting with customers (direct) and agents (indirect).

According to the literature, organizations are more likely to choose to create subsidiaries if they already have previous international experience, as this prior knowledge of the market reduces the level of uncertainty in the international market and ensures greater maturity of their operations ([Claver et al. 2007](#)). In addition, [Paul and Sánchez-Morcilio \(2019\)](#) introduce the concept of the legal distance between regions/countries as an aspect that is related to the internationalization of companies. SMEs use exports as the most common form of internationalization ([Waite and Williams 2009](#); [Zucchella and Siano 2014](#)).

Thus, we realize that SMEs can enter the international market in different ways. To this end, they use collaborative relationships with other SMEs. However, the literature shows us that there are different possible forms of collaboration.

### *3.3. Forms of Collaboration among SMEs in International Market*

In this section, we present the different forms of collaboration that SMEs participate in when aiming at internationalization, which we found in the articles. These types of collaboration among SMEs were analyzed from different perspectives. We presented the characteristics of each form of collaboration, its advantages, disadvantages, structure, and the sectors in which they are found.

#### *3.3.1. Networks*

Networks, whether organizational or interpersonal, are used as a means for SMEs to internationalize ([Jankowska 2015](#); [Jeong et al. 2019](#); [Manolova et al. 2010](#); [Vlachos and Gutnik 2016](#)), as they provide the means for SMEs to overcome restrictions such as a lack of resources or limited capacity. In addition, the network expands communication between its participants and, in turn, the exchange of information between them, thus facilitating the selection of the market and the mode of entry ([Jeong et al. 2019](#)).

The concept of a 'network' is a broad one that describes various types of relationships between two or more companies that are interconnected, whether by economic contexts and/or individual contexts. Networks can be configured as being inter- or intra-organizational or interpersonal, and the relationships they contain can be presented in different ways, such as formal agreements ([Akçay and Tan 2008](#)), informal agreements ([Aureli and Del Baldo 2013](#); [Gajowiak 2013](#); [Haahti et al. 2005](#); [Nunes and Franco 2015](#); [Osarenkhoe and Fjellström 2019](#)), industrial districts ([Burlina 2020](#); [Cisi et al. 2020](#)), strategic alliances ([Bose and Bristy 2016](#); [Tyll et al. 2020](#)), and consortia ([Aureli and Del Baldo 2013](#)).

In turn, [Kock et al. \(2010\)](#) state, networks are composed of direct and indirect relationships. In addition, SMEs' networks can be decomposed into horizontal relationships (competitors and complementors) and vertical relationships (with customers and suppliers). Companies have different relationships at the same time ([Kock et al. 2010](#); [Tuusjärvi and Möller 2009](#)). A company can fulfill different roles according to the resources available and the activities performed. Consequently, the roles played change according to the different activities, even if the actors are part of the same business network ([Kock et al. 2010](#)).

Companies that are members of these networks participate in joint activities and gain benefits from sharing complementary essential resources and skills. In this way, they become stronger competitors against large companies in the same economic sector, as they share risks, costs, and information, gain in productivity, and make more profit with regional development ([Vlachos and Gutnik 2016](#)). Another possibility is innovation-based networks, which have the character of developing new products, services, or processes. These innovation-based networks comprise a heterogeneous set of different participants, such as companies, government support organizations, universities, and technology and development centers ([Kamalian et al. 2015](#)).



As networks involve different structures and relationships, they were categorized to facilitate their own understanding. [Oparaocha \(2015\)](#) classifies networks based on their differences and interconnections:

- Business networks are, in the literature, the most studied; they represent intermediaries such as competitors, suppliers, customers, and strategic partners.
- Social networks are also being studied more frequently and are made up of individuals, family, friends, colleagues, and employees.
- Institutional networks are composed of different actors such as governments, incubators, research institutes, international development agencies, and business associations. Nevertheless, there are not so many studies that deal with this type of network in the literature.

From the classification proposed by [Oparaocha \(2015\)](#) above, [Hietala et al. \(2019\)](#) describe SMEs in the wood product industry in their paper; they discuss how these companies take advantage of international business opportunities and how they take advantage of the different networks in this context. This research was conducted in Finland, through interviews with managers and industry representatives. The authors analyzed SMEs from the various networks to which they belong, indicating that SMEs perceive international opportunities in a reactive manner per se. For example, social networks created from professional forums were an information pathway with the purpose of recognizing international opportunities. Companies in vertical business networks have been able to expand their operations in the international market and unlink their resources for other activities. Horizontal dyadic networks were perceived as promoting new international opportunities through collaborative relationships. On the other hand, the intense subordination of vertical networks has generated apprehensions and has not proved effective in recognizing opportunities in the foreign market. Finally, institutional networks systematized the recognition of opportunities in the foreign market, especially in the introductory phase of market entry.

Informal relationships and intangible factors are relevant in the internationalization of companies ([Davis and Sun 2006](#); [Gajowiak 2013](#); [Manolova et al. 2010](#); [Nunes and Franco 2015](#)). From this perspective, social capital is an important aspect since it comprises social norms and values, such as trust, loyalty, and reliability. These variables can significantly reduce uncertainty and distrust in the activities of business entities. In this way, these variables make up the foundation of business networks, specifically informal ones, which can constitute an important way of acquiring new knowledge about unknown foreign markets ([Gajowiak 2013](#)).

Social capital is an essential element of entrepreneurial orientation, resource gain, and development. The manager's personal networks and the company's internal network influence its internationalization. The manager's social network relationships ensure important information and knowledge about the new market they wish to explore ([Zulu-Chisanga et al. 2020](#); [Hashim 2015](#); [Manolova et al. 2010](#)). Besides that, they showed that the performance of networks between companies for internationalization changes over time and that partnerships and connections with other companies formed at the launch of the new company are more successful for their internationalization ([Manolova et al. 2010](#)).

Social capital influences the development of horizontal industrial clusters aimed at exporting SMEs. Companies with higher levels of social capital are more predisposed to expand their degree of trust and collaboration among the participants in the cluster, which may stimulate exports. In turn, companies with a low level of social capital are less likely to trust other participants in the cluster, which may decrease the efficiency of exports later ([Waite and Williams 2009](#)).

Within this context of social capital, [Festa et al. \(2020\)](#) applied this concept in the aspect of territoriality, thus creating the concept of territorial social capital, which they consider to be a unique competitive factor, as it is an element of local structural capital and the capital of a global reputation. Thus, "territorial relations and socioeconomic ties" explain the core of territorial social capital. They analyzed the territory as a characteristic

aspect that works with the concept and practice of “Made in Italy”. They researched the role of local and subnational business collaborations that defend and value aspects such as history, talent, and style as the core of Italian “quality” and as the foundation of the Italian market.

Industrial business associations (IBAs) are a type of institutional network that facilitates and supports the internationalization processes of SMEs. Promotional actions; information sharing; technical and legal advice, training, and support; and the partnership with other institutional entities are the current forms of support that the institutional network provides in the internationalization process (Costa et al. 2015, 2017).

Companies that are part of an industry association interact horizontally with the other members. Even if there is information or transaction or coordination costs attached to these relationships, these can be offset by the advantages of local cooperation or result in a trade-off with international customer relationships. In addition, a company that participates in an industry association would have access to the resources of the local network, and this would generate a strong propensity to export. Furthermore, the company’s participation in a strong local collaborative relationship could positively influence its export activities (Boehe 2013). Becchetti and Rossi (2000) corroborate this idea and include the aspect of geographical proximity as a relevant aspect for SMEs when stating that collaborative relationships in a network of companies in the same area significantly influence their export intensity and their perspective of becoming exporters.

In the agribusiness sector, associations are considered promising for organizations to establish and coordinate training programs for farmers and other value chain participants. Farmers and other value chain participants received technical and business management training thanks to the work of the associations. In addition, the associations focused on establishing quality standards, product attributes to accredit the region/country of origin, brand development, brand registration, and actions to create brand beliefs, recognition, and awareness of the brand. Another action that can be carried out by the associations is export market studies that make it possible to understand the characteristics of the target export markets and the business opportunities in these markets (Bhaskaran and Gligorovska 2009).

While Torkkeli et al. (2019) affirm that business networks are central to a successful internationalization among SMEs, Costa et al. (2017) point out that both business networks and social networks are important in decisions to enter the market, but social networks have more influence in the initial stages of internationalization, and business networks have more relevance in the subsequent stages.

From that, we realize that there is a network lifecycle. Wegner et al. (2018) propose six stages and compare the development dynamics of two business networks whose purpose is to promote the internationalization of its members. The model has as its stages: conception, birth and formalization, development, consolidation, and maturity, decline, and dissolution.

Companies are influenced by the relationships of the network in which they participate. More specifically, these relationships affect businesses’ strategic decisions about internationalization (Aureli and Del Baldo 2013). Additionally, the participation of companies in networks also impacts their economic performance (Burlina 2020). Another relevant aspect is that the improvement in the performance of SMEs is a consequence of using cooperative strategies to improve their level of knowledge about export markets (Hahti et al. 2005).

However, Jeong et al. (2019) claim that the participation of SMEs in networks does not guarantee an improvement in their international performance. They indicate that this can happen because there are different types of networks, and these types differ in their results. Although social networks have been shown to be essential to assist market and company performance, their effects have not been associated with better international performance. Likewise, the effects of business networks on international performance often seem contradictory. Although business networks have often contributed positively to Chinese companies, relationships with managers of other companies in the business

network have not, on other occasions, generated a desired profitability. Another important finding is that the relationship of the business networks' influence on the SMEs international performance is inversely proportional to the company's international experience. This is due to the fact that, the greater the company's international experience, the less the influence of the business network on its international performance.

In this context, the network contract emerges as an element that aims to formalize the participation of companies in a specific network. The network contract is a legislative instrument established by the Italian government in 2009 to support the competitiveness and innovation of companies (Aureli and Del Baldo 2013; Burlina 2020; Cisi et al. 2020). When network contracts were analyzed according to geographic distribution, the results showed that 55% of the companies were located in the same region (and in some cases even in the same province), and the other 45% were companies from different regions. Thus, the network contract is usually used by companies located in the same industrial district, although their contribution to the creation of transregional clusters is rare. The companies that use the network contract the most are from the manufacturing sector (mainly mechanical), followed by the services and agriculture sector (Aureli and Del Baldo 2013).

### 3.3.2. Clusters

Clusters are a typical form of a network in local or regional markets, where their function is to establish a competitive advantage for their participants and can have an international outreach (Camargo and Wang 2015; Havierníková and Mynarzová 2018; Jankowska and Główska 2016; Vlachos and Gutnik 2016). Industry cluster or cluster is described as a network of companies in the same sector or in the same supply chain. Usually, horizontal clusters are related to the development and production of niche goods to compete globally and establish joint procurement activities (Vlachos and Gutnik 2016; Waite and Williams 2009).

Another definition shows clusters as systems composed of business organizations that operate in the same or similar industry and develop similar or complementary activities in the same geographic area. These companies share common technology, infrastructure, market, services, and work, to creating business and communication opportunities. In addition, clusters try to ensure that SMEs compete and cooperate with each other (Camargo and Wang 2015; Bhagwat and Sharma 2007; Ibishov et al. 2020). Gancarczyk and Gancarczyk (2018) add environmental institutions to the cluster whether they are social or governmental organizations.

As has been shown, there are several distinct definitions of clusters in both theoretical and empirical studies (Havierníková and Mynarzová 2018; Jankowska and Główska 2016; Vlachos and Gutnik 2016; Waite and Williams 2009; Ibishov et al. 2020). Geographic proximity, complementarity, and functionality are the main features used to explain a cluster (Thomas et al. 2012).

There are three types of member tiers in a cluster: the core, the specialized infrastructure, and the social and physical infrastructure. SMEs that are similar or related to the production of a particular product or service in the cluster are part of the core. Technological support institutions, financial institutions, and research and development supply institutions, among others, are part of the second layer of the cluster. The third tier is made up of bodies providing education, development, and training (Bhagwat and Sharma 2007).

However, there are authors who understand that the members of the clusters can be located anywhere, and, in this case, a virtual network is established. In e-cluster organizations, aspects such as management capacity and trust are considered decisive factors for their success (Vlachos and Gutnik 2016).

Another important aspect is related to arising clusters. They can start through market forces, or they can be a result of government actions. However, companies that are located in both types of clusters are different in their level of entrepreneurship, links, social capital, etc. (Hassan and Talib 2015).

One type of cluster that has been widespread in many countries since the 1970s is the industrial park. There are currently more than 12,000 of these parks in the world. However, there is no standardization between them, as they differ in size, organization, and type. Despite this, they also have fundamental elements in common: they bring together several SMEs in the same established physical area and are managed by a single competence with a deliberate jurisdiction over member companies. They can also be called industrial properties, zones, districts, or parks. However, the United Nations Industrial Development Organization (UNIDO) differentiates between an estate and a park, as a developed, partitioned, and serviced region, and an industrial zone as a gross region allocated for industrial usage. The industrial district, on the other hand, is an administrative means to conduct a certain set of parks and/or zones (Falcke 1999).

A company can have four types of relationships with other rival companies at the same time, such as: cooperation, competition, coexistence, and co-opetition (Kock et al. 2010). Co-opetition occurs when companies cooperate and compete simultaneously (Galdeano-Gómez et al. 2016). In the context of clusters, co-opetition gains strength, since companies compete and collaborate simultaneously (Kock et al. 2010) and only then can they benefit from being a member of the cluster (Jankowska 2010, 2015).

It is worth mentioning that co-opetition can appear on the market in different ways (Jankowiak 2013; Jankowska 2010, 2015; Vanyushyn et al. 2009). Galdeano-Gómez et al. (2016) state that co-opetition relationships are complex and dynamic at the same time, for example, when a buyer and a supplier compete for profit sharing from a product, and they collaborate on marketing campaigns for the product in new markets. In another situation, a buyer with bargaining power can generate cooperation between two suppliers that compete in the same market. Furthermore, Galdeano-Gómez et al. (2016) show that different cooperation and competition strategies depend in part on the form of governance in the supply chain network. Hierarchical governance can have more stable relationships between buyers and suppliers.

In co-opetition relationships, there are financial and non-financial exchanges, in addition to the fact that companies have reciprocal and independent objectives. Furthermore, in co-opetition relationships, the degree of cooperation and competition that occurs between competitors can change. There are three subcategories of co-opetition: relationships in which cooperation prevails, equality relationships, and relationships in which competition prevails. As for activities in the supply chain, those furthest from the customer are usually the most oriented towards cooperation, while activities closest to the customer are most often marked by competition. The activities guided by cooperation between competitors are research and development, production, marketing, and purchasing activities. In turn, companies commonly act as competitors in sales, services, and distribution activities (Kock et al. 2010).

As to its structure, clusters can be horizontal, helping SMEs to jointly achieve economies of scale, obtain discounts on the purchase of various inputs due to the greater volume of purchases since they are centralized, reach the utilization of the available capital goods capacity, and use their production capacities in combination to meet large-scale orders through horizontal cooperation. Moreover, collaboration among SMEs in horizontal clusters decreases unnecessary replication and also combines complementary resources. On the other hand, another possible structure for clusters is vertical cooperation. This type of structure can help specialize in the core businesses of the companies and, thus, generates a division of labor for each company in the cluster (Biswas and Roy 2007; Ibishov et al. 2020; Waite and Williams 2009).

Often, vertical clusters are run by large companies and SMEs are more usually involved in a collaboration pact acting as a supplier. Thus, it is very complicated for a single company to fully develop all the mandatory skills and knowledge to operate with competitive advantages, especially in the context of the internationalization of these companies (Waite and Williams 2009).

There are different typologies for clusters in the literature (Biswas and Roy 2007; Ibishov et al. 2020; Jankowiak 2013; Tambunan 2009), varying according to their country of origin or economy (Jankowiak 2013).

In Azerbaijan, Ibishov et al. (2020) show the geographic clusters, i.e., the network of companies, manufacturers, suppliers, and other entities that work together in the same territory; and the sectoral clusters, i.e., the network of companies that operate in the same sector. In turn, Indian clusters are classified as industrial (composed of SME), handloom, handicraft, rural microenterprise, urban microenterprise, and service-oriented (Biswas and Roy 2007). Tambunan (2009) presents evidence that clusters in Indonesia are classified into four different types, they are: artisanal, active, dynamic, and advanced. The artisanal type is mainly composed of micro-enterprises, where producers are completely dependent on the intermediary actors for commercialization. Furthermore, companies have a low degree of cooperation and specialization and do not have links with support organizations in external networks. The active type uses more qualified labor and has better technology. Moreover, companies participate in internal and external networks. In the dynamic type, companies participate in commercial networks abroad. This cluster has different types of companies in terms of size and technology. In the advanced type, the companies are very specialized and cooperate a lot with each other, and business networks outside the cluster are well developed. These differences between clusters, within clusters, and over time explain why some clusters have good results even without government support, while other clusters have government support and do not perform well or stagnate.

Some articles discuss the benefits that clusters provide to their members (Arslan 2020; Franco et al. 2020; Goerzen 2018; Ibishov et al. 2020; Jankowiak 2018; Nadvi 1999; Sarturi et al. 2016; Zavyalov et al. 2017). The cluster generates several benefits for participating companies, as it establishes access to a wide range of specialized suppliers of inputs and services that guarantee competitive prices and facilitate for local producers to compete in distant markets. The large presence of specialized subcontractors generates economies of scale and scope. The cluster also provides a concentration of high-quality labor, as many of the members promote education and professional training. In addition, the flow of technical and marketing information increases the prospects for technical development (Arslan 2020; Nadvi 1999), access to new markets, and promotion of exportation. This way, the cluster promotes the exposure and internationalization of products and influences the results of SMEs (Franco et al. 2020). Members of clusters do not need to maintain large stocks of inputs and can rely on a wide range of export-related service providers, from dispatchers to international carriers. Companies gain access to the knowledge, infrastructure, and information of other members and also share costs/risks. The proximity among members generates trust relationships. Besides that, members can have lower R&D costs, support, and subsidies from the government (Ibishov et al. 2020; Jankowiak 2018; Sarturi et al. 2016).

On the other hand, Brache and Felzensztein (2019) point out that clusters present some disadvantages. As the number of companies participating in the cluster increases, there is increasing competition, which leads to a reduction in the profit margins of these companies. The performance from this will depend on industry-intrinsic factors, as well as the regional and the country-specific ones. Brache and Felzensztein (2019) showed that the cluster may not be the best strategy for SMEs as is suggested in some emerging economies, since it is not a sufficient strategy to propel SMEs towards internationalization. Besides that, Goerzen (2018) also indicates the possible loss of unprotected intellectual property to local competitors and an increase in the prices of scarce factors of production.

It is important to highlight that there are differences that exist in the concepts of clusters, cluster initiatives, and cluster organizations. Cluster initiatives are endeavors to increase the growth and competitiveness of clusters in a region, these initiatives encompass universities and/or research organizations and cluster companies. The cluster initiative can be formalized in the form of a cooperation agreement or a cluster organization with legal personality. On the other hand, cluster initiatives are increasingly exploited by govern-

ments nowadays to foster the internationalization of cluster companies (Jankowska 2015; Jankowska and Główska 2016; Paraušić et al. 2013).

Zucchella and Siano (2014) state that companies participating in local clusters would relate to competitors and customers in an informal environment, ensuring access to important information related to innovation. The authors highlighted that companies participating in a cluster with high levels of trust and social capital could reduce the risk of opportunism on the part of local partners. In addition, the authors point out that trade fairs can be considered “temporary clusters”, as companies attending have access to relevant information about competitors and customers. Another important point addressed is the essential role of local and international research centers in supporting SMEs, especially in northern European countries. Other organizations that were shown to be important in supporting SMEs were private business associations. Two other types of relevant associations have been included, such as industrial and professional associations and local chambers of commerce.

Bobowski and Skulska (2012) point out the main motivators of the East Asian industrial cluster approach are strong R&D activities by public and private entities that promote innovation, ICT developments that benefit competition, collaboration and communication, and, finally, interactions between the manufacturing productive sector and the service sector, mainly due to the added value generated by the combination of managerial or marketing innovations with some sectors, products, and processes. The authors hope that products, processes, and new business model innovations will encourage productivity and, consequently, export competitiveness. They recall that the experiences of the Asian financial crisis of 1997–1998 guided the reshaping of development policies towards productive, open and flexible network structures, vertical specialization, and the gathering of local networked SMEs.

Sarturi et al. (2016) analyze the competitiveness of clusters through theoretical and empirical research that compares the level of competitiveness of the Brazilian wine cluster, located in Serra Gaúcha, with the competitiveness of the Chilean cluster, located in the Maule Valley. One of the aspects of analyzed competitiveness was the presence of governance in the clusters. As a result, it was identified that both clusters have governance in mind. However, when analyzing the governance of the clusters, the competitiveness factors indicated that the Chilean cluster achieved a higher level of competitiveness. With this result, the authors point out that governance must be perceived as an important factor to explain the greater competitiveness of the Chilean cluster. In addition, they claim that governance integrates the evolution process of the cluster, generating a better quality of the cluster business and expanding the business results.

Still in the wine sector, Maurel (2009) studied which factors are decisive for French wineries to obtain good results in the export of their products. These companies meet in cooperatives in order to export together. The studied determinants were the company’s own characteristics, such as size, experience, export-oriented management, and innovation in both products and processes, in addition to investment in research and development. As a result, business partnerships, innovation, larger size, and an effective export commitment were found to be factors related to higher levels of export performance.

There are some differences between companies operating in technology clusters and industry clusters. The technology cluster includes companies in technology parks whose products or services incorporate new, innovative, or advanced technologies. Industry clusters are formed by companies with different production lines, but they are geographically close. Companies in the technology cluster are more focused on the foreign market and are strong in R&D when compared to other companies in the industry cluster. They are also different when it comes to the type of competitors and their competitive strategies. While the companies in the technology cluster compete with established foreign companies, the companies in the industry cluster are close to the local established companies. While the companies in the industry cluster are focused on exploitation, the ones in the technology cluster focus on process innovations to maintain competitive advantage (Thomas et al. 2012).

Within this context, knowledge transfer is an expected process. However, knowledge transfer is a multidimensional process; even if there is no cooperation between companies in the cluster, there may be a knowledge transfer. The transfer of knowledge can be facilitated by the various ways of combining its dimensions, combinations may differ from cluster to cluster, and producers are more likely to perceive and access the knowledge available in the cluster than suppliers (Hoffmann et al. 2014). In addition, it is evident from the literature that the cluster is related to innovation and that it acts as a catalyst in knowledge sharing (Franco et al. 2020).

E-business tools promote the emergence of virtual alliances and help SMEs to expand export sales to new and/or foreign market niches (Vlachos and Gutnik (2016). Within that context, virtual teams emerge as a possibility of collaborative relationships for SMEs (Ale Ebrahim et al. 2010; Matlay and Westhead 2007). The virtual R&D team can be used by SMEs in order to become more efficient and competitive in local and global markets. From analyzing these relationships, they claim that governments in developing countries must be active in creating opportunities and networks to build SME connections and networks to be successful in R&D endeavors (Ale Ebrahim et al. 2010). SMEs may be able to create competitive advantages, which was previously a characteristic of large companies, due to the access that virtual teams provide by breaking down existing geographic boundaries (Ale Ebrahim et al. 2010; Matlay and Westhead 2007).

The literature points out that the automotive, ICT, wood, nanotechnology, food, plastic, and energy sectors are those in which we find the most relevant industrial clusters in Europe (Jankowiak 2013). In addition, we can include other examples of successful clusters around the world, such as Italian textile clusters; leather clusters for Brazilian footwear; and clusters of surgical instruments from Pakistan (Waite and Williams 2009).

Even though the literature shows numerous successful cluster cases, we find examples that the cluster approach is not necessarily related to the development of a particular industrial sector. Doloreux (2008) characterizes the maritime cluster in Quebec and describes the nature of innovation activities and external links of companies in the maritime cluster and the extent to which these links are anchored locally. The results indicate that the shipping companies included in the cluster are small, there is little export activity, and few innovate. Furthermore, these companies are not connected in innovation networks with partners outside the cluster. The results contradict the feasibility of a cluster approach to the development of the maritime industry in Quebec.

### 3.3.3. Strategic Alliance

This form of collaboration is a specific type of network (Bose and Bristy 2016; Tyll et al. 2020). When examining the literature in the field of management, it can be seen that the term “alliance” is frequent and refers to several definitions (Ati and M’Hiri Elleuch 2013; Culpan 2009; Franco and Haase 2015; Todeva and Knoke 2005). There are authors who consider that strategic alliances are long-term agreements with strategic objectives between independent companies. Thus, alliances occur when two or more legally distinct companies aim to bring together financial, human, and know-how resources, with the purpose of jointly carrying out activities related to a strategic area such as research and development, production, and marketing. Alliance contracts regulate the legal, economic, and duration aspects. Companies in an alliance can also opt for more formal agreements and create new companies, such as joint subsidiaries or joint ventures (Ati and M’Hiri Elleuch 2013).

For Tyll et al. (2020), organizations seek to participate in strategic alliances when they are not able to take advantage of certain opportunities without the help of other companies, either due to the associated high risks or the increase in costs. Furthermore, the participation of SMEs in a local strategic alliance can be considered as a step that precedes the company’s competitive advantage development, and it can impact the global performance of these SMEs (Bose and Bristy 2016).

There are some threats related to participation in strategic alliances, such as mistakes in forming alliances, poor management of the strategic alliance, and narrow vision due to the expressive focus on the alliance. It is important to make it clear that even in collaborative relationships there is competition, only that competition occurs in a different way. Collaboration has its scope, and it is a constantly evolving transactional relationship where companies must be alert so that the strategic alliance does not create a disadvantage. Thus, learning from a partner is essential in the alliance relationship (Tyll et al. 2020).

#### 3.3.4. Joint Venture

Joint venture is the creation of a legal and autonomous entity from the partnership of two or more firms (Harrigan 1986). Export joint ventures (JV) are a kind of strategic alliance and are established when two or more companies combine their resources for the specific purpose of export. They are usually made up of companies in the national market (López-Navarro et al. 2013). When partner companies integrate their complementary resources, they generate synergy that can possibly create value for their members. Marketing activities are usually those that gain greater synergy, even though there may be other benefits linked to the collaborative relationship (López-Navarro et al. 2013).

López-Navarro et al. (2013) focused on domestic export JVs. They analyzed the influence of the partners' long-term orientation on collaborative commitment. They did this by analyzing the background to long-term guidance: resource complementarity and partner trust. They tested their hypotheses on a sample of 70 domestic export JVs in Spain. Trust causes a long-term orientation for companies participating in an export joint venture. Confidence decreases the level of uncertainty regarding opportunistic actions by partners. Consequently, this confidence generates less formal control to prevent this opportunism. They confirm that the complementarity of resources is positively related to trust, as this complementarity creates a dependency between companies, reducing opportunism. Another possible explanation for a positive relationship is the need for interaction, which creates greater proximity between companies.

Usually, companies seek to participate in joint ventures with companies that have complementary products to theirs. Cooperation between competitors is perceived as being riskier, as the possibility of opportunistic behavior is much greater. Consequently, the joint venture between competitors generates a higher transaction cost due to the greater need for control and negotiation (Kaufmann 1995).

#### 3.3.5. Export Consortia

Export consortia are another type of strategic alliance. We adopted the definition of the export consortium as being "a voluntary alliance of firms with the objective of promoting the goods and services of its members abroad and facilitating the export of these products through joint actions" (United Nations Industrial Development Organization 2003, p. 3).

Export consortia are "horizontal" networks, as they are relationships between companies that aim to solve a common marketing problem and obtain greater exploitation or exploration of market opportunities through the sharing of resources. When companies establish horizontal ties with other domestic partners, it can enable the resolution of several internal export problems related to the integrity and quality of the value proposition, organizational and financial problems, and lack of information on international markets (Anopchenko and Ostrovskiy 2018; Antoldi et al. 2013).

Antoldi et al. (2013) developed a framework for analyzing export consortia as a way of stimulating intangible resources that increase the competitiveness of SMEs in developing countries. They analyzed some export consortia supported by UNIDO in Morocco, Tunisia, Peru, and Uruguay. The participation of SMEs in export consortia is relevant not only because it expands intangible resources that improve international competitiveness, but also has a positive impact on the national market.

Boutary et al. (2012) carried out a review of the literature on the particularities of SME and network management to understand the benefits that these companies obtain if they



combine their resources. In addition, they confronted the theory with a practical case of a consortium of wine cooperatives in France, since the consortium's formation and after the group's governance.

### 3.3.6. Strategic Marketing Alliance

Strategic marketing alliance is another kind of strategic alliance. Marketing networks are networks focused on the activities of the value chains that connect the focal company to its customers and assist it in carrying out the distribution, sales, or promotion of its products. For SMEs, marketing networks are responsible for discovering market opportunities. As SMEs have more limited resources and a lack of specialized knowledge, these networks become even more peculiar and difficult. Additionally, even if these networks are not focused on learning, the task of establishing and managing them is a complex challenge that requires a structured learning method (Agostini 2016).

An example of a strategic marketing alliance is the marketing sales organization (MSO). Other nomenclatures can be found for the MSO, such as producer sales organization (PSO) or independent sales organization (ISO). This type of alliance presents itself as an association or a consortium of companies that market their products to take advantage of economies of scale through joint operations, in addition to establishing strength in trade negotiations and thus obtaining better conditions (Piorunowska-Kokoszko 2016).

There are different models of marketing–sales organization, which are individualized according to different parameters. The parameters that are used to differentiate these models are the product itself, the area of interest, the market segment, and an association of at least two previously mentioned parameters (Piorunowska-Kokoszko 2016).

Companies can use the strategic alliance model in their global marketing activities, with the aim of obtaining economies of scale, reducing costs, and minimizing risks related to the development of foreign markets. This alliance makes it possible to make full use of the marketing resources of each company member of the alliance, especially when there is a great risk and many obstacles in the development of the international market (Chen and Huang 2004).

It is worth noting that SMEs use marketing networks mainly to overcome their limitations regarding the scarcity of resources and in order to achieve new market opportunities. Different structures, processes, and tools that are used to produce new knowledge on how to implement and manage SME marketing networks. Furthermore, research suggests that effective learning can be positively associated with the investigation of new market opportunities through networks (Agostini 2016).

There are marketing skills related to collaborations in the domestic market and, mainly, in the foreign market. Collaborations can reduce the disadvantage resulting from information limitations and, thus, reduce the cost of economic transactions and help in a company's resource base (Kottaridi and Lioukas 2017).

Subrahmanya (2007) designed the scope of global opportunities that Indian SMEs could take advantage of. Joint efforts are mandatory for SMEs, as well as government officials to strengthen and provoke competitiveness within the sector and connect local SMEs to global multinationals. The author states that, given the current competitive economic scenario, it would be appropriate for SMEs to follow a dual strategy to take advantage of global opportunities:

- Vertical integration with transnational corporations located in India and abroad.
- Horizontal cooperation with other Indian SMEs to respond to a demand by transnational companies for consumer goods.

Brache and Felzensztein (2019) show that specific positive external factors are the main components of the co-location effect on export performance. Geographical proximity or co-location refers to the physical grouping of companies in the same region, enabling the interactive relationship between them. This is examined in the context of the Chilean economy. Unexpectedly, the survey results suggest that geographic co-location does not have a positive implication on export performance in this specific environment. Many

exporting SMEs in Latin America operate in clusters of industries or in close environments that affect geographic proximity.

Finally, we summarize some of the advantages, disadvantages, and structures of the collaborative forms used by SMEs in the context of internationalization in Table 3.

**Table 3.** Types of collaboration among SMEs.

Collaboration Type	Advantages	Disadvantages	Structure	Articles
Network	<ul style="list-style-type: none"> <li>Access a variety of resources and complementary skills</li> <li>Achieve economies or scale in operations</li> <li>Generate superior knowledge and capabilities</li> <li>Develop competencies and achieve efficient scale of operations through specialization</li> </ul>	<ul style="list-style-type: none"> <li>The risk that a partner will become a stronger competitor</li> <li>Misappropriation of technological know-how</li> <li>Loss of control over operations</li> <li>Opportunism</li> <li>Difficulty in having effective governance</li> </ul>	Horizontal/vertical network	<ul style="list-style-type: none"> <li>Akçay and Tan (2008); Aureli and Del Baldo (2013); Becchetti and Rossi (2000); Bhaskaran and Gligorovska (2009); Boehe (2013); Burlina (2020); Cisi et al. (2020); Costa et al. (2015); Costa et al. (2017); Davis and Sun (2006); Gajowiak (2013); Galdeano-Gómez et al. (2016); Hahti et al. (2005); Haddoud et al. (2017); Hashim (2015); Hietala et al. (2019); Jeong et al. (2019); Kamalian et al. (2015); Kock et al. (2010); Manolova et al. (2010); Matlay and Westhead (2007); Nunes and Franco (2015); Osarenkhoe and Fjellström (2019); Torkkeli et al. (2019); Tuusjärvi and Möller (2009); Zulu-Chisanga et al. (2020); Wegner et al. (2018)</li> </ul>
Cluster	<ul style="list-style-type: none"> <li>Export promotion</li> <li>Access to new markets</li> <li>Access to market info</li> <li>Innovation</li> <li>Lower R&amp;D costs</li> <li>Lower operation costs</li> <li>Shared costs/risks</li> <li>Know-how sharing</li> <li>Support and subsidies</li> <li>Infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Increased competition</li> <li>Reduction of profit margins</li> <li>Possible loss of unprotected intellectual property</li> <li>Increase in the prices of scarce factors of production</li> </ul>	Horizontal/vertical network	<ul style="list-style-type: none"> <li>Arslan (2020); Biswas and Roy (2007); Bobowski and Skulska (2012); Brache and Felzensztein (2019); Bhagwat and Sharma (2007); Camargo and Wang (2015); Doloreux (2008); Ale Ebrahim et al. (2010); Falcke (1999); Festa et al. (2020); Franco et al. (2020); Gancarczyk and Gancarczyk (2018); Garbade et al. (2013); Goerzen (2018); Hassan and Talib (2015); Havierniková and Mynarzová (2018); Hoffmann et al. (2014); Ibishov et al. (2020); Jankowiak (2013); Jankowiak (2018); Jankowska (2010); Jankowska (2015); Jankowska and Głowska (2016); Kock et al. (2010); Maurel (2009); Mesquita and Lazzarini (2008); Nadvi (1999); Osarenkhoe and Fjellström (2017); Paraušić et al. (2013); Sarturi et al. (2016); Tambunan (2009); Thomas et al. (2012); Vanyushyn et al. (2009); Vlachos and Gutnik (2016); Zavyalov et al. (2017); Zucchella and Siano (2014); Waite and Williams (2009)</li> </ul>
Strategic alliance	<ul style="list-style-type: none"> <li>Preserve business autonomy</li> <li>Economies of scale</li> <li>Risk sharing</li> <li>Increased cost savings</li> <li>Increased market share</li> <li>Increase profitability</li> <li>Reduced imitability</li> </ul>	<ul style="list-style-type: none"> <li>Alliance formation mistakes</li> <li>Poor strategic alliance management</li> <li>Short sight caused by a significant focus on the alliance</li> </ul>	Horizontal/vertical network	<ul style="list-style-type: none"> <li>Ati and M'Hiri Elleuch (2013); Bose and Bristy (2016); Culpan (2009); Franco and Haase (2015); Tambunan (2009); Tyll et al. (2020)</li> </ul>
Joint venture	<ul style="list-style-type: none"> <li>Higher probability of generating value</li> <li>De-incentivizes opportunistic behavior</li> </ul>	<ul style="list-style-type: none"> <li>Instability in achieving a balanced distribution of results, proportional to the resources contributed by each partner</li> </ul>	Horizontal network	<ul style="list-style-type: none"> <li>Ati and M'Hiri Elleuch (2013); Kaufmann (1995); López-Navarro et al. (2013); Tambunan (2009)</li> </ul>

Table 3. Cont.

Collaboration Type	Advantages	Disadvantages	Structure	Articles
Export consortia	Preservation of autonomy Risk sharing Benefit from synergies Economy of scale	Information asymmetry Conflicts of interest Agency costs	Horizontal network	Anopchenko and Ostrovskiy (2018); Antoldi et al. (2013); Boutary et al. (2012)
Strategic marketing alliance	Keeping independence of business Access to new consumers of goods and services, thanks to contacts of the group Lowering costs of marketing and sales activity Minimization of the risk of delivery of goods Time savings on building relationships with the customers Access to specialists	Financial participation required by the group Reduction of the amount of control the sales department of an enterprise has over its sales decisions	Horizontal/vertical network	Agostini (2016); Brache and Felzensztein (2019); Chen and Huang (2004); Kottaridi and Lioukas (2017); Piorunowska-Kokoszko (2016); Subrahmanya (2007); Tambunan (2009)

### 3.4. Business Models of Collaborative Forms

In this section, we present how the business model is configured in the different forms of collaboration among SMEs. We present the governance modes of the collaborative way in which they conduct business.

Governance from a network perspective describes the structure and rules of the internal organization of business networks. Governance rules are designed to balance the interests of members, as they are conflicting. In addition, these rules aim to ensure the long-term viability of the business network, especially when there is a conflict of interest between members and an information imbalance. The greater the number of members of the network, the greater its complexity and so, therefore, the challenge of good governance increases (Wegner et al. 2018).

Mesquita and Lazzarini (2008) complement the understanding of governance when they discuss the concept of relational governance mechanisms. This type of governance consists of collaborative provisions between companies based on informal rules and tacit codes of conduct that influence the behavior of firms among themselves. Partner companies involved in relational governance rely on generic processes for recurring ex post negotiations and, thus, face the problems involved in formalizing ex ante actions and responsibilities. In this way, the members institutionalize the collaborative space, establishing the resolution of conflicts through the mutual judgment of situations over time. Garbade et al. (2013) state that the degree of knowledge exchanged also defines which governance mechanisms are chosen for the alliance. Knowledge transfer must allow for the transfer and conversion of tacit knowledge.

When SMEs coordinate their collaborative actions through horizontal and vertical relational governance, they can achieve collective exploitation that collaborates for competitive entry into international markets. Horizontal or vertical relationships generate different types of collective efficiencies. Horizontal relational governance leads to the supply of collective inputs and product innovation, and vertical relational governance improves productivity throughout the supply chain (Mesquita and Lazzarini 2008).

Gancarczyk and Gancarczyk (2018) show that governance, in a cluster context, is a hybrid, as it is a cluster of relationships carried out by key agents based on some hierarchical form and market transactions. They point out that the internationalization of the cluster follows the phases that are implemented in different modes of governance, such as export with network governance based on regional outsourcing, offshore outsourcing, foreign direct investment through its own foreign subsidiaries or joint ventures, and reshoring.

Tuusjärvi and Möller (2009) indicate that, when participating in collaborative relationships, SMEs use three groups of grouping norms, which are: relational norms, discrete norms, and norms of moderate autonomy. These standards serve as the main means of

governance in the collaboration of SMEs. The establishment of these different standards and the choice of which standard to apply in a situation is related to the companies' understanding of which standards are fundamental and relevant. Three interest categories appeared as reasons for the structure of the rules. They are:

1. Self-interest that must be fulfilled in the cooperation, which demands discreet norms.
2. Reciprocally common interests, which are related to relational norms.
3. Particular strategic interests, which require preservation through standards of moderate autonomy.

#### 3.4.1. Network Administrative Organization

A network administrative organization (NAO) is a temporary collaborative relationship of a group of companies to seize a market opportunity that they would not be able to exploit if they acted individually (Akçay and Tan 2008).

The NAO is suggested as a more effective mode when compared to shared governance mode. This mode of governance seems appropriate for networks with a large number of participants and of complex organization, since an exclusive entity is created to operate in management of the network. A NAO manages the business network, but participants may contribute to strategic decisions and network planning. Even if the prerogative of participation in decision making is guaranteed to all companies participating in the network, the network decision-making process is influenced by larger companies (Wegner et al. 2018).

#### 3.4.2. Network Contract

The network contract as a tool was created by the Italian government in order to promote the competitiveness of SMEs (Agostini 2016; Aureli and Del Baldo 2013; Burlina 2020; Cisi et al. 2020). The network contract is a legal and economic instrument of collaboration between companies that mutually agree to practice a shared program, collaborating in areas related to their own activity, sharing technical, industrial, commercial, or technological information, knowledge, and/or services (Cisi et al. 2020).

The network contract is frequently used by companies participating in the same industrial district, even though it is rare that it contributes to the creation of transregional clusters (Aureli and Del Baldo 2013). The fundamental conditions of the network contract include the establishment of strategic objectives, the recognition of a network program that defines the mandatory activities and investments to implement the network contract and the rights and duties of each member. According to those who proposed the law, by creating such formal and strong networks, companies can simplify internal organization costs and processes (Cisi et al. 2020).

The companies that participate in a network contract seek advantages in different aspects, such as an improvement in their efficiency and their use of resources in their operations, development of new products, greater performance in international markets, better conditions to participate in tenders, and the possibility of participating in specific industrial policy measures, at different levels, whether national or local, since the government can, among other things, establish tax benefits and facilitate access to credit and loan guarantees (Cisi et al. 2020).

The Italian network contract is notably designed to help SMEs to overcome barriers and face the market, solve problems and achieve the best opportunities, as it presents a model of legal collaboration guided by self-regulation between the parties. Thus, it has gained popularity in Italy and has been recognized by the OECD as an innovative and promising political tool. In addition, it improves collaboration by leaving the typical informality between companies in their clusters in place (Cisi et al. 2020).

### 3.4.3. Cluster Organization

A cluster organization is a legal entity or public and private organization responsible for managing the cluster, which is commonly involved in the cluster's facilities and activities (Jankowska and Głowska 2016; Paraušić et al. 2013).

Jankowska (2015) shows that, in Poland, cluster organizations with legal personality can act in different ways, including as associations, foundations, limited liability companies, or cooperatives. In this way, cluster organizations assume the role of a formal collaboration platform, and their activities help to reduce a market failure, which is information asymmetry, and also to combat opportunistic behaviors. A cluster organization is a tangible representation of cooperation between the participants in the cluster, although it generally does not include everyone.

Paraušić et al. (2013) claim that most clusters in Serbian agribusiness are registered as an association in their legal form. Only four cluster initiatives are legally registered as non-profit corporations.

Paraušić et al. (2013) criticize the clusters in the agribusiness sector when they claim that they are not authentic clusters, as many of them are similar cooperatives, associations, or Non-Governmental Organizations (NGOs). There is no complete development of the participants in the cluster as companies, suppliers, or support institutions. In addition, they have some characteristics of a cluster that make them very similar to associations:

1. There are some clusters that, as participants, have only companies that carry out the same type of activities or that play the same role in the value chain.
2. Few clusters developed vertical relationships between participants in the product's value chain.
3. The performance of some educational and research organizations is very formal.
4. There is little collaboration between the members of the cluster when we analyze the exchange of information and knowledge.

Table 4 shows the number of articles that address each governance mode.

**Table 4.** Governance modes.

Network Administrative Organization (NAO)	Network Contract	Cluster Organization
2	4	3

### 3.5. Government Support

Several countries recognized the importance of developing collaboration among SMEs, mainly for the growth of exports and internationalization. China (Thomas et al. 2012), Denmark, Australia, Austria (Vlachos and Gutnik 2016), Malaysia (Hashim 2015), Norway, New Zealand, Spain, Canada (Doloreux 2008), the USA, Finland, and Portugal (Nunes and Franco 2015) promote programs to support the formation of collaborative networks of SMEs (Tuusjärvi and Möller 2009). Government support is seen as essential at the various levels of operation, regardless of the type of business or the region. In addition, when it comes to SMEs, this support is more relevant, as they need it so that they can compete with large companies (Anopchenko and Ostrovskiy 2018; Bose and Bristy 2016; Chen and Huang 2004; Hashim 2015; Zulu-Chisanga et al. 2020).

In addition, some articles pointed out that the lack of government support programs of collaborative relationships for the internationalization of SMEs in certain industrial sectors was a factor that may have hindered the performance of these SMEs. Some examples of countries that should implement such support programs are Chile (Brache and Felzensztein 2019), Serbia (Paraušić et al. 2013), and India (Jankowiak 2013). Although there are divergent results in the literature, there are studies showing that government support does not have a significant effect on the financial performance of SMEs (Zulu-Chisanga et al. 2020).

Government Export Promotion Programs (GEPPs) are defined as government actions that help companies achieve good export performance. These export support programs can be experiential and informative. Examples of experiential services include trade shows, trade missions, support by trade offices abroad, and programs which identify foreign agents and distributors. On the other hand, workshops and seminars in order to explain how to export, individual export counseling, foreign language support, and training programs specializing in exporting are examples of informative services (Haddoud et al. 2017).

#### 4. Directions for Future Research Development

The general objective of this study is to systematically analyze and synthesize research, be it empirical or conceptual, which focuses on collaborative forms of SMEs in the context of internationalization. To satisfy this objective, we present the progress of the theme in the last three decades and we present different theories and conceptual perspectives applied until now. In this section, we present some identified gaps and paths for future research.

Future research could include: comparative studies between business networks that have similar objectives and that follow different development patterns; research examining exogenous variables and how they interfere with the development of the network, which is relevant both to consolidating existing theories and to influencing business practices; and consideration of the institutional environment of the country where the network is located, along with a comparison of business networks created without public support with those with government support (Wegner et al. 2018). Additionally, it could be beneficial to study relationships between SMEs in different countries, in order to compare those located in developing economies and those in developed economies.

Future studies could present the factors that drive innovation and knowledge sharing between companies in the same cluster. Another possible area of study is the segmentation between family and non-family companies among the companies in the cluster, specifically with regard to management knowledge and the desire to carry out innovation. Another research theme could be about clustering, regarding the connections between companies within the cluster and the constitution of these collaborative networks, which can be directed to companies in clusters from different industries.

#### 5. Conclusions

This article presents a systematic review of the literature on the types of collaborative relationships among SMEs when seeking to internationalize. A literature review method was designed and executed to explore more than 600 references. A systematic selection procedure based on the PRISMA protocol was applied to select 76 articles relevant to this review. By doing so, we brought together and presented a detailed representation of the situation of SMEs collaborative forms in the context of expanding their market. As a result of our research, we found that the research developed in this area is growing. In addition, we were interested in answering two central questions: 1. What forms of collaboration among SMEs are used when these companies enter the international market? 2. How do these collaborations between SMEs shape their business models?

As an answer to these guiding questions, we saw that networks, more precisely clusters, are a collaborative form that is widely explored in the literature, especially applied research. Moreover, other collaborative forms, such as strategic alliances, joint ventures, and consortia have proven to be relevant for SMEs. In relation to business models, governance between SMEs has gained prominence in publications, and types of governance are important aspects since they are seen as a fundamental aspect in the collaborative relationships of SMEs.

Finally, we want this article to be used, either in the academic environment or by professionals, as a support to those interested in the theme of internationalization of SMEs, so that, in this way, the area gains theoretical and empirical strength, which can develop and bear fruit in the development of these companies that move economies around the world.

**Author Contributions:** Conceptualization: L.G.d.A.G., P.B. and Y.C.; methodology: L.G.d.A.G.; software: L.G.d.A.G.; writing—original draft preparation: L.G.d.A.G.; writing—review and editing: L.G.d.A.G., P.B. and Y.C.; supervision: Y.C. and P.B.; project administration: P.B. and Y.C.; funding acquisition: P.B. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was funded by Natural Sciences and Engineering Research Council of Canada (NSERC), grant number IRCPJ 461745-18 and RDCPJ 514294-17, awarded to Université Laval.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** Data sharing is not applicable to this article.

**Acknowledgments:** The authors are grateful to Natural Sciences and Engineering Research Council of Canada for the financial support through its IRC and CRD programs (IRCPJ 461745-18 and RDCPJ 514294-17) as well as the industrial partners of the NSERC industrial chair on eco-responsible wood construction (CIRCERB), the industrial partners of the industrialized construction initiative (ICI) and the Créneau Accord Bois Chaudière-Appalaches (BOCA).

**Conflicts of Interest:** The authors declare no conflict of interest.

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