



# The IMP research on business networks: a systematic literature review and research agenda

Simone Guercini<sup>1</sup> · Antonella La Rocca<sup>2</sup> · Andrea Perna<sup>3,4</sup>

Received: 21 April 2023 / Accepted: 11 May 2024  
© The Author(s) 2024

## Abstract

More than 40 years of Industrial Marketing and Purchasing (IMP) research have revealed that in b2b markets, business exchange is carried out in continuous buyer–seller relationships. This involves direct and indirect interaction and dynamics resulting in significant related social and material investments and in extensive interdependencies that confer on the business landscape a market-as-network structure. Since the introduction of this ideas, research on business networks has been richly alimented by researchers of the IMP community. Yet, we do not have a clear overview of what this literature has covered in the last twenty years (in the period 2002–2022), in parallel with the many changes that have affected business landscape. With this study, we aim to examine what is the status of the last 20 years of IMP literature specifically dealing with *the* business networks level of analysis (45 articles) and to offer key directions for imminent research in this domain while analyzing and synthesizing extant literature.

**Keywords** Business networks · IMP · Buyer-seller relationships · Interdependencies

---

✉ Andrea Perna  
a.perna@univpm.it  
Simone Guercini  
simone.guercini@unifi.it  
Antonella La Rocca  
antonella.larocca1@unicatt.it

<sup>1</sup> Dipartimento di Scienze per l’Economia e l’Impresa, Università degli Studi di Firenze, Florence, Italy

<sup>2</sup> Department of Management SEGESTA, Università Cattolica del Sacro Cuore, Milan, Italy

<sup>3</sup> Department of Management, Università Politecnica delle Marche, Ancona, Italy

<sup>4</sup> Department of Civil and Industrial Engineering, Uppsala University, Uppsala, Sweden

## 1 Introduction

The concept of network has been continuously at the centre of attention of scholars in the business-to-business marketing field which is dominated by the North American mainstream approach and the IMP (Industrial Marketing and Purchasing) driven research (Möller & Halinen, 2022). Although the IMP-driven research still struggles to be cited beyond its community (Aramo-Immonen et al., 2020), the IMP Group (see Håkansson & Gadde, 2018, for a review on how the research network has developed) has substantially contributed to the industrial marketing field (Möller & Halinen, 2018). One of the first and most important contributions of the initial founders of the IMP Group lies in the ‘discovery’ of the existence of buyer-seller relationships (Ford, 1980; Håkansson, 1982) and, soon after, that of “networks” in business markets, as evidenced by the introduction of a specific concept to describe that characteristic namely: ‘markets-as-network’ (Mattsson, 1987). This idea aimed to capture an empirical phenomenon that remained mostly unrecognized until that period, namely that producers and users, instead of jumping around between different counterparts, playing with the price mechanisms, appeared to interact closely and deeply with their main counterparts making significant adaptations in relation to each other (Håkansson et al., 2009). The picture of the business world that emerges from the IMP research tradition is characterized by relatedness and limited autonomy among single individual companies and by products being a variable defined by the parties (Håkansson & Snehota eds., 2017). In this tradition a network has been defined as a structure where a number of nodes (business units such as producers, customers, service companies and suppliers of finance, knowledge or influence) are related to each other by specific threads which are relationships between companies (Ford et al., 2003). Research in the IMP perspective takes the stance that both markets and firms are considered networks of relationships (Håkansson & Johanson, 1992). Consequently, much of what was traditionally thought to be within the boundaries of the firm is, in this perspective, in the “between”. Networks are seen as structures that “emerge” from the evolution of business relationships (Håkansson & Snehota, 1995). On one side, prevailing interdependencies between actors become institutionalized, and therefore difficult to change. On the other side, networks reveal no once-and-for all stable structures but are in a continuous process of change as relationships are established or change in their nature or cease to exist (Anderson et al., 1998). Stability and change are thus an inherent duality of business networks (Håkansson & Snehota, 1995). Seeing markets as network-like structures poses some challenges both from a methodological point of view for researchers involved in the study of networks (Abrahamsen et al., 2017) but also for managers who have to make sense of an evolving and complex context populated by interacting companies (Håkansson et al., 2009). Each manager has her own subjective interpretation of the world around them that provide each manager’s particular network picture of the process of the network and that form the basis for their networking.

Research on business network dynamics has proliferated since the observation that most research was focused on the stable character of industrial networks (Anderson et al., 1998), and one may ask what remains to be discovered. We believe that the undergoing transformation processes to the business landscape are a unique opportunity

for studying and better understanding business networks dynamics. Indeed, the business world keeps evolving and the important topic of changes in, and implications of the interactive business world, is a wide avenue open for further research (Waluszewski et al., 2019). However, in order to advance our knowledge in this domain, and to contribute more broadly to the development of b2b marketing theory (Hadjikhani & LaPlaca, 2013; Hunt, 2013), we need an overview of what lines of research have been followed and what remains instead overlooked. Therefore, the research questions that guided our study are: (1) what are the main research directions that have emerged in the last 20 years of IMP research focusing on business networks level of analysis? (2) in light of identified previous studies on business networks from an IMP perspective, what are key directions and valuable areas for further research in this field?

Our findings show that further research avenues should entail the topic of sensemaking in business networks, managing 'in' and across networks, network structures and dynamics. We suggest that within these three interlinked areas, researchers should continue developing theoretical frameworks as well as nurturing the managerial perspective and therefore elaborating new managerial tools.

The remainder of our paper is organized as it follows. In section 2 (Methodology) we explain how we have conducted the systematic literature review (Tranfield et al., 2003) on IMP-related research published between 2002 and 2022, having business networks as main focus of attention. Section 3 offers an analysis of the 45 identified articles having a focus on business networks. These articles have been examined through an in-depth thematic analysis from which four sub-themes of research have emerged as prominent: (1) sensemaking in networks; (2) managing in business networks; (3) connection of multiple/different networks; (4) supply networks; and (5) networks structures and dynamics. Based on the analysis of this literature, we outline in the last section of the paper some directions for further research on business networks.

## 2 Methodology

To answer to the study's research questions, the Authors decided to rely on a systematic literature review (SLR) method (Tranfield et al., 2003; Snyder, 2019) that helps to reach a reliable evaluation of the existent scientific knowledge of a certain topic. As we are interested – on one hand – to provide an IMP-driven overview of business network research and – on the other hand – to offer a possible research agenda on business network within current contexts, the choice of utilizing SLR appears suitable. In other words, SLR appears a coherent method when researchers aim at carrying out an integrated and synthesized overview of a certain topic and describe future research directions (Palöatier et al., 2018).

Conducting the review (Tranfield et al., 2003) has implied for the Authors to pre-plan the search strategy and perform the first step of the review with the identification of the literature database and the research string. The authors have selected one of the major and comprehensive research Internet data base–Scopus – and performed (on December 28th, 2022) a research of all the articles published in the period 2002–2022. The Authors have then identified a research string in reference to the subject of

the review. We included in the Title field the word “network” and in the Abstract field the word “industrial marketing and purchasing” (31 results) or “IMP” (55 results) or “INA” (2 results) or “ARA” (7 results). This combination of words allowed us to identify studies dealing with networks having an explicit link with the IMP approach. Besides the word “IMP”, in an extended version and as acronym, we included the acronym of Industrial Network Approach (INA) which is sometimes used as alternative to business network approach or IMP approach and the word “ARA” (standing for Actor-Resource-Activity and referring to actor bonds, activity links and resource ties) which refers to one of the key framework for analyzing business relationships used by IMP researchers (Håkansson & Snehota, 1995) and as such is often used to refer to the IMP approach.

In the following step – the process of selecting and assessing studies (Tranfield et al., 2003) – the Authors have collectively taken several decisions. The Authors have excluded manuscripts such as book chapters, conference proceedings and conference papers in order to increase the level of validity (Podsakoff et al., 2005) and therefore relied on peer-reviewed article journals. Excluding results that appeared multiple times, the search resulted in 62 articles and 6 introductions to special issues. The analysis of abstracts led to exclusion of further 6 papers which, despite containing the searched key-words, fall into the following cases: key words were used but referred to other concepts; a study with a very operational objective; 2 studies focusing on analysing the IMP research community/business network studies and 2 studies for which the full text was not available. This step of the process yielded a total of 56 papers and 6 editorials. In the next stage of the systematic literature review process, all the authors have read the 56 papers and the 6 editorials. From the reading of the full articles the authors found 17 articles (which are listed in Appendix A), including 2 editorials, that are focused on concepts and/or phenomena other than business networks, although adopting a business network viewpoint. In these papers the reference to business network was used as synonymous to IMP approach, therefore appearing in our results, but without business networks being at the center of the phenomenon analyzed. In particular, of 17 excluded articles: 6 have as a main focus entrepreneurial phenomena (including one editorial), 3 are focused on conflicts, 2 on identity construction, 1 on social capital, 1 on innovation processes, 1 on competition, 1 on the flow of money and 1 on purchasing behavior. Furthermore, we excluded 1 editorial that include several topics, in line with the collected articles in the special issue, without converging on a theme specifically. According to our research goal – identified over the planning step of the review (Tranfield et al., 2003) – we excluded such articles and proceeded with a thematic analysis of the remaining articles. The thematic analysis has represented a central and key activity carried out in order to report the results of the SLR (Tranfield et al., 2003): thematic analysis is useful mostly when researchers have to scrutinize fragmented concepts once a set of scientific articles is selected for carrying out the research. So, it represented a well-suited way to accomplish our research goal: we implemented the thematic analysis in order to shed light on the key areas within the IMP business networks literature. While undertaking thematic analysis, we followed five phases of thematic analysis (Braun & Clarke, 2006): data familiarisation, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing the final output. We summarized

the studies in an Excel sheet with various columns such as journal name and rank, year published, authors, key research question, methods, key findings, themes and comments, which were our interpretations for the findings. We discussed the generated Excel sheet to create themes which are described in the literature as representing key concepts that define the subject of an article (Ryan & Bernard, 2003). Following this approach, we derived five themes labelled as follow: sensemaking in networks, managing in networks, connection of multiple/different networks, supply networks and networks structures and dynamics. The 45 articles, which are also reported in Appendix B, are discussed in the following section.

### 3 Discussion

From the full text analysis of the 45 papers resulting from our search and subsequent exclusion/inclusion process, we have identified 5 key themes (as explained in the [methodology](#) section). In this section we aim to discuss the most salient findings of the articles within each theme in order to outline, in the final section of the paper, some opportunities for further research in these or adjacent areas. The discussion is thus organized in five sub-sections: (3.1) Sensemaking in networks; (3.2) Managing in business networks; (3.3) Connection of multiple/different networks; (3.4) Supply networks; 3.5 Network structures and dynamics.

#### 3.1 Sensemaking in networks

The 7 papers dealing with what we have labeled “sensemaking in networks” (see Table 1) have as common thread an interest for better understanding the link between seeing, perceiving and acting in business network context. Among these papers we can include that of Ellis and Hopkinson (2010) who is the only one that focuses on the role of communication for managerial action. In their study they investigate how the activity of communicating is made sense of by network actors and conclude that the “discursive production of communication plays a role in structuring the world(s) of IFRs [inter-firms relationships] and establishes some of the network ‘facts’ into which managers act” (p. 421). Most of the other papers, focus their attention on mental models. In the paper by Welch and Wilkinson (2002), the attention is indeed directed to the concept of “ideas” as force behind actors’ action in networks that at the same time evolve through interactions. By combining the “ideological dimension” with the “relational dimension”, the authors’ attempt is to go beyond considering the mental model or “schema” at the company level, to take into account also how the schemas of two organizations become interrelated and adapted to each other over time in line with the ongoing relationship (“schema coupling”). In addition, they also refer to the “schema configuration” at the network level as “the pattern of co-adapted ideas characterising a network and which underlie its functioning” (Welch & Wilkinson, 2002, p.33). This work, with its final suggestions on the need to take into account business network actors’ mental models, is in line with studies focusing on the idea of mental “pictures” as a basis for managerial action. The focus in these studies is to examine what managers *see* of their network context and how this is

**Table 1** Papers on sense making in networks

Title	Author	Year	Journal	Key concept/phenomenon
Idea logics and network theory in business marketing	Welch C., Wilkin-son I.	2002	Journal of Business-to-Business Marketing	Ideas and schemas, schema coupling and schema configuration
From “taking” network pictures to “making” network pictures: A new metaphorical manifesto for industrial marketing research	Purchase S., Lowe S., Ellis N.	2010	Journal of Organizational Change Management	Network pictures vs. Network movies
The construction of managerial knowledge in business networks: Managers’ theories about communication	Ellis N., Hopkin-son G.	2010	Industrial Marketing Management	Managerial talks, discursive repertoires
The utilisation of network pictures to examine a company’s employees’ perceptions of a supplier relationship	Leek S., Mason K.	2010	Industrial Marketing Management	Network pictures variety at relationship level, depth and width of network pictures, (lack of) overlap between network pictures
Beyond network pictures: Situational strategizing in network context	Laari-Salmela S., Mainela T., Puhakka V.	2015	Industrial Marketing Management	Network visioning, sense-making of sensemaking
Improving transport performance in supply networks: effects of (non) overlapping network horizons	Eriksson V., Hulthén K., Pedersen A.-C.	2021	Journal of Business and Industrial Marketing	Network horizon, myopic network horizon
Relationships and networks as a chiasmic mirroring of ideas/images translated in context through ritual embodied activities	Lowe S.	2022	Journal of Business and Industrial Marketing	Post-Cartesian focus upon ideas/images and activities

related to what they *do*. Laari-Salmela et al. (2015) for instance modeled a situational mechanism of strategy formation according to which managers, by interpreting the change and forming and adjusting the network picture held, make sense of strategic issues arising at the network level and act or react accordingly. The authors make a further step in the reasoning, by suggesting that by making sense of their sensemaking process, managers could become more conscious about their engagement in the act of network visioning which is about seeing beyond the existing network pictures (Laari-Salmela et al., 2015). The idea of ‘looking beyond’ the existing puts the attention to the space dimension of the network pictures which is an issue addressed in the paper by Eriksson et al. (2021). The authors elaborate on the idea of ‘network horizon’, defined as “how extended one actor’s view of the network is” (Anderson et al., 1994 cited in Eriksson et al., 2021, p. 1769), and illustrate the negative effect a myopic network horizon can have on bringing forward a change initiative (Eriksson et al., 2021). The authors emphasize the need for managers to be aware of how their network horizon overlaps, partly overlaps and does not overlap with other actors’ network horizon, in order to act upon what they perceive. This leads the attention to the issue of the variability in network pictures between individuals involved in the same

relationship. Leek and Mason (2010), found differences in *depth* and *width* of network pictures depending on managerial levels and functions within the organization. While an overlap of network pictures is considered to be important, a lack of overlap could also be positively exploited, as it could provide important insights to managers such as helping them in identifying the need for a new communication channel (Leek & Mason, 2010). Despite its popularity, the concept of network picture has also attracted some critic for not taking into account the evolving nature of the network. To tackle this weakness and to go beyond the cartesian “picture theory”, Purchase et al. (2010) contrast the concept of network picture with that of ‘network movies’ to focus the attention on the making of pictures (cinematographic reality) more than the taking (photographic reality). The authors observe that while by adopting the latter perspective researchers aim for stability and order, the cinematographic metaphor “allows researchers to consider industrial networks as evolving complex adaptive systems” (Purchase et al., 2010, p. 602). In a similar vein, Lowe (2022) advocates a post-Cartesian focus upon ideas/images and activities as “a dynamically evolving, inter-animating, complex duality, which promotes a practical turn towards polyvalent and situated, imaginative solutions to emergent contextual and often seemingly unmanageable problems and issues within business relationships” (p. 249).

### 3.2 Managing in business networks

Within the thematic group of papers on managing in business networks (see Table 2), we have identified two sub-themes: (1) capabilities, roles and behaviors required for managing (in) business networks and (2) the process of strategizing in business networks. Starting from the first sub-theme, the special issue by Golfetto, Salle, Borghini and Rinallo (2007), brings the attention to one issue, among some others, that has been regularly debate by IMP scholars, namely whether firms are able to ‘manage networks’ or rather can only ‘manage in networks’. Independently from the position taken on this matter (intentional business networks or strategic nets vs. emerging business networks), research seems to converge on the idea that some sort of capabilities are required in order to cope in a context of interconnected relationships. We find two articles in this group of papers that discuss the capabilities required by what has been identified as a ‘network coordinator’ or ‘network mobilizer’. Lemmetyinen and Go (2009) suggest that the ‘network coordinator’ requires different kind of capabilities such as network orchestration and visioning, and the capacity for joint knowledge creation, but also, towards the end of the life cycle, ‘strong partnering capability’. Also, Hermes and Mainela (2014), have attempted to be specific on the kind of capabilities and behaviors required in different situations. In their study on a network mobilization process for institutional change in a turbulent context, the authors identify three different behaviors of a ‘peace-building network mobilizers’: incentivizing, reticent and adaptational behaviors. First the authors find that actors become legitimized network mobilizers drawing on incentivizing behavior (offering free consultation and information services) to motivate actors to collaborate. Second, they find that actors in complex crisis situations do not mobilize networks for institutional change through direct, pro-active behavior, as suggested in previous studies, rather they reticently wait for the right moment to get involved. Third, the authors

**Table 2** Papers on managing in business networks

Title	Author	Year	Journal	Key concept/phenomenon
Managing collaboration within networks and relationships	Batt P.J., Purchase S.	2004	Industrial Marketing Management	Collaboration within networks and impact on firms' strategies
Opening the network: Bridging the IMP tradition and other research perspectives	Golfetto F., Salle R., Borghini S., Rinallo D.	2007	Industrial Marketing Management	contrasting IMP with other perspectives, endogenous development of IMP, managerial relevance
The key capabilities required for managing tourism business networks	Lemmetyinen A., Go F.M.	2009	Tourism Management	Network coordinator
Network strategising trajectories within a planned strategy process	Harrison D., Prenkert F.	2009	Industrial Marketing Management	Network strategising trajectories
How companies strategise deliberately in networks using strategic initiatives	Harrison D., Holmen E., Pedersen A.-C.	2010	Industrial Marketing Management	Strategizing vis à vis different external counterparts, and periods of development/time
The drama of interaction within business networks	Lowe S., Purchase S., Ellis N.	2012	Industrial Marketing Management	Dramaturgical approach to the understanding of business networks
Tourism experience network: Co-creation of experiences in interactive processes	Sfandla C., Björk P.	2013	International Journal of Tour- ism Research	Actors as experience facilitators in tourism networks
Mobilizing crisis management networks - Entrepreneurial behavior in turbulent contexts	Hermes J.W.S., Mainela T.	2014	Industrial Marketing Management	Peace-building network mobilizers' behaviors: incentivizing, reticent and adaptational
Organizing and strategizing in changing networks: Contributions to theory, methodology and management	Freytag P.V., Munks- gaard K.B., Clarke A.H., Damgaard T.M.	2016	Industrial Marketing Management	Strategizing in networks
The social-political roles of NGOs: a study on a triadic business network	Cheah C.W.	2019	Journal of Busi- ness and Indus- trial Marketing	Supportive and disruptive roles of NGO in a triad
The "Interacted" actor in platformed networks: theorizing practices of managerial experience value co-creation	Ramaswamy V., Ozcan K.	2020	Journal of Busi- ness and Indus- trial Marketing	Interactive agency of actors
Driving or driven by others? A dynamic perspective on how data-driven start-ups strategize across different network roles in digitalized business networks	Mosch P., Winkler C., Eggert C.-G., Schumann J.H., Oberma- ier R., Ulaga W.	2022	Industrial Marketing Management	Start-ups' network roles, strategizing trajectories

find that peace-building situations are always unique and require a large degree of flexibility and creativity by peace-building actors, which rules out the possibility of adopting long term strategies by network mobilizers who are instead in need of adaptive capabilities (Hermes & Mainela, 2014). The other papers of this group take a dif-

ferent perspective compared to the previous mentioned studies: more than focusing on the qualities/behaviors of a single actor and his/her actions, they espouse an interaction perspective on actors. Lowe et al. (2012), propose a dramaturgical approach to the understanding of business networks and Ramaswamy and Ozcan (2020) focus on the interactive agency of actors. The idea by Ramaswamy and Ozcan (2020) is to conceive the actor as an “interacted” actor connected to practices of managerial value creation in interactive platforms that bring together physical and digital artifacts and interfaces, and persons and processes in purpose-built environments. Also, the paper by Cheah (2019) focuses on how actors interact within a network and how it affects each other’s decision. In their analysis of a triadic interaction in the Malaysian housing market, involving a property developer, states and an NGO, the authors find that the NGO plays both supportive roles (as partner, advisor and mediator) and disruptive roles (as attacker, challenger and influencer) when interacting with the state and property developers (Cheah, 2019). Sfandla and Björk (2013), also take an interactive perspective by proposing a framework for tourism networks - the tourism experience network (TEN) - in which facilitators and tourists are seen as active co-creators of experiences in relational interactive processes. By linking the value as experience logic with the ARA model, the authors define actors as “experience facilitators” who act as connectors, integrators and facilitators in relational bonds processes to include tourists in the network (Sfandla & Björk, 2013).

The other set of papers dealing with the issue of managing in business network focuses specifically on the process of strategizing in business networks. The publication of two special issues in *Industrial Marketing and Management* journal, one in 2004 (Batt & Purchase, 2004) and one in 2016 (Freytag, Munksgaard, Clarke & Damgaard, 2016) is an indication of the importance of the topic as well as of the need to better scrutinize this phenomenon. Already in 2009, Harrison and Prenkert (2009), highlighted a scarcity of studies on how managers in an organization formally develop a strategy in a network context. The authors propose the concept of ‘network strategizing trajectories’ as a way to analyse how a team of strategists considers the effects of network connections while undertaking a planned process within a project setting. Building on the ARA model, the authors identify the actor network strategizing trajectory, the resource network strategizing trajectory and the activities network strategizing trajectory (Harrison & Prenkert, 2009). Also the study by Harrison et al. (2010), focuses on deliberate strategising initiatives putting the attention on how these might vary depending on types of external counterparts, and different periods of development/time: 1) strategising based on network pictures in the absence of direct interaction; 2) strategising in the presence of a network audience; 3) Strategising among deliberate equals; 4) strategising among imaginative equals, and 5) strategising as open and absorptive bystander. In line with other studies within this stream that try to be situational rather than overgeneralize, the paper by Mosch and colleagues (2022) examines the network roles operated by start ups in a digitalized business network and how they strategize within and across different network roles, identify four network roles -enabler, extender, transformer, and orchestrator- and three main strategizing trajectories: 1) moving to the center, 2) develop strong network ties, and 3) strengthening the current role (Mosch et al., 2022).

### 3.3 Connection of multiple/different networks

From the themes emerged from our sample of articles, the one on the connection of multiple/different networks (see Table 3) is characterized by being a recently addressed topic. Indeed, all the 6 papers have been published in the last five years. The papers deal with connection of public-private networks but also networks of object with network of actors and home network with foreign network.

Cheah's study (2019) focuses on the link between public and private settings by examining the housing sector which is regulated by a public actor hosting organizations which serve both b2c and b2b customers. The organizations are clearly affected by the public actor in their strategizing process although the authors show that mutual adaptations between the public and private settings are required. The originality of the work lies in the observation that an *issue-based net* might emerge as a form of collaboration nurtured by the public actor with the goal of reaching a collective purpose – such as public housing initiatives. The concept of issue-based net is also used in the study by Proença et al. (2018) who adopt that idea to highlight how, in the case of a Portuguese city council, social services networks between public, nonprofit and private organizations have emerged. The peculiarity of the study (if compared to “traditional” studies in the IMP tradition that mainly focus on the emergence of informal, non-planned networks) is that it is focused on the emergence of formally established and ‘planned’ networks.

**Table 3** Papers on the connection of multiple/different networks

Title	Author	Year	Journal	Key concept/phenomenon
A network perspective on the reshoring process: The relevance of the home- and the host-country contexts	Baraldi E., Ciabuschi F., Lindahl O., Fratocchi L.	2018	Industrial Marketing Management	Interdependencies, transnational networks, re-embedding activities
Enabling factors for developing a social services network	Proença T., Proença J.F., Costa C.	2018	Service Industries Journal	Multiple networks and social services, enabling factors, issue-based net
Why firms exploit the dual marketing strategy? A network-institutional perspective	Cheah C.W.	2021	Journal of Business and Industrial Marketing	Planned strategic networks, dual marketing strategy, issue-based net
Actor roles and public-private interaction in transitioning networks: the case of geofencing for urban freight transport in Sweden	Lindkvist H., Lind F., Melander L.	2023	Journal of Business and Industrial Marketing	Public-private networks, actors' roles and positions, developing setting
Managing interorganizational interactions for social impact: A study of two antibiotics R&D networks	Baraldi E., Ciabuschi F., Kronlid C., Lindahl O.	2022	Journal of Business Research	Intended social impact, R&D networks, network governance
Integrating the business networks and internet of things perspectives: A system of systems (SoS) approach for industrial markets	Pardo C., Wei R., Ivens B.S.	2022	Industrial Marketing Management	System of System approach (SoS), network management

Also, the paper by Baraldi et al. (2022), focuses on the connection of public-private networks and, more specifically, on R&D networks in relation to the production of antibiotics. The authors show how the mechanism surrounding the management of the networks is affected, due to the objectives of the project, by the intended social impact of developing and distributing new antibiotics which is in turn affected by the complexity of the R&D networks where multiple and heterogenous actors are involved with different goals and expectations.

Lindkvist et al. (2023) explore the roles played by actors when a new technology emerges within public and private business network. Distinguishing between the developing setting and the implementing setting, the authors aim to shed light on transition from one network configuration to another. More specifically, the Authors elaborate on transition by analyzing actor' roles with reference to the acceptance of them over the transition process between developing to implementing networks. Pardo et al. (2022) propose to consider a new type of network in relation to the Internet of Things. The authors suggest that the connection of Industrial internet of Things (IIoT) physical products creates a sort of network of things which adds to the business network. In the discussion the paper shows that a 'system of things' relates to a 'system of actors' through changes in connections and in value creation process which in turn affects the way networks can be managed (Pardo et al., 2022). The last type of connection between different networks identifiable in this set of papers is the one related to the re-shoring process as analyzed in the paper by Baraldi et al. (2018). Authors focus their attention to the manufacturing activities which are reshored and so re-embedded in the home country markets and show how the home country network effects guide the entire reshoring process. In other words, the reshoring decision is shaped by not only the business relationships the focal company is embedded in but also through the changes the relocation implies at the home network level.

### 3.4 Supply networks

A better understanding of the functioning of supply networks has emerged as a key theme and the seven papers discussed in this section (see Table 4) aim to provide a contribution in the research area at the intersection of supply chain management and industrial marketing and purchasing research traditions. Most of the papers (5/7 papers) deal with sustainability issues such as the one by Ryan et al. (2012) that investigates the role of interactions and network for developing sustainable organizations. From a theoretical perspective, the paper advances the understanding of changes – related to dyadic and network levels – for reaching a more comprehensive view about sustainable organizations. In this regard, a conceptual framework is presented which includes the system/network, issue-based or strategic nets, dyadic relationships and the network organization. This framework – based on a multi-actor logic and so against the single actor view – sheds light on how collaborations are fundamental for developing sustainable organizations, and it put an emphasis on the role of suppliers and supply network members when those organizations are emerging. Also, the paper by Frostenson and Prenkert (2015) aims to demonstrate that supply chains are relational and network-based structures. The work focuses on the risks of

**Table 4** Papers on supply networks

Title	Author	Year	Journal	Key concept/phenomenon
Partnering and relationships within an international network context	De Lurdes Veludo M., Macbeth D.K., Purchase S.	2004	International Marketing Review	Partnering, collaborations, supply chain management, ARA model
Managing interdependencies in supplier networks	Roseira C., Brito C., Heneberg S.C.	2010	Industrial Marketing Management	Interdependencies, network structures and dynamics
An interaction and networks approach to developing sustainable organizations	Ryan A., Mitchell I.K., Daskou S.	2012	Journal of Organizational Change Management	Sustainability, learning process, strategizing
Sustainable supply chain management when focal firms are complex: A network perspective	Frostenson M., Prenekert F.	2015	Journal of Cleaner Production	Sustainability, resources, expanded network horizon, network position
The role of power and trust in spreading sustainability initiatives across supply networks: A case study in the bio-chemical industry	Meqdadi O., Johnsen T.E., Johnsen R.E.	2017	Industrial Marketing Management	Sustainability, power and trust, multiple supplier networks
The role of inter-organizational relations and networks in agribusiness: The case for the Polish fruit and vegetable industry	Wiśniewska-Paluszak J.A., Paluszak G.T.	2019	International Journal on Food System Dynamics	Sustainability, relational resources
Creating a Sustainable Supply Chain Network by Adopting Relationship Management Strategies	Rezaei Vandchali H., Cahoon S., Chen S.-L.	2020	Journal of Business-to-Business Marketing	Sustainability, network structures, decision making process

taking the focal company as the major and most important actor driving the adaptation of supply chain management to the current sustainability context and scenario.

The article by Meqdadi et al. (2017) addresses the problem of the ‘spreading of sustainable initiatives’ in supply networks. The Authors show how the coordination mechanisms and capabilities of organizing activities among heterogenous actors is central for spreading green initiatives along the supply network. In this vein, ‘spreading’ seems relating to the concepts of trust and power considered key for orchestrating the diffusion of sustainability. On a similar vein, Rezaei Vandchali et al. (2020) link the concept of SSCN to the one of relationship management strategies (RMS) to explain how firms should cope with sustainable issues. Their output in terms of theoretical contributions is represented by a network-based framework that leads to the development of 16 propositions aimed to guide companies to identify the sustainability practices and how to implement them. The last paper focusing on sustainability issues – (and the only one adopting a more quantitative methodological perspective) is the study carried out by Wiśniewska-Paluszak and Paluszak (2019). The authors analyze the concept of network relationships with reference to the agribusiness sector and suggest that ‘network objectives’ are key as they shape the business relationships. With reference to the suppliers and the business relationships of focal firms with them, the Authors point out that the specificities of the agribusiness networks

result in the creation of not very long in time supplier relationships. The study shows clearly a big variety of the supplier relationships within agribusiness.

The two remaining articles look at supply networks but from a more traditional (according to the IMP research tradition) perspective. Roseira et al. (2010) study the supplier networks by focusing on interdependencies which emerge while companies interact. Interdependencies are the unit of analysis in this paper: they are investigated in order to verify what are the effects of them within the supplier networks. For instance, kind of special outsourcing groups are created in which a number of actors get specialized in performing industrial products. Finally, the last paper in this group, by Veludo et al. (2004), shows that partnering and business relationships are key for connecting different research traditions such as IMP, buyer-seller literature and multinational corporation (MNC) literature. The authors utilize the automotive industry as context. In this paper the importance of the network effects is taken into consideration for developing further the MNC literature. The collaborations and their importance between carmakers and suppliers are highlighted as being rather complex due to the potential divergent scopes of the involved parties: these contrasts seem also to increase as consequence of the internationalization of the supply networks.

### 3.5 Networks structures and dynamics

Network structure and dynamics has been addressed in the IMP literature by considering different subtopics (network structure, networking), perspectives (time, space) and methodological approaches (moving beyond the traditional focus on case research). A central theme is that of the coexistence of stability and change, already highlighted by Håkansson and Snehota (1995), but dynamics is also related to other themes that may be examined over time or emerge with respect to specific contingencies. However, the heterogeneity of themes and perspectives in the IMP literature generally builds around a significant grip on the underlying themes, helping to build the richness of the IMP approach. Let us look at the identified contributions (see Table 5) that testify to this diversity and coherence. To start with an IMP's core theme - that of stability and change - we can mention the paper by Bondeli and Havenvid (2022) which puts emphasis on the phenomenon of resilience as the capacity of a firm to survive, adapt and grow in the face of turbulent change, by continuously preparing for and rebounding from setbacks (Hamel & Välikangas, 2003; Pettit et al., 2010). The authors suggest that a firm's ability to 'bounce back' is dependent on its ability to manage interdependencies with other firms in the network which implies that a firm's resilience is a function of its relationships. Furthermore, it is suggested that to achieve resilience in a turbulent and uncertain environment, such as described in the paper, firms invest in the development of social capital with business and non-business actors rather than in the development of material resource interfaces (as often underlined in IMP-related studies). Also, the paper by Sutton-Brady (2008) is focused on the link stability-change in business networks but more than conceiving them as two separate states in the evolution of a network, Sutton-Brady (2008) stresses their co-existence. The author's study, based on the analysis of Australian wine industry organizations, identifies and proposes other variables than time (a proxy variable for stability) that may influence the stability of business relationships which includes

**Table 5** Papers on network structures and dynamics

Title	Author	Year	Journal	Key concept/phenomenon
Networks, learning and the lifecycle	Benson-Rea M., Wilson H.I.M.	2003	European Management Journal	Network structure, change, evolution
Evolutionary economics and the markets-as-networks approach	Brennan R.	2006	Industrial Marketing Management	Evolutionary economics, market-as-network approach, business network evolution
As time goes by: Examining the paradox of stability and change in business networks	Sutton-Brady C.	2008	Journal of Business Research	Stability and change in business networks, time as proxy of stability
Relational paths in business network dynamics: Evidence from the fashion industry	Guercini S., Runfola A.	2012	Industrial Marketing Management	Business networks dynamics, interaction evolution and business network dynamics, integration, substitution
Cross-border M&A as a trigger for network change in the Russian bakery industry	Degbey W., Pelto E.	2013	Journal of Business and Industrial Marketing	Merger and acquisition, change in business networks
Structural antecedents of institutional entrepreneurship in industrial networks: A critical realist explanation	Matthyssens P., Vandembemt K., Van Bockhaven W.	2013	Industrial Marketing Management	Intentionality, critical realism, business network dynamics, business network manageability
Business service networks and their process of emergence: The case of the Health Cluster Portugal	Ramos C., Roseira C., Brito C., Henneberg S.C., Naudé P.	2013	Industrial Marketing Management	Business services networks, network formation
The influence of network effects on SME performance	Naudé P., Zaeфарian G., Najafi Tavani Z., Neghabi S., Zaeфарian R.	2014	Industrial Marketing Management	Networking, network structure, SMEs, performance, emotional intelligence, social network analysis, structural equation modeling
Dimensions of space in business network research	Törnroos J.-Å., Halinen A., Medlin C.J.	2017	Industrial Marketing Management	Space in business network, economic geography, business network dimensions, business network notions
Change in business relationships and networks: Concepts and business reality	Fonfara, K., Ratajczak-Mrozeka, M., Leszczyński, G.	2018	Industrial Marketing Management	Change in business networks
Business network becoming: Figurations of time, change and process	Lowe S., Rod M.	2018	Industrial Marketing Management	Time, change, metaphor, time conceptualization epistemology, ontology
Re-appraising interaction and process for industrial network research: The future plunging mirror hall metaphor	Andersen P.H., Medlin C.J., Törnroos J.-Å.	2020	Industrial Marketing Management	Business network, epistemology, ontology, metaphor
Bouncing back in turbulent business environments: Exploring resilience in business networks	Bondeli J.V., Havenvid M.I.	2022	Industrial Marketing Management	Resilience, business context turbulence, social capital

location, product/service quality, technology, cooperativeness, adaptations and cost. The position of Benson-Rea and Wilson (2003) on the stability-change problem is different as the authors contest to the IMP approach to adopt a static view of change and suggest taking account of the more dynamic case of network revolution that is the ability to fundamentally change the network focus. Juxtaposing the IMP perspective with the entrepreneurial perspective, Benson-Rea and Wilson (2003) present a conceptual framework relating evolutionary/emergent and revolutionary/intended networks to learning processes. The question on the emergent vs. intentional nature of business networks has attracted the attention of several scholars. The paper by Matthyssens et al. (2013) proposes the adoption of a methodological approach of “critical realism” and grapples with an open debate about the nature of business network dynamics. The paper holds together methodological-epistemological aspects and boundary conditions in the IMP debate to either view business network dynamics as an emergent collective phenomenon or as an intentional phenomenon that results from the will of individual actors. From a more empirical point of view, Degbey and Pelto (2013) have focused on the question of what triggers change and put the attention on the effect of country mergers and acquisitions (M&A) on both incremental and radical network changes. The analysis of their findings shows how changes triggered by an M&A do not only concern the relationship between the merging parties but may spread into connected relationships generating a more extensive network effect. Research in this area has also put the attention on the reconfiguration of business networks resulting from the appearance of new and the disappearance of old actors, resources or activities (Fonfara et al. 2018). The paper by Naudé, Zaefarian, Tavani, Neghabi and Zaefarian (2014), instead of focusing on the effects of network structure and external networking behaviors, examines the antecedents of these two constructs proposing to consider emotional intelligence and entrepreneurial style as key variables. The authors found support to the relationship between emotional intelligence and the two constructs while did not find support to the relationship between entrepreneurial style and external networking. Drawing on the results of the study, the authors conclude that emotional intelligence of CEOs may help them in acquiring a better position in the network as they have better chances to span structural holes and move to a central position in their network.

The topic of time and change is also addressed in the article by Lowe and Rod (2018) which examines different philosophical and cultural perspectives. The authors distinguish objective (clock time) and subjective dimensions (time marked by events experienced by actors) and examine different concepts of time in different cultures (circular, linear). The paper states that a ‘becoming’ network is an unfolding emergence and therefore this requires researchers to explore “how different contextual conceptions of time in different locales affects different outcomes in terms of uniqueness in behavior, communication and cognition” (Lowe & Rod, 2018, p. 162). Continuing the debate on change, we find also the study by Brennan (2006) which examines the relationship between business network research and evolutionary economics research. Brennan (2006) focuses particularly on the classic and influential contribution of Nelson and Winter (1982), recognizing some correspondences or parallelisms between evolutionary economics research and the market-as-network approach developed in IMP research. The author hypothesizes advantages that could

result from an integration of the two approaches. For the IMP tradition related to market-as-network these advantages would include the study of the dynamics of change, while for evolutionary economics there would be advantages from an extension of the study to interorganizational routines as well as those within synchronic organizations (Brennan, 2006).

Networks evolution has been also examined by Guercini and Runfola (2012) who, by conducting an empirical research on firms producing semi-finished textiles and their long-standing relationships with customers, found two patterns of business network dynamics induced by interaction evolution, which are called “integration” and “substitution.” The four cases examine different circumstances that characterize the evolution of the textile semi-finished product supplier’s interaction with the customer. The analysis of the cases shows how the interactions pose challenges to the relationship which leads two possible consequences: a greater integration into existing relationships in the business network, or a replacement of some relationships with new ones.

The topic of network dynamics and, in particular, network emergence is also discussed by Ramos et al. (2013) along the following lines: (1) the reasons why networks are formed, that is, why actors need to interact with other actors; (2) how partners are chosen; and (3) how environmental conditions influence the process of network formation. Drawing on the empirical findings, the authors’ conclusion is that there is no one single theory having the power to explain the process of network emergence; instead, a diverse combination of different theories has a good explanatory power at different stages of the process.

While most of the papers in this section deal with the time dimension in relation to business networks, the paper by Törnroos et al. (2017), exactly acknowledging the prominence of the theme of time in the study of business networks in the IMP literature, highlights a lack of studies on the role of spatial structures in which processes and experiences, as well as mind maps and managerial mindsets, take place. According to the authors the concept of space in research seems to be used in a very broad way, to the point that the theme of space is associated to general concepts such as that of “network structure” or “location”. To fill this gap, the authors propose four dimensions in relation to space for business network research: (1) a structural network dimension; (2) a mental network dimension; (3) a relative network dimension; and (4) a relational dimension. Three notions of space for business network research are then developed: (1) place, (2) location, and (3) distance.

Finally, the last paper in this group, by Andersen et al. (2020) looks at business network through the tool of metaphor. The authors propose to reevaluate the interaction and process theme in the context of industrial networks by considering different approaches and, in particular, the realist and the constructivist (basically of the social constructivism type) approaches. The contribution appears partly ontological but mainly epistemological to the study of business networks, providing some implications from the discussion of conceptual categories with regard to the study of longitudinal processes of organizations, temporality in processes, and the need to consider different perspectives to better understand interaction in business networks.

## 4 Conclusions and directions for further research

The aim of our study was to get an overview of the research on business networks produced by researchers belonging to the IMP research community in the last two decades and to use the performed analysis as source of inspiration to generate possible future lines of research which we detail in the following paragraphs. We acknowledge that the reported literature review, although systematic, is not exhaustive as we may have excluded relevant papers on the subject due to the absence in the abstracts of the papers of key words we employed as shortcut to identify research on business networks with an explicit link to the IMP. However, we do not pretend with this paper to provide a comprehensive research agenda on business networks, but rather, we would like to contribute to stimulate the debate on this long-lasting stream of research which continue to appear central also considering the undergoing and impactful economic, environmental and social changes. We thus suggest three lines for future research which revolve around the five sub-themes and insights coming from the underlying studies. The first line of research follows up from the theme of sensemaking, the second line of research comes from intersecting three of the themes identified – managing in business networks, connection of multiple/different networks and supply networks – while the last and third line of research we propose is related to the last theme identified which is network structures and dynamics. Looking at the three research areas it is also possible to envision research that spans across the three lines of research identified as shown in Fig. 1.

In relation to the theme of sensemaking, we think that there is plenty of research opportunities starting from concepts identified in the literature and not yet fully

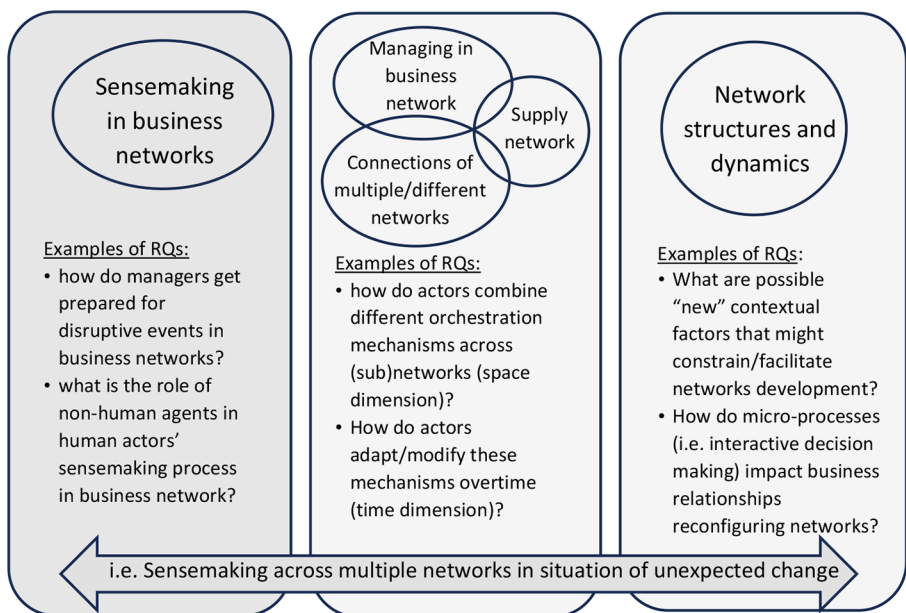


Fig. 1 Future lines of research on business networks from an IMP perspective

exploited. Ideas such as ‘network movies’ (vs. network pictures) and ‘network visioning’ testify the need of looking at business networks with strong processual lenses but also having a forward-looking perspective. From the time perspective, this implies for researchers to account for current sensemaking (usually done retrospectively), but also to make efforts in investigating what’s that managers see as impacting the relevant network in the near future, and how they think they will act upon what they perceive it will be. The challenge for researchers is to produce both theoretical frameworks and managerial tools that really reflect this dynamic and forward-looking perspective. The increasing complexity and uncertainty characterizing markets in the last years (Bocconcelli et al., 2018), directs the attention on how managers can be ready to face disruption; by comparing managers’ intentions (forward looking perspective) with subsequent behaviors (reconstructed via sensemaking approach), and by tracking outcomes, might be a way to identify/examine more or less effective patterns. This might also help scrutinizing better the traits/characteristics of individual actors (on which there has been limited attention in IMP-related studies) as well as concepts like resilience which has become very popular but appears often as black-boxed. Also, the ability to see and act in a more extensive network base, also due to an increasing number of actors to relate with (often institutional) and employment of non-human actors in b2b context (Paschen et al., 2021), draws the attention on how managers may come (or need to) to question more often their own existing network pictures and perceived network horizons in order to prefigure new/unexpected network configurations. Follow up research questions might be: how do managers get prepared for disruptive events in business networks? what is the role of non-human actors in human actors’ sensemaking process in business network?

A second line of research we believe is still relevant exploring and that we link to the second, third and fourth theme emerged in our literature review, is the one on managing in and across networks. Distancing itself from the conventional view on managerial processes, the IMP suggests that, to the sake of the network itself (its effectiveness and innovativeness), the network should not be controlled; rather, at the core of management in the business landscape there is the networking process (Håkansson et al., 1995). Following this seminal line of thought, we have seen, through our literature review, that concepts like ‘network orchestration’ and ‘network mobilization’ have received increasing attention. Again, starting from two key dimensions for the IMP approach – time and space – we see some opportunities for research. From one side, focusing on the space dimension, we see room for research into zooming into the combination of orchestrating mechanisms a company can put in place to manage the multiplicity of relationships it is engaged with. Indeed, concepts like ‘orchestration’ and ‘mobilization’ are often treated as unified mechanisms (toward a network) while there are hints (for instance implied in the concept of ‘trajectories’) that more mechanisms can be used in parallel depending on the specific network (part of a network or sub-network) at hand. Furthermore, the variety of different business and non-business actors, human and non-human actors, as well as the entrance of new actors coming into play due to major transformations brought by the digital transformation and the transition towards sustainable development, might lead to adaptations/modifications to these mechanisms overtime. Furthermore, interactions among actors ‘belonging’ to different networks inevitably increase the pos-

sibility of having to cope with contrasting views which poses the attention on topics such as communication and conflict management. This is particular evident in relation to supply networks, especially global, which generally involve actors belonging to different sectors and thus often following different logics. We have seen how supply chain crisis, like the one generated by Covid-19, has led to the re-shaping of global supply networks which make this empirical context particular interest to study changes in orchestration mechanisms. Research on the variety and variability of orchestration/mobilizations mechanisms employed by the same company in and across networks, and over time, is still scant and we thus propose this as a research area for further research on business networks.

The third line of research we propose, and that we see as an overall reflection on the future of research on business networks, is anchored to the last theme discussed in our literature review, network structures and dynamics. The reading of networks proposed by the IMP group is recognizable from that proposed by other scholarly communities in the field of management and more generally in scholarly research in recent decades (strategic networks, social networks, etc.). Indeed, in recent decades the network has been the subject of reading in different disciplinary contexts and with different approaches, from organization to sociology and more generally in the social sciences, from Internet reality to complex systems theory (Barabási, 2013). We think that future research comparing these different perspectives to networks, and the peculiar contribution of the IMP approach in comparing these approaches, may be useful for research on approaching markets as networks. IMP research approaches business networks in a context in which the study of interaction and relationships is present. In particular, the study of interaction (La Rocca & Hoholm & Mørk, 2017) tends to favor a view of network dynamics as (micro) grounded in the dynamics of interactions in them such as “learning” and “teaching” in interaction (Guercini & Runfola, 2015) or interactive decision making (Guercini et al., 2022). We believe that the IMP approach to networks candidates it to effectively interpret new contexts in which network actors are emerging from the advancing technological environment such as networks of things or networks with artificial intelligence agents.

## 5 Appendix A. Papers that deal with concepts/phenomena other than business networks but adopting a business network (IMP) perspective

Title	Author	Year	Journal	Key concept/phenomenon
Network perspectives on interfirm conflict: Reassessing a critical case in international business	Welch C., Wilkinson I.	2002	Journal of Business Research	Power and conflicts
Business to business relationships: The paradox of network constraints?	Ballantyne D., Williams J.	2008	Australasian Marketing Journal	Power and conflicts

Title	Author	Year	Journal	Key concept/phenomenon
Stochastic modelling and industrial networks-complementary views of organisational buyer behavior	McCabe J., Stern P.	2009	Journal of the Academy of Marketing Science	Common ground between stochastic modelling and IMP
The impact of globalization on networks and relationship dynamics	Paliwoda S.J.	2012	Industrial Marketing Management	Various concepts/phenomena
Constructing identities in Indian networks: Discourses of marketing management in inter-organizational relationships	Ellis N., Rod M., Beal T., Lindsay V.	2012	Industrial Marketing Management	Identity
When in Rome, be(come) a Roman? An actor focus on identities in networks	Huemmer L.	2013	Industrial Marketing Management	Identity
Competition in business networks	Ford D., Håkansson H.	2013	Industrial Marketing Management	Competition
Managing in conflict: How actors distribute conflict in an industrial network	Finch J., Zhang S., Geiger S.	2013	Industrial Marketing Management	Power and conflicts
The roles of money and business deals in network structures	Håkansson H., Olsen P.I.	2015	Industrial Marketing Management	Money/deal
How to manage innovation processes in extensive networks: A longitudinal study	Aarikka-Stenroos L., Jaakkola E., Harrison D., Mäkitalo-Keinonen T.	2017	Industrial Marketing Management	Innovation
Placing social capital in business networks: conceptualisation and research agenda	Bondeli J.V., Havensvid M.I., Solli-Sæther H.	2018	Journal of Business and Industrial Marketing	Social capital
Strategic patterns in the development of network capability in new ventures	O'Toole T., McGrath H.	2018	Industrial Marketing Management	New venturing/start ups
A business network perspective on unconventional entrepreneurship: A case from the cultural sector	Pagano A., Petrucci F., Bocconcelli R.	2018	Journal of Business Research	New venturing/start ups
Start-ups and networks: Interactive perspectives and a research agenda	Baraldi E., Ingemansson Havensvid M., Linnéa Å., Öberg C.	2019	Industrial Marketing Management	New venturing/start ups
Early stage network engagement strategies in the network capability development of new ventures	McGrath H., O'Toole T.	2021	Journal of Business and Industrial Marketing	New venturing/start ups
Serial crowdfunding in start-up development: a business network view	Fortezza F., Pagano A., Bocconcelli R.	2021	Journal of Business and Industrial Marketing	New venturing/start ups

Title	Author	Year	Journal	Key concept/phenomenon
It ain't over till it's over: exploring the post-failure phase of new ventures in business networks	Petrucci F., Milanesi M.	2022	Journal of Business and Industrial Marketing	New venturing/start ups

## 6 Appendix B. Overview of the 45 reviewed articles

Title	Author	Year	Journal	Key concept/phenomenon
Idea logics and network theory in business marketing	Welch C., Wilkinson I.	2002	Journal of Business-to-Business Marketing	Ideas and schemas, schema coupling and schema configuration
Networks, learning and the lifecycle	Benson-Rea M., Wilson H.I.M.	2003	European Management Journal	Entrepreneurship, IMP, network structure, change, evolution
Managing collaboration within networks and relationships	Batt P.J., Purchase S.	2004	Industrial Marketing Management	Collaboration within networks and impact on firms' strategies
Partnering and relationships within an international network context	De Lurdes Veludo M., Macbeth D.K., Purchase S.	2004	International Marketing Review	Partnering, collaborations, supply chain management, ARA model
Evolutionary economics and the markets-as-networks approach	Brennan R.	2006	Industrial Marketing Management	Evolutionary economics, market-as-network approach, business network evolution
Opening the network: Bridging the IMP tradition and other research perspectives	Golfetto F., Salle R., Borghini S., Rinallo D.	2007	Industrial Marketing Management	Contrasting IMP with other perspectives, endogenous development of IMP, managerial relevance
As time goes by: Examining the paradox of stability and change in business networks	Sutton-Brady C.	2008	Journal of Business Research	Stability and change in business networks, time as proxy of stability
The key capabilities required for managing tourism business networks	Lemmetynen A., Go F.M.	2009	Tourism Management	Network coordinator
Network strategising trajectories within a planned strategy process	Harrison D., Prekert F.	2009	Industrial Marketing Management	Network strategising trajectories
How companies strategise deliberately in networks using strategic initiatives	Harrison D., Holmen E., Pedersen A.-C.	2010	Industrial Marketing Management	Strategizing vis à vis different external counterparts, and periods of development/time
Managing interdependencies in supplier networks	Roseira C., Brito C., Henneberg S.C.	2010	Industrial Marketing Management	Interdependencies, network structures and dynamics

Title	Author	Year	Journal	Key concept/phenomenon
From “taking” network pictures to “making” network pictures: A new metaphorical manifesto for industrial marketing research	Purchase S., Lowe S., Ellis N.	2010	Journal of Organizational Change Management	Network pictures vs. Network movies
The construction of managerial knowledge in business networks: Managers’ theories about communication	Ellis N., Hopkinson G.	2010	Industrial Marketing Management	Managerial talks, discursive repertoires
The utilisation of network pictures to examine a company’s employees’ perceptions of a supplier relationship	Leek S., Mason K.	2010	Industrial Marketing Management	Network pictures variety at relationship level, depth and width of network pictures, (lack of) overlap between network pictures
The drama of interaction within business networks	Lowe S., Purchase S., Ellis N.	2012	Industrial Marketing Management	Dramaturgical approach to the understanding of business networks
Relational paths in business network dynamics: Evidence from the fashion industry	Guercini S., Runfola A.	2012	Industrial Marketing Management	Business networks dynamics, interaction evolution and business network dynamics, integration, substitution
An interaction and networks approach to developing sustainable organizations	Ryan A., Mitchell I.K., Daskou S.	2012	Journal of Organizational Change Management	Sustainability, learning process, strategizing
Tourism experience network: Co-creation of experiences in interactive processes	Sfandla C., Björk P.	2013	International Journal of Tourism Research	Actors as experience facilitators in tourism networks
Cross-border M&A as a trigger for network change in the Russian bakery industry	Degbey W., Pelto E.	2013	Journal of Business and Industrial Marketing	Merger and acquisition, change in business networks
Structural antecedents of institutional entrepreneurship in industrial networks: A critical realist explanation	Matthyssens P., Vandembemt K., Van Bockhaven W.	2013	Industrial Marketing Management	Intentionality, critical realism, business network dynamics, business network manageability
Business service networks and their process of emergence: The case of the Health Cluster Portugal	Ramos C., Roseira C., Brito C., Henneberg S.C., Naudé P.	2013	Industrial Marketing Management	Business services networks, network formation
Mobilizing crisis management networks - Entrepreneurial behavior in turbulent contexts	Hermes J.W.S., Mainela T.	2014	Industrial Marketing Management	Peace-building network mobilizers’ behaviors, incentivizing, reticent and adaptational
The influence of network effects on SME performance	Naudé P., Zaefarian G., Najafi Tavani Z., Neghabi S., Zaefarian R.	2014	Industrial Marketing Management	Networking, network structure, SMEs, performance, emotional intelligence, social network analysis, structural equation modeling

Title	Author	Year	Journal	Key concept/phenomenon
Beyond network pictures: Situational strategizing in network context	Laari-Salmela S., Mainela T., Puhakka V.	2015	Industrial Marketing Management	Network visioning, sense-making of sensemaking
Sustainable supply chain management when focal firms are complex: A network perspective	Frostenson M., Prenekert F.	2015	Journal of Cleaner Production	Sustainability, resources, expanded network horizon, network position
Organizing and strategizing in changing networks: Contributions to theory, methodology and management	Freytag P.V., Munksgaard K.B., Clarke A.H., Damgaard T.M.	2016	Industrial Marketing Management	Strategizing in networks
The role of power and trust in spreading sustainability initiatives across supply networks: A case study in the bio-chemical industry	Meqdadi O., Johnsen T.E., Johnsen R.E.	2017	Industrial Marketing Management	Sustainability, power and trust, multiple supplier networks
Dimensions of space in business network research	Törnroos J.-Å., Halinen A., Medlin C.J.	2017	Industrial Marketing Management	Space in business network, economic geography, business network dimensions, business network notions.
Change in business relationships and networks: Concepts and business reality	Fonfara K., Ratajczak-Mroczka M., Leszczyński G.	2018	Industrial Marketing Management	Change in business networks
A network perspective on the reshoring process: The relevance of the home- and the host-country contexts	Baraldi E., Ciabuschi F., Lindahl O., Fratocchi L.	2018	Industrial Marketing Management	Interdependencies, transnational networks, re-embedding activities
Enabling factors for developing a social services network	Proença T., Proença J.F., Costa C.	2018	Service Industries Journal	Multiple networks and social services, enabling factors, issue-based net
Business network becoming: Figurations of time, change and process	Lowe S., Rod M.	2018	Industrial Marketing Management	Time, change, metaphor, time conceptualization epistemology, ontology
The social-political roles of NGOs: a study on a triadic business network	Cheah C.W.	2019	Journal of Business and Industrial Marketing	Supportive and disruptive roles of NGO in a triad
The role of inter-organizational relations and networks in agribusiness: The case for the Polish fruit and vegetable industry	Wiśniewska-Paluszak J.A., Paluszak G.T.	2019	International Journal on Food System Dynamics	Sustainability, relational resources
The “Interacted” actor in platformed networks: theorizing practices of managerial experience value co-creation	Ramaswamy V., Ozcan K.	2020	Journal of Business and Industrial Marketing	Interactive agency of actors
Creating a Sustainable Supply Chain Network by Adopting Relationship Management Strategies	Rezaei Vandchali H., Cahoon S., Chen S.-L.	2020	Journal of Business-to-Business Marketing	Sustainability, network structures, decision making process

Title	Author	Year	Journal	Key concept/phenomenon
Re-appraising interaction and process for industrial network research: The future plunging mirror hall metaphor	Andersen P.H., Medlin C.J., Törnroos J.-Å.	2020	Industrial Marketing Management	Business network, epistemology, ontology, metaphor
Why firms exploit the dual marketing strategy? A network-institutional perspective	Cheah C.W.	2021	Journal of Business and Industrial Marketing	Planned strategic networks, dual marketing strategy, issue-based net
Improving transport performance in supply networks: effects of (non)overlapping network horizons	Eriksson V., Hulthén K., Pedersen A.-C.	2021	Journal of Business and Industrial Marketing	Network horizon, myopic network horizon
Relationships and networks as a chiasmic mirroring of ideas/images translated in context through ritual embodied activities	Lowe S.	2022	Journal of Business and Industrial Marketing	Post-Cartesian focus upon ideas/images and activities
Driving or driven by others? A dynamic perspective on how data-driven start-ups strategize across different network roles in digitalized business networks	Mosch P., Winkler C., Eggert C.-G., Schumann J.H., Obermaier R., Ulaga W.	2022	Industrial Marketing Management	Start-ups' network roles, strategizing trajectories
Actor roles and public-private interaction in transitioning networks: the case of geofencing for urban freight transport in Sweden	Lindkvist H., Lind F., Melander L.	2023	Journal of Business and Industrial Marketing	Public-private networks, actors' roles and positions, developing setting
Managing interorganizational interactions for social impact: A study of two antibiotics R&D networks	Baraldi E., Ciabuschi F., Kronlid C., Lindahl O.	2022	Journal of Business Research	Intended social impact, R&D networks, network governance
Integrating the business networks and internet of things perspectives: A system of systems (SoS) approach for industrial markets	Pardo C., Wei R., Ivens B.S.	2022	Industrial Marketing Management	System of System approach (SoS), network management
Bouncing back in turbulent business environments: Exploring resilience in business networks	Bondeli J.V., Havenvid M.I.	2022	Industrial Marketing Management	Resilience, business context, turbulence, social capital

**Funding** Open access funding provided by Università Politecnica delle Marche within the CRUI-CARE Agreement.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

## References

- Abrahamsen, M., Havensvid, I. M., & La Rocca, A. (2017). Researching the Interactive Business Landscape. In H. Håkansson and I. Snehota (Eds.), *No Business is an Island: Making Sense of the Interactive Business World*. (pp. 253–273), Emerald.
- Andersen, P. H., Medlin, C. J., & Törnroos, J. Å. (2020). Re-appraising interaction and process for industrial network research: The future plunging mirror hall metaphor. *Industrial Marketing Management*, *91*, 627–638.
- Anderson, J. C., Håkansson, H., & Johanson, J. (1994). Dyadic Business relationships within a Business Network Context. *Journal of Marketing*, *58*(4), 1–15.
- Anderson, H., Havila, V., Andersen, P., & Halinen, A. (1998). Position and role-conceptualizing dynamics in business networks. *Scandinavian Journal of Management*, *14*(3), 167–186.
- Aramo-Immonen, H., Carlborg, P., Hasche, N., Jussila, J., Kask, J., Linton, G., & berg, C. (2020). Charting the reach and contribution of IMP literature in other disciplines: A bibliometric analysis. *Industrial Marketing Management*, *87*, 47–62.
- Barabási, A.-L. (2013). Network science. *Phil Trans R Soc A*, *371*, 20120375. <https://doi.org/10.1098/rsta.2012.0375>.
- Baraldi, E., Ciabuschi, F., Lindahl, O., & Fratocchi, L. (2018). A network perspective on the reshoring process: The relevance of the home- and the host-country contexts. *Industrial Marketing Management*, *70*, 156–166.
- Baraldi, E., Ciabuschi, F., Kronlid, C., & Lindahl, O. (2022). Managing interorganizational interactions for social impact: A study of two antibiotics R&D networks. *Journal of Business Research*, *141*, 264–278.
- Batt, P., & Purchase, S. (2004). Managing collaboration within networks and relationships. *Industrial Marketing Management*, *33*(3), 169–174.
- Benson-Rea, M., & Wilson, H. I. M. (2003). Networks, learning and the lifecycle. *European Management Journal*, *21*(5), 588–597.
- Bocconcelli, R., Cioppi, M., Fortezza, F., Francioni, B., Pagano, A., Savelli, E., & Splendiani, S. (2018). SMEs and marketing: A systematic literature review. *International Journal of Management Reviews*, *20*, 227–254.
- Bondeli, J. V., & Havensvid, M. I. (2022). Bouncing back in turbulent business environments: Exploring resilience in business networks. *Industrial Marketing Management*, *107*, 383–395.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.
- Brennan, R. (2006). Evolutionary economics and the markets-as-networks approach. *Industrial Marketing Management*, *35*, 829–838.
- Cheah, C. W. (2019). The social-political roles of NGOs: A study on a triadic business network. *Journal of Business and Industrial Marketing*, *34*(5), 994–1004.
- Cheah, C. W. (2021). Why firms exploit the dual marketing strategy? A network-institutional perspective. *Journal of Business and Industrial Marketing*, *36*/12, 2150–2164.
- De Lurdes Veludo, M., Macbeth, D. K., & Purchase, S. (2004). Partnering and relationships within an international network context. *International Marketing Review*, *21*(2), 142–157.
- Degbey, W., & Pelto, E. (2013). Cross-border M&A as a trigger for network change in the Russian bakery industry. *Journal of Business and Industrial Marketing*, *28*/3, 178–189.
- Ellis, N., & Hopkinson, G. (2010). The construction of managerial knowledge in business networks: Managers' theories about communication. *Industrial Marketing Management*, *39*, 413–424.
- Eriksson, V., Hulthén, K., & Pedersen, A. C. (2021). Improving transport performance in supply networks: Effects of (non)overlapping network horizons. *Journal of Business and Industrial Marketing*, *36*/10, 1767–1779.
- Fonfara, K., Ratajczak-Mrozek, M., & Leszczyński, G. (2018). Change in business relationships and networks: Concepts and business reality. *Industrial Marketing Management*, *70*, 1–4.
- Ford, D. (1980). The development of buyer-seller relationships in industrial markets. *European Journal of Marketing*, *14*(5/6), 339–353.
- Ford, D., Gadde, L. E., Håkansson, H., & Snehota, I. (2003). *Managing Business relationships*. Wiley.
- Frostenson, M., & Prenkert, F. (2015). Sustainable supply chain management when focal firms are complex: A network perspective. *Journal of Cleaner Production*, *107*, 85–94.

- Guercini, S., & Runfola, A. (2012). Relational paths in business network dynamics: Evidence from the fashion industry. *Industrial Marketing Management*, 41(5), 807–815.
- Guercini, S., & Runfola, A. (2015). Actors' roles in interaction and innovation in local systems: A conceptual taxonomy. *Journal of Business & Industrial Marketing*, 30(3/4), 269–278.
- Guercini, S., La Rocca, A., & Snehota, I. (2022). Decisions when interacting in customer-supplier relationships. *Industrial Marketing Management*, 105, 380–387.
- Hadjikhani, A., & LaPlaca, P. (2013). Development of B2B marketing theory. *Industrial Marketing Management*, 42(3), 294–305.
- Håkansson, H. (Ed.). (1982). *International marketing and purchasing of industrial goods. An interaction approach*. Wiley.
- Håkansson, H., & Gadde, L. E. (2018). Four decades of IMP research—the development of a research network. *IMP Journal*, 12(1), 6–36.
- Håkansson, H., & Johanson, J. (1992). A model of Industrial Networks. In Björn, Axelsson, & G. Easton (Eds.), *Industrial Networks. A new view of reality*. Routledge.
- Håkansson, H., & Snehota, I. (1995). *Developing relationships in Business networks*. Routledge.
- Håkansson, H., & Snehota, I. (Eds.). (2017). *No business is an island: Making sense of the interactive business world*. Emerald Group Publishing Limited.
- Håkansson, H., Ford, D., Gadde, L. E., Snehota, I., & Waluszewski, A. (2009). *Business in networks*. Wiley.
- Hamel, G., & Välikangas, L. (2003). The quest for resilience. *Harvard Business Review*, 81, 52–63.
- Harrison, D., & Prenkert, F. (2009). Network strategising trajectories within a planned strategy process. *Industrial Marketing Management*, 38, 662–670.
- Harrison, D., Holmen, E., & Pedersen, A. C. (2010). How companies strategise deliberately in networks using strategic initiatives. *Industrial Marketing Management*, 39(2), 947–955.
- Hermes, J. W. S., & Mainela, T. (2014). Mobilizing crisis management networks - entrepreneurial behavior in turbulent contexts. *Industrial Marketing Management*, 43(6), 967–976.
- Hunt, S. D. (2013). A general theory of business marketing: RA theory, Alderson, the ISBM framework, and the IMP theoretical structure. *Industrial Marketing Management*, 42(3), 283–293.
- La Rocca, A., Hoholm, T., & Mørk, B. E. (2017). Practice theory and the study of interaction in business relationships - some methodological implications. *Industrial Marketing Management*, 60, 187–195.
- Laari-Salmela, S., Mainela, T., & Puhakka, V. (2015). Beyond network pictures: Situational strategizing in network context. *Industrial Marketing Management*, 45, 117–127.
- Leek, S., & Mason, K. (2010). The utilisation of network pictures to examine a company's employees' perceptions of a supplier relationship. *Industrial Marketing Management*, 39, 400–412.
- Lemmettyinen, A., & Go, F. M. (2009). The key capabilities required for managing tourism business networks. *Tourism Management*, 30, 31–40.
- Lindkvist, H., Lind, F., & Melander, L. (2023). Actor roles and public-private interaction in transitioning networks: The case of geofencing for urban freight transport in Sweden. *Journal of Business and Industrial Marketing*, 38(6), 1376–1389.
- Lowe, S., & Rod, M. (2018). Business network becoming: Figurations of time, change and process. *Industrial Marketing Management*, 68, 156–164.
- Lowe, S. (2022). Relationships and networks as a chiasmic mirroring of ideas/images translated in context through ritual embodied activities. *Journal of Business and Industrial Marketing*, 37(2), 241–251.
- Lowe, S., Purchase, S., & Ellis, N. (2012). The drama of interaction within business networks. *Industrial Marketing Management*, 41(3), 421–428.
- Matthyssens, P., Vandenbempt, K., & Van Bockhaven, W. (2013). Structural antecedents of institutional entrepreneurship in industrial networks: A critical realist explanation. *Industrial Marketing Management*, 42(3), 405–420.
- Mattsson, L.-G. (1987). Management of strategic change in a 'markets as networks perspective'. In A. Pettigrew (Ed.), *Management of Strategic Change* (pp. 234–256). Basil Blackwell.
- Meqdadi, O., Johnsen, T. E., & Johnsen, R. E. (2017). The role of power and trust in spreading sustainability initiatives across supply networks: A case study in the bio-chemical industry. *Industrial Marketing Management*, 62, 61–76.
- Möller, K., & Halinen, A. (2018). IMP thinking and IMM: Co-creating value for business marketing. *Industrial Marketing Management*, 69, 18–31.
- Möller, K., & Halinen, A. (2022). Clearing the paradigmatic fog—how to move forward in business marketing research. *Industrial Marketing Management*, 102, 280–300.

- Mosch, P., Winkler, C., Eggert, C. G., Schumann, J. H., Obermaier, R., & Ulaga, W. (2022). Driving or driven by others? A dynamic perspective on how data-driven start-ups strategize across different network roles in digitalized business networks. *Industrial Marketing Management*, 102, 381–402.
- Naudé, P., Zaefarian, G., Najafi Tavani, Z., Neghabi, S., & Zaefarian, R. (2014). The influence of network effects on SME performance. *Industrial Marketing Management*, 43(4), 630–641.
- Nelson, R. R., & Winter, S. G. (1982). *An evolutionary theory of economic change*. Harvard University Press.
- Palóatier, R. W., Houston, M. B., & Hulland, J. (2018). Review articles: Purpose, process, and structure. *Journal of the Academy of Marketing Science*, 46, 1–5.
- Pardo, C., Wei, R., & Ivens, B. S. (2022). Integrating the business networks and internet of things perspectives: A system of systems (SoS) approach for industrial markets. *Industrial Marketing Management*, 104, 258–275.
- Paschen, J., Paschen, U., Pala, E., & Kietzman, J. (2021). Artificial intelligence (AI) and value co-creation in B2B sales: Activities, actors and resources. *Australian Journal of Marketing*, 29(3), 243–225.
- Pettit, T. J., Fiksel, J. & Croxton, K. L. (2010). Ensuring supply chain resilience: Development of a conceptual framework. *Journal of Business Logistics*, 31, 1–21
- Podsakoff, P. M., MacKenzie, S. B., Bachrach, D. G., & Podsakoff, N. P. (2005). The influence of management journals in the 1980s and 1990s. *Strategic Management Journal*, 26, 473–488.
- Proença, T., Proença, J. F., & Costa, C. (2018). Enabling factors for developing a social services network. *Service Industries Journal*, 38(5–6), 321–342.
- Purchase, S., Lowe, S., & Ellis, N. (2010). From taking network pictures to making network pictures: A new metaphorical manifesto for industrial marketing research. *Journal of Organizational Change Management*, 23(5), 595–615.
- Ramaswamy, V., & Ozcan, K. (2020). The interacted actor in platformed networks: Theorizing practices of managerial experience value co-creation. *Journal of Business and Industrial Marketing*, 35/7, 1165–1178.
- Ramos, C., Roseira, C., Brito, C., Henneberg, S. C., & Naudé, P. (2013). Business service networks and their process of emergence: The case of the Health Cluster Portugal. *Industrial Marketing Management*, 42(6), 950–968.
- Rezaei Vandchali, H., Cahoon, S., & Chen, S. L. (2020). Creating a sustainable supply Chain Network by adopting Relationship Management Strategies. *Journal of Business-to-Business Marketing*, 27(2), 125–149.
- Roseira, C., Brito, C., & Henneberg, S. C. (2010). Managing interdependencies in supplier networks. *Industrial Marketing Management*, 39(6), 925–935.
- Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field Methods*, 15(1), 85–109.
- Ryan, A., Mitchell, I. K., & Daskou, S. (2012). An interaction and networks approach to developing sustainable organizations. *Journal of Organizational Change Management*, 25(4), 578–594.
- Sfandla, C., & Björk, P. (2013). Tourism experience network: Co-creation of experiences in interactive processes. *International Journal of Tourism Research*, 15, 495–506.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339.
- Sutton-Brady, C. (2008). As time goes by: Examining the paradox of stability and change in business networks. *Journal of Business Research*, 61, 968–973.
- Törnroos, J. Å., Halinen, A., & Medlin, C. J. (2017). Dimensions of space in business network research. *Industrial Marketing Management*, 61, 10–19.
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14, 207–222.
- Waluszewski, A., Snehota, I., & La Rocca, A. (2019). What remains to be discovered? Manifesto for researching the interactive business world. *Journal of Business and Industrial Marketing*, 34(1), 232–239.
- Welch, C., & Wilkinson, I. (2002). Idea logics and Network Theory in Business Marketing. *Journal of Business-to-Business Marketing*, 9(3), 27–48.
- Wiśniewska-Paluszak, J. A., & Paluszak, G. T. (2019). The role of inter-organisational relations and networks in agribusiness: The case for the Polish fruit and vegetable industry. *International Journal on Food System Dynamics*, 24(2), 1–30.