



Networks, ecosystems, fields, market systems? Making sense of the business environment



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ABSTRACT

This positioning paper is informed by our judgment that the mainstream research on business marketing and marketing in general is losing its relevance and vigor because it views business environments as narrow “markets” and focuses primarily on dyadic business relationships and their management. Sticking to this limited, economics-driven market view has detached the discipline from major real-world phenomena, leaving it with scant understanding of the contemporary environmental context of marketing and business strategy. Based on a focused reading of literature on *business fields*, *business networks*, *business ecosystems*, and *market systems*, we venture our own comprehensive theoretical framing of complex business environments summarized in two frameworks. In the pursuit of relevance our integration is avowedly simplifying as we strive for parsimony. Key points *explicate the nested, multi-layered, multimodal, transitional and conditioned character of the business environment, and the dynamics, phases and processes of the evolution of that nested environment*. We use the frameworks constructed, which form an initial theory of complex business environments, to supply a research agenda for business marketing and offer brief managerial conclusions.

1. Introduction

When asked about why he scored so often, Wayne Gretzky, viewed by many as the greatest hockey player ever, would say: “I skate to where the puck is going to be, not where it has been”.

Such is the challenge we have taken on with this positioning paper: to inspire marketing scholars to focus on where strategic marketing practice is going to be, not where it has been. We see much of general as well as business-to-business (B2B) marketing research becoming obsolete for strategic management because of its narrow view of firms' business environments as simply given “markets”. It is high time to revise radically how we perceive and study business markets. That way we can break out of some straitjacketing traditions and transform the focus of the mainstream business marketing discipline from relationship management to ecosystems orchestration.

Certainly, B2B marketing research, and marketing in general, each face serious criticism. Despite the remarkable surge in academic research output (Backhaus, Kai Lügger, & Koch, 2011; Cortez & Johnston, 2017; Hadjikhani & LaPlaca, 2013; Lichtenthal, Mummalaeni, & Wilson, 2008; Möller & Halinen, 2018) several scholars discern problems in the relevance of both. Examples are: (1) the lack of practical relevance to key managerial problems, or the “theory-praxis” gap (Åge, Cederlund, & Gummeson, 2014; Brennan, Tzempelikos, & Wilson, 2014; LaPlaca & da Silva, 2016; Nenonen,

Brodie, Storbacka, & Peters, 2017; Reibstein, Day, & Wind, 2009; Slater, Hult, & Olson, 2010; Webster & Lusch, 2013); (2) too little theory or theorizing and too much emphasis on methods and empirical aspects (Eisend, 2015; Möller, 2013; Yadav, 2010); and, somewhat in tension with the last element, (3) too little, stagnant and overly methods-driven research compared to the knowledge challenges of business environments and strategy practices (Cortez & Johnston, 2017; Jaworski & Kohli, 2017; Lilien, 2016; Möller, 2017; Nenonen et al., 2017; Reibstein et al., 2009; Steenkamp, 2018; Wiersema, 2013; Zeithaml et al., 2020).

Having listened to and indeed been among the critical voices, we suggest that the central reason for the skepticism concerning marketing and B2B marketing is the discipline's detachment from real-world phenomena. This has weakened our theoretical grasp of the environmental context of marketing and business strategy today.

1.1. The managerial reality

A quick review of highly cited contemporary managerial writing reveals how underlying megatrends – digitalization, globalization and environmental awareness in particular – are making today's business context inherently systemic, complex, and volatile. In the growing contextual complexity, a handful of managerially significant transformations shine through.

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First, leading firms are embracing the idea of dynamic and collaborative business ecosystems, characterized by emergence, as a new way of organizing economic activity. Tellingly, the term “ecosystem” occurs 13 times more often in annual reports now than a decade ago (Fuller, Jacobides, & Reeves, 2019). Genuinely complex contexts comprise nested systems with multiple interacting elements, and these interactions tend to be nonlinear; small changes can induce disproportionate consequences (Snowden & Boone, 2007).

Ever-more dynamic business contexts make for greater malleability, allowing firms, often in collaboration with others, to influence how the context develops (Reeves, Haanaes, & Sinha, 2015). A malleable context or environment challenges firms to “see around the corner” to understand possible inflection points that bend development in surprising directions (McGrath, 2019). It also affords chances to engage in shaping strategies (Hagel, Brown, & Davison, 2008) that influence the context so as to create more value.

Second, driven by ecological challenges and rising inequality, the last decade has resounded with calls to reset capitalism (Financial Times, 2019) and to broaden the responsibilities of commercial firms to optimize their total societal impact (Beal et al., 2017) and shared value (Kramer & Porter, 2011), and to serve “not only [a corporation's] shareholders, but all its stakeholders – employees, customers, suppliers, local communities and society at large” as per the 2020 Davos Manifesto (weforum.org/the-davos-manifesto). This beckons both a much broader conceptualization of value, as co-created with a multitude of actors, not only by the firm and for the customer, and recognition of other forms of value creation than revenue generation for firms and meeting functional or hedonic needs or wants for customers.

Third, business and society hold great expectations of technology/science-based developments, among them the internet of things (IoT), fifth-generation internet, robotics, gene technology, and industry 4.0. Digital data have of course taken off exponentially, supported by more advanced analytics often known as artificial intelligence or AI. This powers firms on from descriptive towards predictive and then prescriptive analytics, where analytical models specify optimal future behaviors and actions (Cearley, Burke, & Walker, 2016; Davenport, 2013; McKinsey Global Institute, 2011).

Although AI has more commonly been used in consumer relationships, many management authors foresee its rapid development in B2B (Kimura, Reeves, & Whitaker, 2019). That could dramatically change practices in procurement and sales (de la Boulaye, Erriquez, Iribarren, & Russo, 2019) and introduce robots of various forms as one element in managing customer relationships. BCG, for instance, proposes that firms need to become bionic, enhancing their human activity by electronic or electromechanical devices (Hutchinson, Aré, Rose, & Bailey, 2019). The argument runs that embracing computing power, AI, machine learning, low-cost data sensors, mobile connectivity, and robotics, will radically augment, if not fully automate, customer relationships and business processes.

1.2. The role of business marketing research – Goals of the paper

The looming business landscapes described above are inherently opaque, dynamic, and fraught with ambiguity – but real. Already a cursory inspection shows that the business environment, or the context for value creation, is undergoing radical transformation, rendering obsolete the often-implicit assumptions of mainstream marketing scholarship (c.f., Mele, Pels, & Storbacka, 2015; Möller, 2013; Pels, Möller, & Saren, 2009; Webster & Lusch, 2013). For at least a decade, many scholars have therefore lamented the scant attention paid to markets particularly by mainstream marketing literature (Araujo, Kjellberg, & Spencer, 2008; Kjellberg et al., 2012; Mele et al., 2015; Nenonen, Storbacka, & Windahl, 2019; Venkatesh, Peñaaloza, & Firat, 2006).

This deficiency is evident in that the foundation for marketing, the market construct, is not even defined in the American Marketing Association's dictionary. Generally, working markets with multiple buyers and sellers are assumed, and the focus is on a marketer's optimization or management of concerted marketing efforts towards specific customers, conceived as customer relationships or groups (segments or types). At a

more strategic level, the dominant mode of thinking is about an independent marketer's decisions and activities concerning product and service offerings per market in the Porterian competitive industry. But the general environment/industry/market itself is mainly considered as a given.

Environmental complexity and uncertainty obviously go beyond emergent characteristics of the business environment. Take the drive to reconfigure current value-producing systems to match sustainability requirements, necessitated mostly by climate change. This is generating a radical value-system transition that consists of complex phases and processes, and cuts across many different analytical layers and all business fields on a global scale. Influencing that development are complex webs of local and global social and political entities, and the companies on the leading edge of the transition (Geels, 2010; Knight, Pfeiffer, & Scott, 2015; Van Tulder, Verbeke, Jankowska, & Buckley, 2019).

In sum, we see a chasm between how mainstream marketing academics view the firm environment through the traditional market lens and the new business reality. To make marketing as a discipline and business marketing in particular relevant again, we must re-train our research efforts on the complexities of the value-creating context, aiming for managerially relevant research results (Jaworski, 2011; Lilien, 2016; Reibstein et al., 2009). Thus, this big-picture article responds to a call by Lindgreen and Di Benedetto's (2017, p. 1) editorial for *Industrial Marketing Management* to serve as a “functional bridge between academic theory and practitioner applications, even as it maintains stringent standards for scientific rigor”.

Our overall objective is to start to address that call and all these challenges and criticisms, and start to solve the current deficiencies, by (1) *exploring current research approaches to find theoretical foundations for advanced research on firms' business environments*; (2) *aided by those approaches' core ideas, developing an integrative theoretical framework of environmental layers, phases and processes, and their key management issues*; and (3) *thence proposing a research agenda to make business marketing more strategically relevant and to help guide managers*.

That objective is sweeping and ambitious. To keep the task manageable, though, we simplify. Instead of comprehensively reviewing literature on business environments, we base our treatise on a selection of research streams, and their core writings. Our selection and interpretations naturally reflect our personal experiences and framing. Section 2 covers that simplifying research process and the four research approaches, which are discussed in detail in Appendix 1. Section 3 extracts key theory and synthesizes it into a framework. Section 4 proposes a concise but far-reaching research agenda and brief managerial guidance.

2. Understanding complex business environments

Several scholarly lines of inquiry are already tackling the complex business environments which face managers. These include market-related theories (neoclassical markets, monopolistic competition, evolutionary economics, industrial organization theory); sociology-related theories (neoinstitutional theory, sociological network theory, the performativity approach); and various more strategic or management-related approaches that combine ideas from several disciplines (business networks, actor-network-theory, business and innovation ecosystems, institutional entrepreneurship, service-systems, innovation and technology studies) (Aarikka-Stenroos & Ritala, 2017; Bourdieu, 2005; Callon & Muniesa, 2005; DiMaggio & Powell, 1991; Dopfer, Foster, & Potts, 2004; Fourcade, 2007; Kjellberg, Azimont, & Reid, 2015; Möller & Halinen, 2017; Scott, 2014).

Unfortunately, this extensive and fast-growing knowledge base suffers from several problems. The conceptualizations it affords are highly fragmented and couched in specialized theoretical languages each presuming a disciplinary proficiency. Also, they often draw on multiple disciplines, like field theory, ecosystems, and business networks. Facing such complexity, and because we are by no means expert in all areas, our research process is to simplify and strive for parsimony.

First, we group the most promising literature into four managerially meaningful clusters. These we term “approaches”. When exploring literature, we prioritize relevance for strategic management in business

Table 1
Research approaches conceptualizing the business environment.

	Business fields	Business networks	Business ecosystems	Market systems
Core ideas	<ul style="list-style-type: none"> Field institutions are made of cultural-cognitive, normative, and regulative processes and elements; with associated activities and resources, these give stability and meaning to field. Two streams: (1) Traditional Field Theory Stream addressing the elements and character of the field as an arena of competition; and (2) Neo-Institutional Theory Stream focusing on the processes constructing and transforming the field. 	<ul style="list-style-type: none"> Three streams: (1) Markets-as Networks focusing on business networks as emergent structures; and (2) Strategic Networks addressing intentionally designed networks and their management. (3) Innovation Networks addressing intentionally designed networks and their management targeting to co-creation of innovations. All three see inter-actor networks as the core constituents of the business domain and employ the Actors-Resources-Activities frame for analysis. Relationships as vehicles for resource and social exchange, resource creation, and network influencing. 	<ul style="list-style-type: none"> Two perspectives: (1) Macro Ecosystems, i.e., ecosystems as extensive “ecologies” describing industries/business fields, composed of interrelated and often competing focal ecosystems; and (2) the more used, organization-centric Focal or Strategic Ecosystems, i.e., ecosystems as focal and purposeful coalitions of actors. The latter has broader and narrower versions: (a) affiliation ecosystems, i.e., collaborative arrangements by which firms combine their offerings into a customer-facing solution, and (b) alignment ecosystems, i.e., structures of partners that interact to enable a focal value proposition. 	<ul style="list-style-type: none"> Markets viewed as socially constructed human artefacts and contexts for value creation. Systemic: market systems consist of a broad set of actors (not only seller-buyer dyads); the resulting complexity leads to emergent characteristics. Two perspectives: (1) Market-as-Verb Perspective (e.g., market practices and market work); and (2) Market-as-Noun Perspective (e.g., market system elements and market devices). Increasing focus on materiality and performative power of (inanimate) market devices such as technologies.
Goals	<ul style="list-style-type: none"> To understand (1) the structure and evolution of the business domain as an arena of social activities; and (2) the formation of norms/rules guiding actor behavior, and (3) the competition to create and influence the rules and social structures. 	<ul style="list-style-type: none"> To understand the structure and evolution of macro networks To assess the characteristics of strategic networks and derive effective capability and organizational solutions. To assess a firm's collaborative & competitive options in networks Focus on focal networks/strategic nets, their development and management. Macro network view of “industries/fields” – their network structure and its dynamics. 	<ul style="list-style-type: none"> To understand business environments as ecosystems (Macro Perspective). To describe and analyze focal ecosystems as modes of organizing business. To examine the management requirements of ecosystems. 	<ul style="list-style-type: none"> To understand markets as complex socio-technical-material systems instead of simple matchers of supply and demand. To achieve market innovations: change of existing market structures and practices for increased value creation.
Structure	<ul style="list-style-type: none"> Focus on the field level, its social structure and embodied norms, rules and culture. Actors constitute the field; they both influence the field and are conditioned by it. 	<ul style="list-style-type: none"> Focus on focal networks/strategic nets, their development and management. Macro network view of “industries/fields” – their network structure and its dynamics. 	<ul style="list-style-type: none"> Macro ecosystems and focal ecosystems. Nestedness – layers of ecosystems, and platforms. 	<ul style="list-style-type: none"> Incorporates micro-meso-macro perspective attempting to understand how they are interlinked.
Agency of actors	<ul style="list-style-type: none"> Actors' (firms, managers) behaviors and actions, including sensemaking, are constrained by the collective culture and norms of the field. The paradox of embedded agency: actors can envision institutional change despite being embedded in an institutional status quo. Actors' relative power depends on their capital (financial, technological, cultural, commercial, social and symbolic) and the importance of functions they carry out in the field. 	<ul style="list-style-type: none"> Actor behavior is embedded; actions cannot be understood out of their local and historical context. Actors learn and construct their environment through enactment. They are both constrained and enabled by their focal network(s). Actors' relative influence depends on the importance of their resources (for the focal network), and relationships. 	<ul style="list-style-type: none"> Actors are generally seen as boundedly rational decision makers, restricted and influenced by their resource base and the modes of interdependence (types of complementarity). Actors pursue economic and strategic gains by constructing and partnering in ecosystems. 	<ul style="list-style-type: none"> Market systems are malleable: evolve due to actor-driven and emergent developments. Markets not seen as exogenous to actors. Market work: purposeful efforts by a focal actor to perform and transform markets. Actors' agency governed by institutional arrangements and by various market practices, in which action is determined by the context. The performative power of actors depends on their network position, the relative strength of business model, and ability to author compelling market propositions.
Processes, forces	<ul style="list-style-type: none"> Evolutionary and revolutionary. Fields are in constant, but mainly incremental change (stability of the field level). Infrequent bursts of radical change, primarily caused by technological or social innovations, challenge the institutional pattern. Actor level competition is the primary force of change. 	<ul style="list-style-type: none"> Social interaction, resource exchange and co-creation, and adaptation form the key processes for analyzing interorganizational and network change. Emergence of macro and focal networks over iterative phases – exploration, mobilization. Actor level collaboration primary force for emergence and creation of new resources. 	<ul style="list-style-type: none"> Organization-centric (orchestrator) view on change. Both competition and collaboration as driving forces. Main focus on competition. 	<ul style="list-style-type: none"> Duality of design and emergence: the focal actor can influence the evolution of the market system but needs to acknowledge emergent developments. Two approaches to deliberate design: (1) the focal actor view; and (2) the collaboration view. Actor-driven change based on non-predictive strategy: effectuation and experimentation.

(continued on next page)

Table 1 (continued)

	Business fields	Business networks	Business ecosystems	Market systems
Key references	Anderson & Tushman, 1990; Bourdieu, 2005; Carvalho et al., 2017; Christenson, 1997; DiMaggio & Powell, 1983, 1991; Fourcade, 2007; Fligstein, 1991; Garud et al., 2007; Moore, 1993; Rogers, 2010; Scott, 2014; Scott & Davis, 2007; Thornton & Ocasio, 1999; Van Bockhaven & Matthysens, 2017.	Aarikka-Stenroos et al., 2014; Aarikka-Stenroos & Ritala, 2017; Dhanaraj & Parkhe, 2006; Frels et al., 2003; Henneberg et al., 2006; Håkansson & Ford, 2002; Håkansson & Snehota, 1995; Håkansson & Waluszewski, 2002; Medlin & Törnroos, 2014; Möller, 2013; Möller & Halinen, 2017; Möller & Svahn, 2006, 2009; Möller & Rajala, 2007; Möller et al., 2005; Pisano & Verganti, 2008; Ritter et al., 2004.	Aarikka-Stenroos & Ritala, 2017; Adner, 2006, 2012, 2017; Adner & Kapoor, 2010; Autio & Thomas, 2014; Dattée et al., 2018; Engel, 2015; Frow et al., 2016; Gawer & Cusumano, 2002; Jansiti & Levien, 2004; Jacobides et al., 2018; Lundvall, 2007; Partanen & Möller, 2012; Ritala & Gustafsson, 2018; Talmar et al., 2018; Thomas et al., 2014.	Alvarez & Barney, 2007; Andersson et al., 2008; Araujo, 2007; Araujo et al., 2010; Baker & Nenonen, 2020; Callon, 1998; Geiger et al., 2012; Kindström et al., 2018; Kjellberg et al., 2012, 2006, 2007; MacKenzie & Millo, 2003; Mason et al., 2017; Mele et al., 2015; Muniesa et al., 2007; Nenonen & Storbacka, 2018; Nenonen et al., 2014, Nenonen, Storbacka, & Frethey-Bentham, 2019, Nenonen, Storbacka, Sklyar, et al., 2019, Nenonen, Storbacka, & Windahl, 2019; Read et al., 2009; Sarasvathy, 2008; Storbacka & Nenonen, 2011a, 2011b.

marketing contexts, and material addressing radical and systemic change in the environment. In each approach, we explore *goals for describing and theorizing the environment, disciplinary basis and core constructs used, structural and process descriptions, and key managerial frameworks or tools for influencing and managing the environment and its constituent elements.*

By these criteria, we propose that the body of knowledge as clustered into four approaches, *Business Fields, Business Networks, Business Ecosystems, and Market Systems*, promises significant potential for more realistic environmental investigation than the traditional market conceptualization. These approaches already contain managerially relevant studies. As such, they are less problematic for transforming business marketing than the various core theories of economic sociology. Each approach borrows from multiple base disciplines, sometimes including the latter. They are also highly interrelated. Each approach divides loosely into key “streams” or “perspectives”.

The chosen four approaches with key references, are briefly introduced in Table 1. To offer the reader a “big picture,” we next present the key findings of our work, i.e., our conceptual frameworks and use these to structure our discussion of the environmental layers, phases and processes that were built based on the performed literature review summarized in the Appendix 1. We decided to use the appendix format for the literature review as our contribution relates more to the integrative theoretical frameworks, rather than to the performed literature reviews. The reader can, however, trace the basis of our conclusions from the more detailed examination of each approach in Appendix 1.

3. Framing complex business environments – Towards an integrated understanding

In this section, we first extract an essence of core common ideas from the four research approaches to business environments which we covered above as promising most contemporary managerial relevance. We use these ideas to construct a comprehensive theoretical framework that contributes to integrating understanding of the environmental complexity facing current firms. We first present our structural nested-layers framework before its processual sibling, which explains how the whole evolves over time. From these two frameworks Section 4 derives a research agenda for advancing the relevance of the business marketing (and general marketing) discipline and offering managerial guidelines.

3.1. Nested, multimodal, and transitional business reality

While offering many unique perspectives on current business environments, the four research approaches examined share several similarities. The overlap was expected since only the institutional literature (which characterizes the Business Fields approach) is close to a genuinely independent research corpus; the Business & Innovation Networks, Business Ecosystems, and Market Systems approaches draw from several sources of sociological and economic theories (including each other and the institutional theory), making them medleys of underlying disciplines. The combined information base is kaleidoscopic. To use this base effectively we must align and focus it.

Focusing on the core commonalities we suggest the basic characteristics for making sense of any complex environment are (1) *the layered and nested nature* of the environment, (2) *its multimodality*, intertwining social, economic, political and technological aspects, and (3) *its transitional character*, denoting the constant change of the environment and its parts. The last characteristic involves a processual rather than structural view of the environment and is developed further in our processual framework. Together, though, these three aspects form the fundamental elements of our nested business environment framework or NEST, diagrammed in Fig. 1. Note that only the layers are depicted directly; the multimodality is embedded in the layer descriptions, and the transitional, evolving and emergent character is discussed after we have outlined the layers.

3.1.1. Nested reality – The four layers

Describing reality by interrelated layers has roots in the critical realist

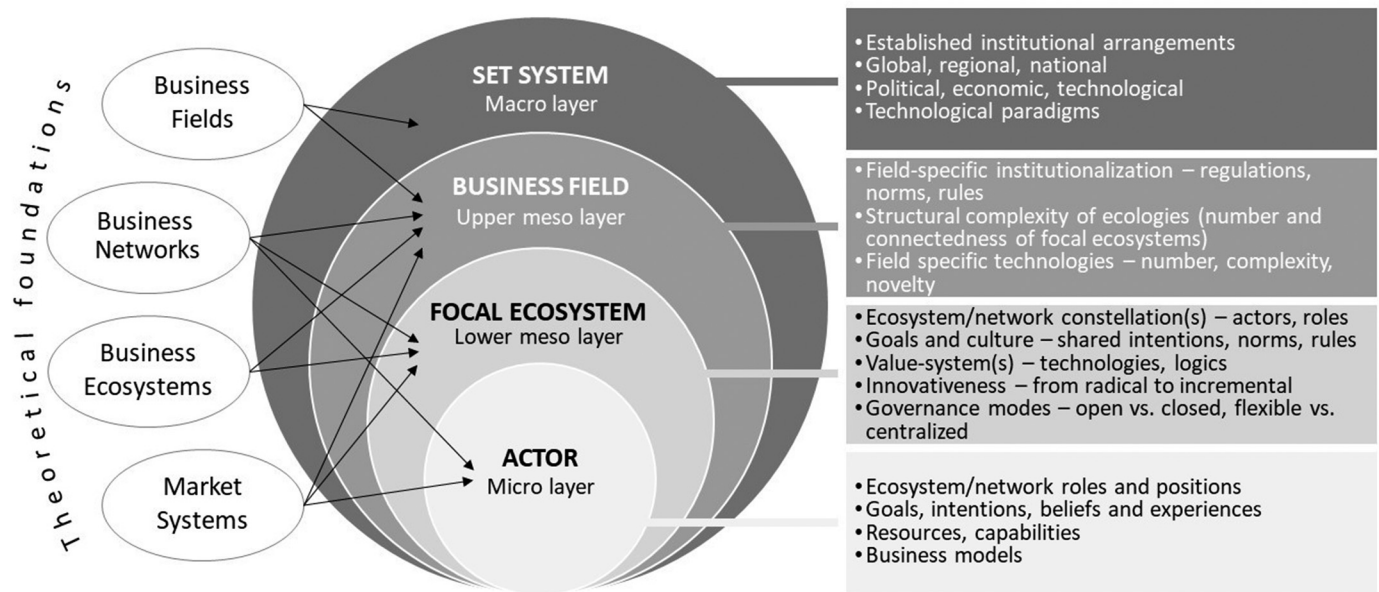


Fig. 1. NEST – Nested business environment framework.

view of society and social organization (Layder, 1981, 1993; Sawyer, 2005; Sayer, 2000). This perspective has partly penetrated the Strategic Networks stream of the Business Networks approach (Möller, 2010; Möller & Halinen, 2017) and the Business Fields approach, and is more extensively applied in recent studies under the Market Systems approach (Baker & Nenonen, 2020; Taillard, Peters, Pels, & Mele, 2016). Its key feature is bridging the traditional dichotomy of macro (structural institutional phenomena) and micro perspectives (actor behavior and interaction) through more finely graded intermediate layers of focal contexts and through influencing processes (structuration and emergence). Similar approaches depicting the operating environment of businesses as nested and layered have been presented, for example, within the service-dominant logic (Chandler & Vargo, 2011; Vargo & Lusch, 2016, 2017) and the multi-level perspective of socio-technical regimes (Geels, 2002, 2005, 2010).

Drawing on the four research approaches assessed (Table 1 and Appendix 1), we propose describing corporate environments through *four interrelated or nested layers*: Actor Layer (Micro), Focal Ecosystem Layer (Lower meso), Business Field Layer (Upper meso), and Socio-Economic-Technological (SET) System Layer (Macro). Note that we say “layers” rather than “levels” and adopt their titles from Sawyer, 2005. The upper layers influence and condition the activities, choices, and contents of the lower ones; and correspondingly the actors, ecosystems and institutions of the lower layers construct and constitute the upper ones. This perspective follows the ontology and logic of critical realism, which suggests certain elements and structures have causal power and influence over all focal events and activities (see Easton, 2010; Sayer, 2000). This is not naïve environmental determinism. Rather, it recognizes that contextual structures and elements like institutions, strategic networks, and actors influence the feasibility and probability of potential new ecosystems, and the development of their underlying value creating systems.

Together the nested layers constitute the firms' business environment, and the firm is itself part of that environment. We now detail them from Micro to Macro.

3.1.2. Actor layer (micro)

This layer describes the various organizations and individuals who carry out managerial work like constructing innovations and strategic initiatives, organizing, and forming and maintaining business relationships. For example, companies like Apple, Ericsson, Nokia, Motorola, Samsung, Google, and individuals like Steven Jobs and Andy Rubin (Android Inc) have been essential constructing the mobile telephony field. The Actor layer is mainly addressed by market work research

within the Market Systems approach and the Strategic Networks stream of the Business Networks approach. Besides firms, the actor concept may include various governmental organizations, universities, research institutions, NGOs, and institutional bodies. Due to our focus on business environment we employ the perspective of a business actor.

Firms are assumed to have more managerial control of activities on this layer, and their actions carry (partial) performative power over the upper layers. A focal actor perspective proposes that an actor with the right capabilities (Nenonen, Storbacka, & Windahl, 2019) can influence the upper layers through three main mechanisms. First, actors can purposively engage in meaning construction and sense-giving activities in their network. Actors with notable *sensemaking and agenda development* capabilities tend more to construct and co-create compelling market propositions (Möller, 2010). A key goal is to transform established conceptions and beliefs about “markets”, products, and legitimate producers, and offer new constructs and valuation criteria to enhance the acceptability of the emerging actors and their value-propositions (Mason, Friesl, & Ford, 2017).

Second, actors in the network relate to each other by their *business models*. Hence, one research focus is business model innovation. This concerns both developing new value propositions and redefining positions and roles of actors in the business networks and focal ecosystems, thus influencing their beliefs and goals, and resource and capability profiles.

Third, an actor's *relative power* depends on their business and technological experiences, resources, and capabilities; the demand for their capabilities; and their actor position(s) and network relationships. Actors can use strong positions to do market work to construct and influence the emerging norms and regulations, and to involve themselves in regulation, standardization, and other norm-providing institutions. Degree of power also depends on the phase of emergence of the new ecosystem: in the embryonic phase actors with innovative insights into opportunities can influence others' beliefs and expectations more easily than when the cognitions have already become structured (Autio & Thomas, 2016; Möller, 2010).

3.1.3. Focal ecosystem layer (lower meso)

This layer consists of sets of actors and addresses the constellations of partners with whom the focal actor has direct relationships. Continuing the mobile telephony illustration, Apple's iPhone/iTunes ecosystem and Google's Android ecosystem are good examples of a hub company or ‘focal actor’ centered ecosystems. These constellations have been conceptualized and examined primarily by the Strategic Networks stream of the Business Networks approach, the Focal or Strategic Ecosystems perspective of the Business Ecosystems approach, and the

Market Systems approach. Key characteristics are the structure of a strategic network (partners and their roles), the goals and culture (including shared norms and intentions), governance and organizational arrangements, value-creating systems (including technologies); and the processes occurring at this layer, be they of exploration and exploitation, system mobilizing, coordination, maintenance, or competition.

Both the Business Ecosystems approach and Business Network approach generally adopt a firm-centric view. Ecosystems are constellations of partners for focal firms. This emphasizes the perceived and subjective character of the Lower Meso Layer, and consequently the boundaries of focal ecosystems. Each actor perceives, and so operates in, a slightly different ecosystem, with different, albeit perhaps overlapping, strategic networks.

Following strategic networks research (Möller & Halinen, 2017), we propose that the structure and organization of strategic networks, as well as intentionally designed focal ecosystems, vary considerably, from loose configurations to tightly coupled, well-integrated and centrally coordinated strategic constellations. Open and flexible constellations are typical in the early construction stage of complex and extensive ecosystems that have “fluid” membership and no formal inclusion or exclusion criteria or guiding rules. An open constellation involves numerous weak ties that generate sensemaking, ideation and contact development. Semi-open constellations may have different types of membership: potentially a core strategic network with an established organization, and outer layers of more loosely connected actors (e.g., NGOs, university laboratories, and other non-business partners). Finally, closed systems feature formally negotiated membership and partner roles, and established governance systems.

As to terminology, we suggest reserving “strategic network” for an intentionally constructed, contract-based coalition with shared goals, whereas “focal ecosystem” would mean a wider, looser, coalition, often involving one or more strategic networks as core organizations. However, for present purposes we have stipulated that “focal ecosystems” include “strategic networks”.

3.1.4. Business fields layer (upper meso)

The business fields layer is constituted by interrelated business ecosystems and their underlying strategic networks. Business fields portray specific interrelated clusters of business activity, and comprise business field-specific institutions (regulations, norms, and values of conduct), structures and technologies. For example, the mobile telephony field, besides containing such competing focal ecosystems as the Apple driven iPhone/iTunes ecosystem and Google's Android ecosystem, involve numerous interlinked technology and service providers (e.g., mobile payment platform providers, mobile games providers) and various regulatory agencies.

Institutional theory (infusing the Business Fields approach), the Business Networks and the Business Ecosystems approach, plus the socio-technical systems angle we discuss in the next section, all supply conceptual tools for understanding our Business Fields layer. Important features include how complex and rapidly transforming the field is – largely due to the underlying technologies – and how much institutionalization there is, especially formal regulation.

In more mature business fields, the nature of technologies, strategic networks, and the keystone actors is fairly well known, and regulations and norms already guide the business. Actors tend to have more shared meaning than in embryonic ecosystems, that is, on the Lower Meso layer. Although a mature business field can be complex, this systemic determination makes requirements more predictable and incremental innovations more likely to be profitable. It is also worth noting that the same actor may belong to multiple, often overlapping, business fields, particularly in the case of multi-business firms.

Contrast embryonic business fields. These are characterized by greater flux, opacity and thus uncertainty as to the potential technological paths and the capabilities and resources their development requires, plus uncertain earning potential. The uncertainty extends to potential partners and their competencies. Strategic navigation and future-oriented decisions are further exacerbated when the emerging field is extensive and nested, involving several sub-fields which influence and condition each other. Still

further complications ensue from technologies or systems requiring large, locked-in investments with long and uncertain return periods, and potential but still-unspecified regulations. The early years of gene technology and its applications make a fitting example.

3.1.5. Socio-economic-technological systems layer (macro)

Socio-economic-technological systems are macro ecologies of interrelated business fields sharing major technological regimes. For example, the development of electronics and digitalization underlies several technological platforms that have enabled internet-based services, mobile telephony, and various software fields. SET systems are deeply ingrained in political and legal institutional arrangements, technological regimes, economic structures, and culture involving people's values and behavioral orientations. The emergence of the commercial Internet, for example, has deeply influenced not only specific business fields, but the structure of the entire world economy, its business practices and consumer cultures.

This layer is primarily examined by the institutional theories behind the Business Fields approach and by the socio-technical regimes angle (Geels, 2002, 2005, 2010). It combines both the material context of the society, e.g., the material arrangements of living, transport, production and distribution systems, and infrastructure in general; and enduring socio-political characteristics like global or regional political arrangements and blocs (United Nations, European Union), nation states, regional and local authorities and broad political coalitions, and our ingrained cultural and normative value-systems. Thus, this layer particularly shows multimodality.

While the Macro Layer is notably generic, great differences still exist between various global regions and individual countries, and these differences matter in international business. Another issue is the emphasis on the stability and endurance of Macro Layer systems and institutions. These elements are, nonetheless, in constant change due to the activities and pressures bubbling up from the Business Fields Layer and the activities and priorities of various public actors, including governments and international bodies. Examples of the latter are the ongoing debates on dealing with climate change.

3.2. Formation and transformation processes: Phases and conditioning forces

This subsection and framework shift the focus from overall structure to process. Our discussion of the nested layers of business environments has already alluded abundantly to the actions and processes that constitute and transform various layers and their elements. Actually, the entire environment is in continuous transition even though, as noted, some states are more stable and enduring than others. This dynamic character leaps out when change is fast and critical events are identifiable, like the launch of the commercial Internet and the introduction of web browsers, company websites and search machines from mid-1995 onwards. A much harder task is to perceive and make sense of the myriad and intertwined technological, economic and social processes that preceded the commercial World-Wide-Web, or that have since led to today's digitalized society.

We argue that this kind of historical and comprehensive understanding of processes and their consequences is essential for management. Strategic foresight builds on deep comprehension of the current world; this is possible only by understanding the actors, processes, and causal powers that have jointly produced, and are producing, current reality (Bhaskar, 2010; Sawyer, 2005; Sayer, 2000). These forces also compete to fashion our future. Unfortunately, they are multi-layered, entangled and chaotic; in brief: messy.

With the aid of the propositions from the four research approaches discussed in Appendix 1 and Table 1, we next seek a simplifying and openly simplistic framework of the processes involved in the formation and transformation of the layered business environment. *Note that, to keep this task manageable, we concentrate on the construction of just one layer: a new business field.* We argue that this lens helps explain the

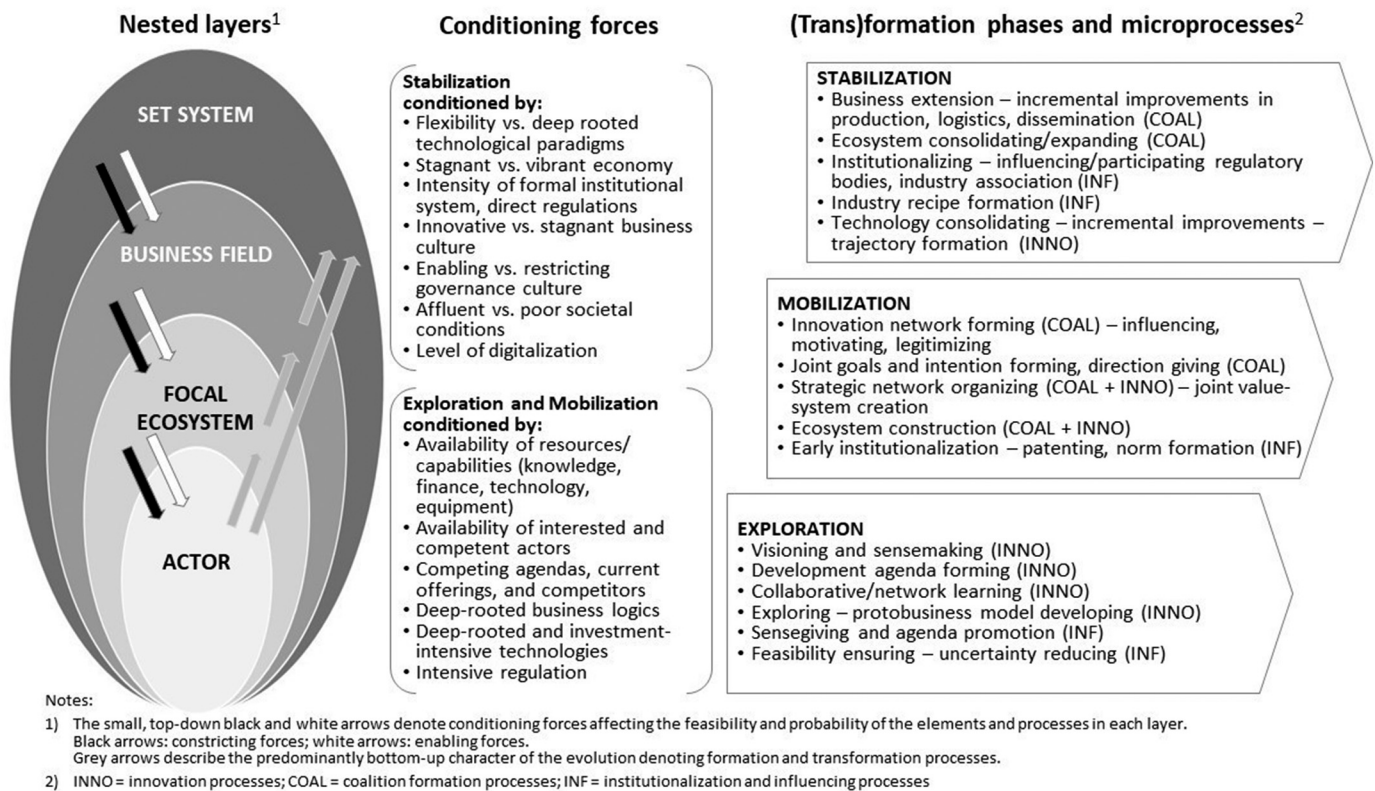


Fig. 2. Business environment formation process – a business field focus.

incremental transformations and the transitional character of whole business environments.

To simplify business field construction, we split the processes involved into a dichotomy: (1) *formation and transformation processes* and (2) *conditioning forces*. Formation and transformation processes involve all activities which the actors, whether individuals, organizations, coalitions, or formal institutions, pursue to construct a new business field. Their influence flows mostly bottom-up and lateral, that is, starting with the Actor Layer. Conditioning forces are harder to define; they comprise activities and mechanisms that, in principle, either enable and support formation or contest and constrict it. Conditioning forces work top-down in the sense that outer layers either constrain or allow transformative processes driven by lower layers, but also laterally, i.e., within a layer. One should note that the distinction between formation and conditioning processes is an abstract conceptual tool. In reality, formation and transformation processes and conditioning forces are interwoven; we therefore interweave them in our discussion.

3.2.1. Formation phases, processes and their conditioning forces

How to make messy evolutionary processes clearer? Commonalities oblige us here. All four research approaches we selected indicate phases or stages for formation, transformation, institutionalization and innovation diffusion. The phased understanding is also salient in sociological theories about the change and structuring of entire societies (Giddens, 1984).

We propose three main phases of business environment formation and transformation: *Exploration, Mobilization, and Stabilization*. Our labeling condenses terms from different literatures albeit sacrificing some of their originally stipulated meanings. To see inside the dynamics of the phases requires further analytical dimensions. We propose capturing the core aspects of business environments' original formation and subsequent transformation processes through (1) *innovation processes*; (2) *coalition formation processes*; and (3) *institutionalizing and influencing processes*, and the forces conditioning all three. Numerous "microprocesses" constitute each and exhibit those same three core dimensions. These processes are highly intertwined. Therefore, our discussion below again interweaves them.

The major processual aspects of business environments and specifically the formation of a new business field are depicted as our processual framework in Fig. 2. On the left are the nested layers from Fig. 1. The small, top-down black and white arrows denote the conditioning forces affecting the feasibility and probability of various structures, constellations, and processes at each level. For example, on the actor level these forces influence, besides actors' perceptions, beliefs, choices, and behaviors, also what kind of actors populate the environment. The black arrows indicate constricting forces and the white arrows, enabling ones. For simplicity, no arrows indicate lateral forces. The grey arrows describe the predominantly bottom-up character of the evolution denoting formation and transformation processes.

On the right are our three postulated main phases, Exploration, Mobilization, and Stabilization, and their microprocesses. Some microprocesses are further distinguished as innovation, coalition formation, and influencing microprocesses, shown by capital abbreviations: INNO, COAL, INF, although certain microprocesses may combine features. The microprocesses were selected based on the four research approaches in Appendix 1 and Table 1. Finally, in the middle we present the conditioning forces.

3.2.2. Exploration

Exploration for future business generally takes place at the Actor Layer and is conditioned laterally by the forces within this layer and top-down by the characteristics of the Focal Ecosystems Layer and Business Fields Layer. Research and development agglomerations foster construction of breakthrough innovations, the way that Silicon Valley fosters computer-based innovations. Such hotspots bring together actors with differentiated resources and capabilities (entrepreneurs, various research institutions and units, venture capitalists, consultants, major incumbents, etc.), and are characterized by future business orientation and risk-taking cultures. Many less deliberately cultivated settings "flip" conditions into ones that instead restrain innovation development: deeply ingrained, mature business processes anchored by heavy investments in locked-in technologies, scarce risk financing, and minimum research efforts, mostly targeted moreover to incremental improvements.

The microprocesses constituting exploration have two main interwoven strands. *The first is exploring and constructing potentially path-breaking business innovations.* These processes are primarily learning-oriented, including sensemaking through combinatory or networked learning and proto-idea-development through experimentation. Note that innovation is *like a mosaic*. It combines new elements (technology, business ideas, organizational ideas), pieces of existing solutions, and transformed old elements. In this sense, the notion of constructing something entirely new is false. The innovations, even radical ones, are medleys of the new, the borrowed, and the transformed. Because of this, the knowledge and resource endowments and cultural values of the entire business environment (across all the nested layers in Fig. 2) are key.

The second major strand in exploration is sensegiving and business opportunity promotion. These entails creating a development agenda and roadmap and selling them to potential partners. Reducing perceived uncertainty and anticipated risks through feasibility demonstration are important aspects.

In general, competition is a major conditioning force driving exploration processes. Competition between actors for innovating new solutions is enhanced by cultures valuing new solutions and encouraging risk-taking, yet simultaneously providing a relatively stable institutional context providing legal stability and enabling a contract- and trust-based social system (Putnam, 2007; Sitkin et al., 1998; Zaheer, McEvily, & Perrone, 1998). Societies and cultures valuing stability and/or lacking trust-enhancing institutions are not very conducive for radical business or societal innovations.

3.2.3. Mobilization

Significant business innovations are practically all systemic, involving several knowledge bases and technologies. Because of this, their successful construction requires mobilizing collaborative coalitions. Mobilization is intimately linked to the early business agenda promotion (Exploration Phase), the major difference being that coalition formation, whether a loose research and development coalition or a contract-based strategic network, involves increasingly specified goal construction, organization, and orchestration. Consequently, the mobilization microprocesses move towards *concretely targeting and materializing the entire value-system underlying the new business offering*. This may include business processes, technologies, logistics, customer delivery and service systems. Completing such complex systems may take years and entail interlocking strategic networks with varying members. The processes involve *choosing and motivating partners, constructing shared goals, agreeing roles and responsibilities, and creating shared governance structures and management principles*.

The mobilization of a strategic network and its extension, a focal ecosystem, is constrained by the factors unpacked in the Exploration Phase. An important extra factor is the growing competition between coalitions targeting the same end-customers and markets (lateral conditioning), exemplified by the competing smart phone coalitions (iPhone/Apple; Android phone producers/Google). Fierce competition for resources, partners, intermediaries, and end-customers may enhance the development of the new business field; or alternatively diminish the profitability of, and consequently the incentives for, future development in the long run.

An essential aspect conditioning mobilization is to what extent the social and legal institutions support collaboration between not only business firms but between firms, universities, NGOs, and government agencies. Extensive collaboration is a critical aspect in all major innovative breakthroughs.

3.2.4. Stabilization

The stabilization phase of the business environment's (trans)formation features behaviors and actions by various actors (individuals, organizations, coalitions) to consolidate, expand, and institutionalize the constructed business solutions and their underlying organizational, infrastructural and institutional bases. We discern two main logics, the *first a scaling-up and dissemination* of the value creation process developed

during the Mobilization Phase. This entails further mobilization activities for expanding production, distribution and customer service systems, often involving internalization. Expansion generally requires adaptations from the established ecosystem members and partners in various strategic networks, as well as recruiting new collaborators.

These processes link to *the second logic of stabilization: safeguarding the focal business ecosystem* just constructed. Safeguarding has a value-system aspect and an institutionalization aspect. As to the value-system aspect, ecosystem members try to defend their value-system solutions against incumbent competitors by continuous improvements in various sub-systems. These call for incremental local innovations, presuming ceaseless adaptations and transformations, which may require renewing the roles, responsibilities, and value-capture within the ecosystem. Ecosystem members who fail to systematically improve risk losing their position to a competitor. If the hub company loses its dexterity, the entire focal ecosystem may collapse, as illustrated by the rapid demise of Nokia Mobile Phones at the end of the 2000s and the many firms that depended on it.

The *institutionalizing aspect of the safeguarding logic* involves the activities whereby the ecosystem members, as organizations or collectives, influence the norms, regulations, and beliefs which define how the business field is perceived. Influencing can take place by communicating with targeted key persons representing relevant institutions, participating in the working of norming institutions, or communicating to chosen opinion leaders and groups. The goal is to shape the legal, technological, and social regulations, standards, and norms influencing the business field. Part of this work relates to technology and business conduct and aims to safeguard the field from new entrants; another part relates to values and valuing, aiming to grow and maintain the credibility and societal approval of the field.

The stabilization processes discussed influence and transform the Macro Layer, Socio-economic-technological systems; for instance, technological trajectories, legislation, and consumption culture and habits. Although these transformations stem mainly from collective influence, the activities of major corporations, and even individuals (consider Elon Musk and Greta Thunberg) may reach across all environmental layers.

3.3. Summary: Structural and processual

In this subsection we have very briefly tried to cover an extremely complex phenomenon, the (trans)formation of new business fields and the entire business environment. Although we used the construction of a new business field as a discursive lens, we believe that the conceptual tools employed, and the two frameworks proposed (Figs. 1 and 2) in this whole section also support understanding the incremental transformations of the entire business environment. For clarity we now recapitulate the key constructs proposed in Section 2.

First, we found it useful to frame the business environment structurally by four interrelated layers – Actor, Focal Business Ecosystem, Business Field and Socio-Economic-Technological layers, depicted in Fig. 1. The actors and activities of each lower layer are conditioned by the upper layers, and the characteristics of the layer under consideration. This conditioning can be both constricting and enabling. The actors and their activities constitute the layers above them; collectively these activities influence and construct all three layers above the Actor layer.

Second, we adopted a processual view of the formation and transformation of business environments. Three interrelated phases, Exploration, Mobilization, and Stabilization cover the environmental formation and transformation through sets of intricately intertwined microprocesses as well as through a set of forces conditioning these microprocesses, as illustrated in Fig. 2. These microprocesses were labelled as mainly pertaining to innovation, coalition formation, or influencing. Further, note that all the evolution phases are created and transformed through a combination of these intertwined microprocess types.

4. Implications for theory and practice

The rationale for this paper was our judgment that mainstream

research on business marketing and marketing in general is losing its relevance because it views business environments as simplistic “markets” and concentrates on dyadic business relationships and their management rather than ecosystem analysis and orchestration. Sticking to this narrow, economics-driven market view has detached the discipline from substantial real-world phenomena, obscuring the real contemporary environmental context of marketing and business strategy. The situation calls for radical renewal of the way we understand and study business environments.

From a focused reading of the literature promising most relevance to today's social and business reality, which we clustered into four research approaches, we have ventured conceptual frameworks, diagrammed in Figs. 1 and 2. Most importantly these show first the multilayered/nested, and second the dynamic/evolving, character of the business environment. We believe this comprehensive and integrated framing significantly advances research on business environment and strategy.

The notable features of this contribution are twofold. First, we explicate the nested and multilayered, but also multimodal and conditioned character of the business environment. Environments can be examined through four interrelated layers. The upper layers condition the managerial and collective business opportunities, choices, and actions taking place on the lower layers. The conditioning forces are both constricting and enabling. The multimodal view, which is not headlined but is embodied in the descriptions of the layers, emphasizes the relevance of understanding and considering actors representing primarily economic, technological, social, and political interests.

Second, we explicate the dynamics of processes by which business environments form and transform through three major phases (Exploration, Mobilization, Stabilization) which cut across all four postulated layers. Each phase was then detailed by indicating its relevant microprocesses (classified into innovation, coalition formation, and influencing) and the forces conditioning these.

Next, based on our analysis, we draw up a concise agenda for future research and offer a few managerial implications.

4.1. *Reinvigorated research agenda: From business as usual to embracing complexity*

To reinvigorate business marketing, researchers must genuinely embrace the complex and systemic nature of firm environments. In the past, we have generally instructed our PhD students to be precise, and as focused as possible, about their unit of analysis, and to carefully position their study relative to the existing canon. In the future, we all as students of business marketing should strive to hone our understanding of the multi-layered structural and longitudinal/processual dynamics of the business environment. This call for research is obviously very broad: to cover even some of the key issues raised in our frameworks we would benefit from several research approaches.

As the layered view of the business environment holds potentially innumerable research questions, we have tried to systematize the agenda development by assembling the core aspects of each layer (structure and contents, phases and processes, key conditioning factors) with a number of generic guiding research questions in Table 2.¹ As one notes there is some overlap between the proposed conditioning factors between the layers. This is inevitable as many forces and conditions cut through the nested layers. The guiding questions follow the logic of addressing WHAT kind of SET systems, business fields, and focal ecosystems exists; through WHAT kind of processes have they evolved or been formed and transformed; to what extent are various systems influenced by ‘top-down’ conditioning and ‘bottom-up’ drives; WHY do we have different or specific systems, fields, and ecosystems; and WHAT factors are driving and/or explaining the

differences. Here we can venture only a few propositions by way of research agenda, starting from much-needed “macro” designs.

4.1.1. *Business field and socio-economic-technological layers*

Plainly we need a better theoretical and practical grasp on different business environments and their evolution. We actually know very little about how different business fields and larger SET systems evolve. Through what kind of processes and structures does the evolution take place? Can one make out general features in business field and macro SET system evolution or are there differentiated paths? If the latter, then what differentiates them? For example, what is the role of digitalization in business field evolution, or the growing push for renewable energy and sustainable development?

Answers to just such sweeping, macro questions would greatly strengthen both the scholarly and managerial grip on business environments and could guide strategic foresight and navigation. The issues being so wide, we have to prioritize our research efforts. A theory-driven approach is to come up with contingency factors or dimensions which influence the structure and dynamics of macro level SET systems and business fields and how they evolve. Another avenue is to focus on societally or technologically interesting fields and their evolution.

For example, the interplay between SET systems, representing the most generic and deep-rooted environmental layer, and business fields could be approached through comparison of specific business fields across different countries differing in their SET systems, in terms of the phase of technological development (e.g., digitalization) and/or cultural (risk averse vs. risk-taking) and institutional aspects (rigid control vs. enabling). What role do these environmental characteristics and conditioners play in, for instance, the geographic dispersion and development pace of the electric car business, games business, or renewable energy business? How do the key drivers and conditioning factors differ between different types of business fields?

On the business field layer, some studies indicate that the characteristics of value-system(s) underlying a business field (e.g., modularity, mode of interdependency between key actors, and level of specification and codification of the value-system elements) affect its structure (Adner & Kapoor, 2010; Langlois & Robertson, 1995; Möller & Rajala, 2007; Rosenkopf & Schilling, 2007). One could investigate how far the SET level and business field layer indicators explain or even predict the structures of entire business fields or their core business ecosystems. This obviously presumes “industry level” data are available.

Another major issue is the formation and transformation of business environments. Both evolution and radical change would be fruitful topics. As a way into this territory we recommend theory- and phenomenon-driven research designs. For example, a suitable subject would be the top-down impact of differing degrees of digitalization and regulation in in some field, like health care services or the pharmaceutical industry—across either countries or field-specific concentrations. A further idea is to examine the influence of entrepreneurial culture and institutional support for the emergence of innovative business fields across geographical and political spheres. From this angle the thrust is to better grasp the conditioning forces that influence business field evolution.

Another path into this territory runs through historical or quasi-historical studies, or longitudinal process studies. One could study how embryonic businesses develop upward through our nested layers into a focal ecosystem and then perhaps a business field. Equally, research could track how existing business fields transform (collapse, bounce back, blossom, etc.) under the force of new contingencies. Candidates would be the energy sector under sustainable development, or health care services under the combination of aging populations, advancement in life sciences, and digitalization. The thrust from this slightly different angle is to understand conditioned business field emergence and transition.

4.1.2. *Focal ecosystem and actor layers*

The collaborative construction and orchestration of ecosystems by actors is one of today's major business marketing issues. We believe that better understanding the processes and capabilities for constructing

¹ We owe the idea of a table to one of the anonymous reviewers, and acknowledge the influence of Shelby Hunt's (Hunt, 1983) ‘fundamental explananda’ of marketing science.

Table 2
Environmental layers view – a research guide.

Layers	Structure, content and types	Phases and processes	Key conditioners	Guiding research questions
SET System	<ul style="list-style-type: none"> ● Number of major technological systems ● Degree of institutionalization and core orientations – control vs. freedom ● Core aspects of business and consumption culture 	<ul style="list-style-type: none"> ● Key processes driving and describing evolution: technology, institutionalization and culture, business evolution ● Phase/stage of SET system ● Pace of SET system transformation: transient vs. stable 	<ul style="list-style-type: none"> ● Stage of dominant technological trajectory: established vs. emergent ● Societal/cultural aspects: closed vs. open, stagnant vs. vibrant ● Institutional aspects: controlling vs. encouraging 	<ul style="list-style-type: none"> ● WHAT kind of major SET systems can be identified in terms of their structural characteristics and content? ● WHAT are the key processes in the formation and transformation of these systems? ● WHY do different SET systems exist? ● WHAT are the key drivers and conditioning factors?
Business Field	<ul style="list-style-type: none"> ● Number, types and connectivity of underlying ecosystems ● Core structure: vertical vs. horizontal, mixed ● Field specific institutionalization ● Core technologies and their pace of change ● Major sources of competition – technology vs. end customer demand 	<ul style="list-style-type: none"> ● Key processes driving and describing business field formation and transformation: technology, competition (resources, solutions, markets and combinations), institutionalization 	<ul style="list-style-type: none"> ● Stagnant vs. vibrant economy ● Institutional system: control vs. flexibility; property rights ● Technological orientations: mature vs. flexible technologies, degree of digitalization ● Business culture: stagnant vs. innovative ● Consumption culture: safety vs. novelty seeking 	<ul style="list-style-type: none"> ● WHAT kind of major business fields can be identified in terms of their structural characteristics and content? ● WHAT are the key processes in the formation and transformation of these fields? ● WHY do different fields exist? ● WHAT are the key drivers and conditioning factors? From top-down, bottom-up or laterally?
Focal ecosystem and strategic network	<ul style="list-style-type: none"> ● Actor constellation(s) and strategic networks – innovation systems, demand-supply systems, service platforms, technological platforms ● Value-systems - goals ● Governance solutions and culture ● Actor roles 	<ul style="list-style-type: none"> ● Key processes driving and describing focal ecosystem/strategic networks evolution: technological innovation, business and governance innovation, competition (on resources, solutions, markets and key customers) 	<ul style="list-style-type: none"> ● Entrepreneurial culture: scarce vs. vibrant ● Availability of resources and actors ● Availability of venture capital and investors ● Collaborative vs. competitive business orientation ● Variety of types of collaborators 	<ul style="list-style-type: none"> ● WHAT kind of major focal ecosystems can be identified in terms of their structural characteristics, governance modes, goals and culture? ● WHAT are the key processes in the formation and transformation of these systems? ● WHY do different focal ecosystems exist? ● WHAT are the key drivers & conditioning factors? From top-down, bottom-up or laterally?
Actor	<ul style="list-style-type: none"> ● Ecosystem and network roles and positions ● Goals, intentions, beliefs and experiences ● Resources and capabilities 	<ul style="list-style-type: none"> ● Processes driving and describing actor's position, role and influence in strategic network(s) and focal ecosystem(s): technological and business innovation, strategic intent 	<ul style="list-style-type: none"> ● Relative number of entrepreneurs and entrepreneurial firms ● Availability of resources, including risk capital ● Collaborative experience ● Variety of business models 	<ul style="list-style-type: none"> ● WHAT kind of actors initiate and orchestrate focal ecosystems and strategic networks? ● WHAT kind of key processes are involved? ● WHY do actors differ in their ecosystem behaviors and activity? ● WHAT are the key drivers and conditioning factors? From top-down and laterally?

successful focal ecosystems is a must if business marketing research is to stay strategically relevant. While at the focal ecosystem layer the research discussed above on constrictive or enabling conditioning forces is still relevant, issues about managerial actions and capabilities are increasingly coming to the fore.

Strategic management would benefit from answers to a host of questions turning on such basic issues as: are there different types of focal ecosystems, what differentiates them, and do they differ in their emergence processes and forces conditioning the emergence? Further, do different focal ecosystems require different management capabilities, organizational cultures, governance structures, and business models in order to develop? The research strategies sketched for the upper layers above are relevant for addressing these questions about the Focal Ecosystems and Actor Layers, too.

We commend theory-driven research designs comparing different types of business ecosystems or examining the different phases of construction of the same ecosystems. Fortunately, there is a relatively large amount of research concerning business networks (cf., Möller & Halinen, 2017) and an increasing body of business ecosystem research (Aarikka-Stenroos & Ritala, 2017). As pointed out in discussing research under the Business Fields Approach, we prioritize studies that use existing theoretical understandings to come to grips with the influence of various conditioning factors on the ecosystem questions posed. The previous propositions for business field research are valid here, too. The modularity of the emerging business, mode of interdependence between key actors, and level of specification and codification of the value-system elements of the business should be used for comparing the creation, governance, and management of relevant focal ecosystems. In particular the work of Möller and colleagues (Möller & Rajala, 2007; Möller & Svahn, 2006, 2009) proposing seven different types of strategic networks, differing in terms of the value-creating systems, offers directions for comparative ecosystem research. A closely related idea would be to use the angle of attack in viable systems literature to examine whether and how an ecosystem's performance depends on how complete it is (Barile, Pels, Polese, & Saviano, 2012; Barile & Polese, 2010).

As neighboring nested layers, focal ecosystems and their core actors are intimately interrelated. We should have a better grasp of what influences whether firms or entrepreneurs can initiate, mobilize, and stabilize successful ecosystems or strategic networks. The extant literatures on entrepreneurship in network, ecosystem, and institutional contexts offer valuable suggestions, as does the network capability studies corpus on actor characteristics influencing his/her success. Besides actors' resources and capabilities, one should examine the influence of their network/ecosystem roles and experience. Other theoretically interesting conditioners include how actors' absorptive capacity influences foresight development (Möller, 2010; Zahra & George, 2002), and their "ambidexterity", or capability to combine effectiveness (innovating business) and efficiency (running current business) (O'Reilly III & Tushman, 2013). These characteristics can also be used to examine performance differences among focal ecosystems.

The basic ideas of comparative and longitudinal research designs discussed in the business field context pertain also to focal ecosystem and actor layer investigations. Because the scale is smaller, it is practicable to carry out more intensive research, necessary for accessing relevant managerial characteristics and actions. Again, we recommend theoretically derived, comparative designs related to conditioning forces, whether such designs be cross-sectional or longitudinal.

4.1.3. About theorizing and research methods

We have discussed an agenda for future research approaches in very general terms. We conclude with a few ideas for theory construction and some more novel research methods.

The transition from more micro-level phenomena to multi-level complexity calls for more attention to the types of theory marketing should be developing. Various scholars have called for greater precision in separating general theories from mid-range theories (cf., Brodie, 2017; Peters, Pressey, Vanharanta, & Johnston, 2013). We doubt that any general theory can provide detailed knowledge and thus actionable

suggestions about such complex and varying phenomena as business field evolution and focal ecosystem construction. The existing general conceptualizations, the Actors-Resources-Activities framework driven by Industrial Marketing and Purchasing (IMP) and the foundational premises and axioms based on Service-Dominant Logic (SDL), supply conceptual languages for describing part of the business environment phenomena but they lack the details and causal aspects expected from actionable theories. Instead, we would prioritize developing contingency-driven mid-range theories with explanatory power and insights for guidelines for managing in different types of business fields, and for constructing and maintaining different types of focal ecosystems.

Another perspective in theory construction is to harness the experiences and expertise of managers and other actors constituting business fields and focal ecosystems. A few scholars acknowledge that fast-changing managerial reality leaves academic research lagging behind and drives companies to deal with their business situations by developing theories-in-use. This encourages phenomenon-based research (Doh, 2015; Schwarz & Stensaker, 2016; Von Krogh, Rossi-Lamastra, & Haefliger, 2012), which typically concentrates on translating observed phenomena into conceptualized knowledge. Phenomenon-based research pushes the theoretical and practical conversation out further, rather than seeking closure by confirming or rejecting existing theories (Alvesson & Gabriel, 2013).

Phenomena to focus on would include ecosystem construction processes, shaping strategies aimed at mobilizing actors, and continuous ecosystem innovation processes. The argument is that firms have their own theories-in-use for dealing with these processes, and that by examining these, researchers could generate embryonic mid-range theories for further development and evaluation in other contexts. Zeithaml et al. (2020) suggested that marketing in general should embrace a theories-in-use approach to advance theory development. An extra benefit of such an approach would be identifying relevant new constructs, critically examining the relevance of current constructs, and generating phenomenon-specific indicators for the theoretical constructs.

The ideas presented resonate with the call for more complex theory construction, based on actors in context, by Tsoukas (2017). His "Don't Simplify, Complexify: From Disjunctive to Conjunctive Theorizing in Organization and Management Studies" should be compulsory reading in all marketing doctoral seminars. One suitable approach for understanding how business actors make sense and construct meanings, leading to choices and actions within their local environments, is to tap into discourses and narratives (Boje, Oswork, & Ford, 2004). More broadly, discourse analysis could examine how ecosystems and business fields are being socially constructed, especially their cognitive, institutional and cultural characteristics.

These briefly sketched research openings include approaches often considered opposites, some representing critical realism and others, social constructionism. Given the complexity of the business environment, we see a need to learn to use multiple research approaches and develop multimethod designs (Andersen, Medlin, & Törnroos, 2019). Indeed, the move from just micro and macro to multi-layer phenomena will necessitate new research methods. Different ways of theorizing suggest that multiple methods are needed to cover all knowledge creation perspectives and the analytical layers of the nested business environment and their evolution. Business marketing in general and the *Industrial Marketing Management* journal in particular have historically been open to methodological plurality. This lays a strong foundation to build on.

Further, we draw attention to the following methods and approaches that seem to hold promise in researching complex and systemic business environments: agent-based modeling (cf., North & Macal, 2007), causal process tracing (cf., Blatter & Haverland, 2012), action research (cf., Abrahamsen, Henneberg, Huemer, & Naudé, 2016; Lewin, 1946), fuzzy-set qualitative comparative analysis or fsQCA (cf., Ragin, 2008; Toth, Henneberg, & Naudé, 2017), temporal qualitative comparative analysis or TQCA (cf., Caren & Panofsky, 2005), narrative event sequence analysis (cf., Buttriss & Wilkinson, 2006), and design

methodologies, such as trajectory touchpoint technique (cf., Sudbury-Riley, Hunter-Jones, Al-Abidin, Lewin, & Naraine, 2020). Taking a broader view, we believe strongly that environmental and strategic research in business marketing would benefit from proper longitudinal studies, involving the developing historical approaches to ‘industry’, business, and corporations (Argyres et al., 2020; Godfrey, Hassard, O'Connor, Rowlinson, & Ruef, 2016; Vaara & Lamberg, 2016). Proper discussion of all these proposals would require another paper.

Our sketched research agenda is both broad and complex. To address the reality of radical environmental transformation the research community would benefit from collaborative efforts. The social, economic, political, natural-environmental, and technological change processes have complex, abrupt, and extensive impacts on business fields, essentially demanding a fundamental transformation of the academy. We need to shift from narrow and incremental research themes to embrace the messy but significant ones. Doing all this requires programmatic research efforts for creating shareable data banks on business field evolution and the construction of focal ecosystems. Instead of dwelling on territorial disputes between “mainstream scholars” and “outliers” we must learn to harness the strengths of varied research approaches and carry out multi-methodological research.

These challenges call for a cultural shift in marketing (including business marketing) research, probably the most conservative branch of management and organizational scholarship. The department heads, journal editors, and doctoral program directors – the gate-keepers who formulate and safeguard research policy— should take heed of the big issues in the real world and start to prioritize relevant research programs instead of favoring elegant but sometimes insignificant and ivory-tower academic exercises.

4.2. *Reinvigorated managerial ideas for navigating the business environment*

In reflecting the managerial ramifications of the increasingly complex business environment, we would like to offer four ideas for practitioners: (1) broadening the scope of business environmental scanning, (2) making a conscious decision about the overall approach to business environment transformation, (3) ensuring a multi-level approach to collaboration and competition, and (4) developing a mindset highlighting processes (verbs) in addition to things (nouns).

Broadening the scope of business environment scanning. Most companies do a very good job in generating and using customer and competitor insights – and what is even more reassuring, it is a common practice to draw on these insights to guide decision-making on all organizational levels. In a similar vein, the importance of technological changes is widely recognized in most contexts. However, we observe less robust practices when it comes to being abreast of the changes related to, for example, field-specific institutions and broader institutional arrangements above and beyond the “white noise” of daily politics. There might be a couple of individual persons having a broad picture of the business environment in each organization – think Bill Gates with his voracious reading habits and connections to various associations – but it is rather rare to come across entire organizations with such broad environmental scanning habits. Therefore, perhaps it is time to reinvigorate business practices such as scenario planning and/or roles such as governmental affairs officers, which have been largely abandoned as too resource-intensive and expensive. We are not suggesting returning to the ways of the 70's and 80's but rethinking how we could reinvent such practices and roles to ensure that the scanning of the business environment genuinely covers all the four layers of presented in the NEST framework. A key aspect is how to make sense of weak signals enabling the building of valid foresight before competitors. Firms operating in several fields and cultivating a variety of technological, institutional and business relationships have a competitive edge in this (Doz, Santos, & Williamson, 2001; Möller, 2010;

Making a conscious decision about the overall approach to business environment transformation. As discussed in the previous sections, the

business environment is never standing still: it is constantly forming and transforming through exploration, mobilization and stabilization. The above-mentioned broad environmental scanning is needed in order to know what is happening. However, this understanding is of little use unless this use is guided by an overall “business environment strategy” specifying the firm's approach to environmental change: adapt, shape, or support someone else's shaping efforts. The ‘adapt’ approach has been the preferred approach for many organizations in the past, and we concur that adapting to the changing environment continues to be a viable overall strategy; especially if the firm is lacking the vision or resources to proactively drive a change in its operating environment. The ‘adapt’ approach should, however, be complemented with sufficiently agile structures and processes so that the firm can adapt its operations quickly enough. The ‘shape’ approach, on the other hand eschews the notion of a given and deterministic business environment “out there”. Instead companies opting for this overall approach apply so-called shaping strategies aimed at influencing the development of the business environment, primarily via the elements of the Actor and Focal Ecosystems Layers. Finally, firms may also choose to support someone else's shaping efforts. Collaboration and collective action have been identified as a key element in successful shaping strategies (cf., Baker & Nenonen, 2020; Maciel & Fischer, 2020). Hence, this approach may be particularly appealing to firms who lack the requisite resources to shape their business environment alone – but still want to approach a proactive overall approach to their business environment.

Ensuring a multi-level approach to collaboration and competition. Most firms are highly competent when it comes to managing their collaborative and competitive relationships on the Actor to Actor level or on the Focal Ecosystem Layer. We fully acknowledge the advances that have been made in customer and supplier relationship management, strategic alliances, network management and competitive strategies. However, we believe that firms could improve their capabilities when it comes to collaboration and competition on the Business Field and SET System layers. Building on the above discussion about shaping strategies, it is possible for companies to influence how even the most entrenched institutional arrangements develop – but that is likely to require extensive collaboration with both other firms and with other types of actors (such as consumer advocacy groups). In a similar vein, it is of utmost importance that firms are very aware of the competition that takes place between different Business Fields and SET systems – even if they are only embedded in some of them. Firms must also be very aware of the relationships between the different environmental layers and how changes on one layer may affect the collaborative and competitive relationships on the other. For example, the current COVID-19 crisis – emanating from the SET System Layer – has forced many industrial firms to re-think their supplier relationships.

Developing a mindset highlighting processes (verbs) in addition to things (nouns). Finally, our analysis highlights that the business environment is inherently dynamic, continuously displaying a variety of micro-processes and more fundamental transformation phases. In order to successfully operate in such a dynamic business environment, firms need to foster mindsets that put at least as much emphasis on processes as they do to ‘things’ – such as inputs, outputs and outcomes. This, in turn, requires managers to adopt a refined lexicon, balancing the use of nouns with an increased use of verbs. In the context of business strategy, this translates to emphasizing the strategy development process – or strategizing – over the output of this process, i.e., the strategy. Even though this might seem counter-intuitive, in very dynamic contexts the increasing ability of the organizational members to think strategically – the other outcome of strategizing – might be more enduring than a specific strategy. The same logic can also be applied to innovations and innovating. The transient nature of the business environment highlights the need for continuous learning and creating an agile organization (Doz & Kosonen, 2010). Therefore, the process of innovating will become a core activity of firms, instead of a project-based activity aimed at developing a particular innovation. Innovation should, thus, be viewed as an ongoing, collaborative, distributive, and unfinished undertaking (Garud, Jain, & Tuertscher, 2008).

To conclude, we do hope that our framing of the layered, nested, multimodal and dynamic business environment encourages programmatic research in this essential domain of business marketing. We call

for a cultural shift in marketing research harnessing the strengths of varied research approaches and embracing multi-methodological research.

Appendix 1. Four approaches to understand the business environment: Business fields, business networks, business ecosystems, and market systems

Business Fields	
Goals for describing and theorizing the environment	To understand the social power structure and evolution of the business field; the rules – and their formation, which is the institutionalization – guiding actor behavior; and the competition to influence those rules.
Disciplinary basis and core constructs	Importantly, organizations are seen as more than productive and economic systems; they are also cultural and social systems (Scott, 2014). The Business Fields approach draws on economic sociology and on the social construction of reality (Berger & Luckmann, 1966). The construction occurs in a subjective way through a complex interaction of institutional conditioning processes, and vice versa collective individual efforts to construct the social field. Two perspectives stand out: <i>traditional field theory</i> (Bourdieu, 2005; Fourcade, 2007) and <i>neo-institutional theory</i> (DiMaggio & Powell, 1983, 1991; Thornton & Ocasio, 1999).
Structural and process descriptions	<ul style="list-style-type: none"> ● <i>Traditional field theory</i> views markets or business environments as competitive arenas of social interaction for exchange of goods and services. Competition is thus a constitutive element and causes indirect conflict between market participants. Also central is actors' relative power, and consequently position in the field, which depends how much they hold of various capitals: financial, technological, cultural, commercial, social, and symbolic. The field is mainly regarded as a game, whose rules the actors by turns tacitly abide by and try to alter. Interest attaches to the actors' ability to influence and create social structures that, directly or indirectly, may "modify the prevailing rules of the [economic] game to their advantage" (Bourdieu, 2005, p. 81). ● <i>Neo-institutional theory</i> shifts the emphasis to the institutionalization process. The field is defined by the community of purpose or business. In DiMaggio and Powell's (1983) definition, "By organizational field we mean those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products" (pp. 64–65). The interest lies in the processes whereby certain features of markets and organizations come to acquire an "objective", natural and taken-for-granted character – a culture, in short – that makes them hard to challenge (Fourcade, 2007). <p>Institutionalization processes and the means or mechanisms to influence institutionalization play a core role. Taking a wide interpretation, institutionalization means the process of embedding some conception (for example, a belief, norm, social role, particular value or mode of behavior) within an organization, social system, or society as a whole. As such institutionalization is basic to grasping how new business fields get constructed and how existing fields function. Generally, three elements are considered fundamental in constituting institutions (Carvalho, da Cunha, de Lima, & Carstens, 2017). According to Scott and Davis (2007), "institutions are made up of <i>cultural-cognitive</i>, <i>normative</i> and <i>regulative elements</i>, which together with associated activities and resources offer stability and meaning to social life" (p. 258, emphasis added).</p> <ul style="list-style-type: none"> ● The <i>regulative or coercive elements</i> are generally established by government bodies holding regulative power (local, national and global authorities); they manifest in rules, regulations, and sanctions, and are obeyed because of the coercive power behind the regulative element. ● The <i>normative element</i> (social norms and values) emerges through complex interaction among the actors in the field including such NGOs as chambers of commerce and industry associations. These norms and values are seen as social obligations embodied in written and unwritten rules of conduct, and as sources of credibility and socially accepted behaviors. ● The <i>cultural-cognitive element</i> (previously known as mimetic) is based on socialization processes producing meanings and taken-for-granted beliefs about the field, its constituting actors, behaviors and traditions. It involves beliefs about effective firm behaviors and the various logics whereby the (business) field operates and should operate. One business manifestation is the "recipes of successful behavior in the industry" examined by Spender (1989). As the cognitive structures are constituted by the internalized understanding of each actor, the actor's roles in the field quite evidently influence how he or she interprets the field (Scott, 2014).
Managerial frameworks or tools	<p><u>Agency – freedom of strategic movement</u></p> <p>A key strategic issue concerns the agency or strategic freedom and independence of firms. Actors' (firms, managers) behaviors and actions, including sensemaking, are constrained by the collectively held culture and norms of the business field. Actors can, however, also act to change the institutional rules of the field (the "paradox of embedded agency"); actors can envision and pursue institutional change despite being embedded in an institutional status quo (Garud, Hardy, & Maguire, 2007). As mentioned, actors' relative power depends on their financial, technological, cultural, commercial, social and symbolic capitals and the importance of their functions for performing and renewing the field. This aspect can serve to extend the resource- and capability-based view of the firm. The functional roles and positions a firm can pursue are further affected by their perceived legitimacy and embeddedness (being in the center, on the periphery or "outsiders") in the business field.</p> <p><u>Actors influencing fields</u></p> <p>The institutional line of research has offered theory-driven ideas for influencing the field. Competition drives firms to increase their various forms of capital subsequently increasing their power and position in the field and enabling them to influence the institutions and norms of the field. A single example will serve. Drawing on institutionalism but also collective action, stakeholder theory, and strategic network studies, Van Bockhaven and Matthyssens (2017) propose a comprehensive toolkit for influencing an emerging business field, consisting of:</p> <ol style="list-style-type: none"> (1) <i>recognizing and prioritizing</i> stakeholders (stakeholder power and salience for the target issue, stakeholder self-interest); (2) <i>assessing stakeholder dispositions</i> (stakeholder group identity, stakeholder mapping); (3) <i>mobilizing collective action</i> (gaining resonance among a critical mass of stakeholders for the target issue, attracting resources and relationships that mobilize/influence wider actors, influencing political actors); (4) <i>motivating targeted cross-sector participation</i> to co-construct a new value-creating system (VCS), by recognizing various actor dispositions towards the targeted VCS, reducing actor uncertainty about the elements of the VCS, the mobilizer firm, the actors' expected role in the new VCS and field, and motivating actors with divergent mental models to converge on the new mental model). <p><u>Diffusion of innovations</u></p> <p>New value-creation practices, rules of conducting production and commerce, and technologies emerge, diffuse, and become legitimated over time and at varying rates in a social system (Christenson, 1997; Fligstein, 1991; Rogers, 2010). The diffusion focus raises several questions for managers. For managers of an innovator: how to influence the diffusions process and boost the chance of a positive result, and how to influence the pace of diffusion and the targeted adoption? For a potential co-innovator: whether to join a specific innovation community, or a competing one? For a potential adopter: how to assess the risks of proposed innovation, and how to time potential adoption?</p> <p>One key take on innovation within the Business Fields Approach is <i>dominant design theory</i>. Whether about products or processes, or any aspects of a VCS – organizational forms, managerial innovation – this inquires how certain innovations become what are called dominant designs (Anderson & Tushman, 1990). Plainly, the stakes of that inquiry are high for both innovators and adopters, and the managerial questions posed above are relevant for dominant designs, too. Again, competition to achieve rapid innovation diffusion (Moore, 1999) or establish a dominant design forms a significant driver of firm behavior and field evolution.</p> <p>Since all major innovations are systemic, involving different types of actors and often major changes in the business field, the institutional theory of business fields provides significantly more comprehensive conceptual understanding and tools for innovation management than the traditional New Product Development (NPD) approach common in marketing. The Van Bockhaven and Matthyssens (2017) toolkit also works for innovation management.</p>

Business Networks

Goals for describing and theorizing the environment	<ul style="list-style-type: none"> ● The overarching goal of Business Networks research is to examine and describe firm environments (industries, markets) as interorganizational networks constituted by actor relationships. ● To assess the characteristics of strategic networks and derive effective capability and organizational solutions. ● To assess a firm's collaborative & competitive behaviors and management solutions in networks.
Disciplinary basis and core constructs	<p>The Business Networks approach (not to be confused with social network theory from sociology) is an eclectic tradition influenced by resource interdependence theory, social exchange theory, transaction cost economics, and later by dynamic capability and cognitive management studies (Möller, 2013). Three streams can be identified:</p> <ul style="list-style-type: none"> ● <i>Markets-as-Networks</i> (sometimes called industries-as-networks, or industrial network) stream, concentrating on business networks as emergent structures. ● <i>Strategic Networks</i> (sometimes called nets/valuenets) stream, addressing intentionally designed networks and their management (Möller & Halinen, 2017). ● <i>Innovation Networks</i> - some authors identify networks focusing on the co-construction of innovations as a separate third stream, and we adopt this view.
Structural and process descriptions	<p><u>Markets-as-Networks</u></p> <p>The Markets-as-Networks stream claims that the network perspective describes firm environments more aptly than the market and industry view (Håkansson & Snehota, 1995). There are two main areas of interest: the <i>emergence processes and structure of boundaryless “macro networks”</i>, and the <i>emergence and functioning of focal business networks with limited participants</i> (Möller, 2013).</p> <p>The focus is on reciprocal relationships among all kinds of actors (firms, government agencies, individuals, and so on) controlling all kinds of resources (financial, knowledge, technical and so forth) exchanged through actor relationships. Relationships are vehicles for actors to access and control resources, and for the co-creation of new resources. The environment is seen as comprising networks of actor relationships (Håkansson & Snehota, 1995).</p> <p>This stream places special emphasis on collaboration, based on mutuality and trust, as shaping network relationships, and thus on focal networks. Collaboration is seen as essential in creating new resources, technical and business solutions, and systemic market offerings. Competition for resources and network positions, however, also drive firm behavior. Actor behavior is environmentally embedded. That is, actions cannot be understood out of their local and historical context. Actors learn and construct their environment through enactment; the actor–environment relationship is reciprocal, and environment is non-transparent. Actors are considered organic and adaptive (Håkansson & Snehota, 1995). Moreover, actors, their resources and activities (the A-R-A framework, Håkansson & Snehota, 1995) are interdependent in the network; network ties both constrain and enable the behavior of actors. Resource control and actor ties define an actor's network position and potential influence (Håkansson & Ford, 2002).</p> <p><u>Strategic Networks</u></p> <p>The Strategic Networks stream focuses on governance and management of business networks. Strategic networks (or value-nets, strategic nets) are regarded as intentionally constructed organizational forms which firms initiate or join in order to pursue such goals and gains which are beyond the reach of a single firm (Möller & Halinen, 2017). Such networks may include supplier and marketing or distribution networks, technological-innovation and product-development networks, and different competitive coalitions used, for example, for establishing industry standards and for competing against other networks or a specific dominant player (Jarillo, 1988; Frels, Shervani, & Srivastava, 2003; Möller & Svahn, 2006).</p> <p>Key goals include identifying different types of strategic networks; assessing their management requirements and modes of organization; and developing a normative theory of network management.</p> <p>The strategic networks stream has strong links to the dynamic capabilities and knowledge-based views in strategic management (Möller & Rajala, 2007; Möller, Rajala, & Svahn, 2005).</p> <p>A significant issue is how the value-creating system underlying the network impacts its construction, organization, and maintenance. Notably Möller and colleagues argue that the construction and management of the network is significantly influenced by the level and orientation of the uncertainty (technological versus market) related to the business goals of the network. In high uncertainty contexts emphasis is on explorative behaviors targeting the co-creation of new solutions, in established business fields the network seeks to increase its efficiency and competitiveness through coordinated exploitation of each partner's key competences (Möller & Svahn, 2006). While the emphasis is on understanding collaborative network processes and practices, competition between strategic networks is a notable force. Availability and competition about resources and partners form a link to an extended dynamic capability view (involving collaborative forms) and through resource competition to the resource-advantage theory (Hunt, 1997; Wittmann, Hunt, & Arnett, 2009).</p> <p><u>Innovation Networks</u></p> <p>The Innovation Networks stream research focuses on the emergence and orchestration of networks pursuing co-construction of innovations and their commercialization (Aarikka-Stenroos, Jaakkola, Harrison, & Mäkitalo-Keinonen, 2017; Aarikka-Stenroos, Sandberg, & Lehtimäki, 2014; Möller & Rajala, 2007; Powell, Koput, & Smith-Doerr, 1996).</p> <p>The key goals are to provide conceptual tools for understanding the emergent and intentional construction of innovation networks, and managerial guidelines for influencing/orchestrating them (Dhanaraj & Parkhe, 2006; Möller & Svahn, 2009; Pisano & Verganti, 2008).</p> <p>This stream has close ties with the Business Ecosystems approach, and, beyond our four selected approaches, with innovation and technology studies (Adner & Kapoor, 2010; Autio & Thomas, 2014; Möller & Halinen, 2017). The more systemic an innovation (involving various technologies and fields of knowledge, and actors mastering these), the more actors and networked collaboration it takes.</p>

Managerial frameworks or tools

Markets-as-Networks stream

The *Actors-Resources-Activities (ARA)* framework furnishes the key descriptive language for analyzing business networks. Networks are formed by actors who carry out various value-creating activities using resources they control. Actors can thus be described in terms of

- their resource collection and activity structure;
- a relationship via the resource ties, activity links, and actor bonds; and
- a network via activity patterns, resource constellation, and the webs of actors constituting the network (Håkansson & Snehota, 1995).

The *Four Resources framework* refines the resources element of the ARA framework. Resources are categorized as respectively:

- products (any artefacts);
- facilities (any kind of value-creating equipment for transforming and exchanging “products”);
- business/ organizational units (governing and creating other resources); and
- relationships (Håkansson & Waluszewski, 2002).

“*Network pictures*” offer a cognitive view of how actors make sense of their networks, their mental mapping, and maps of networks and network relationships (Henneberg, Mouzas, & Naudé, 2006). Maps are postulated as guiding actors’ strategic choices.

Network change – process view. Social interaction/exchange, resource exchange and co-creation, and adaptation form the key processes for analyzing interorganizational and network change. Change is assumed to be progressive but often iterative (Medlin & Törnroos, 2014).

Strategic Networks stream

Levels of networks and network management - two frameworks:

- A four-level solution involving different managerial capabilities: industries as networks (*network visioning*), firms in a network (*network management, creation of network position*), relationship portfolios (*portfolio management*), and exchange relationship (*relationship management*) (Möller & Halinen, 1999).
- A three-layer framework (Möller & Halinen, 2017): *fields; focal ecosystems and strategic networks*; and *actors* (organizations). Two-way influence is postulated: each upper layer conditions and enables the formation and behaviors in the next layer down, and lower layers construct and constitute upper ones through their activities.

Types of strategic networks and their management. Based on the degree of determination of the value-creating-system (VCS) underlying a strategic network, three archetypes (with subsystems) have been presented:

- *Current business networks* (vertical demand-supply nets, horizontal market nets);
- *Business renewal networks* (business renewal nets, customer solution nets); and
- *Emerging new business networks* (science networks, dominant design nets, application nets).

Each network is seen to require a specific set of management capabilities and organizational solutions (Möller & Rajala, 2007). Möller and Halinen (2017) enumerate the following generic capabilities:

- visioning and sensemaking and sensegiving;
- agenda development, conceptualizing;
- mobilizing and creating network constellations – influencing, motivating, legitimizing;
- goal construction and organizing – governance creating;
- effectiveness seeking – value-system and solution development, market creation, production and dissemination;
- efficiency seeking – coordination, performance controlling; and
- network maintenance – renewing, updating.

Innovation Networks stream

Types of networked innovation. This framework asks how the complexity of innovation relates to its construction and commercialization through collaborative networks. The more, and more complex, technologies/knowledge bases the innovation requires, and the less compatible the innovation and the required technology/knowledge base are with the existing value-system of producers and customers, the more complex – in other words, multi-actor – the innovation network required. Vice versa, incremental and autonomous innovations, or “plug and play” networks are the easiest to mobilize (Möller & Svahn, 2009).

Phases in innovation network emergence and co-construction and network orchestration. Radical systemic innovation, and a new business field, are postulated to emerge over three main phases: “exploring for future business, mobilization for applications, coordination for dissemination” (Möller & Svahn, 2009). The first phase is dominated by exploration, sensemaking, and sensegiving – reducing the inherent uncertainty – and involves flexible network collaboration. In the latter phases networks focus on exploiting member capabilities in a more coordinated way, as competition pushes them to commercialize innovation (Dhanaraj & Parkhe, 2006; Möller, 2010; Möller & Svahn, 2006, 2009).

Business Ecosystems

Goals for describing and theorizing the environment

The Business Ecosystems approach draws originally on biological ecosystems and aims to describe differences between industries (Moore, 1993, 1996), and especially collaborative forms of constructing innovations and business coalitions in general (Adner & Kapoor, 2010; Autio & Thomas, 2014; Frow, McColl-Kennedy, & Payne, 2016). The popular ecosystem metaphor enjoys wide use: e.g., business/innovation ecosystems, entrepreneurial ecosystems, platform ecosystems, and service ecosystems (Aarikka-Stenroos & Ritala, 2017).

Disciplinary basis and core constructs

The proliferation of uses involves conceptual ambiguity; ecosystem constructs closely resemble such other system-level approaches as fields, clusters, networks, and platforms (Adner, 2017; Ritala & Gustafsson, 2018).

Most of the management-oriented ecosystem literature is very pragmatic, borrowing mainly from strategy, technology management, and innovation literatures (e.g., Adner, 2012; Gawer & Cusumano, 2002; Iansiti & Levien, 2004).

Following Möller and Halinen (2017), within this overall approach we distinguish two main uses of, or perspectives on, the ecosystem construct:

- The *Macro Ecosystems* perspective, or ecosystems as extensive “ecologies” describing industries/sectors/clusters/business fields; and
- The *Focal or Strategic Ecosystems* perspective, or ecosystems as purposeful coalitions of actors. This perspective draws on micro- and evolutionary economics, institutional theory, networks research, and organization theory. Actors are generally seen as boundedly rational decision makers, restricted and influenced primarily by their resource base and the modes of interdependence (types of complementarity). A few authors also use institutional theory and ideas from value creating systems, as well as business network theory and strategy to make suggestions for ecosystem orchestration, notably Autio and Thomas (2014).

Structural and process descriptions	<p><u>Macro Ecosystems Perspective</u></p> <p>The Macro Ecosystems perspective says economic and social domains comprise interrelated actors in competitive and collaborative relationships with various aims for influencing and even directing the co-evolution of the domain. These larger ecologies may refer to national level “innovation systems” (Lundvall, 2007) or regional systems like Silicon Valley (Engel, 2015) but more generally apply to industries or business fields. For example, the mobile services field could be depicted as a complex ecosystem. The overarching goal of this perspective is to describe the business environment's structural properties. However, we do not find this perspective much more informative than the Business Fields and the Business Networks approaches.</p> <p><u>The Focal or Strategic Ecosystems Perspective</u></p> <p>This more commonly employed, and often <i>organization-centric</i>, perspective sees ecosystems as purposeful coalitions or “the collaborative arrangements through which firms combine their individual offerings into a coherent, customer-facing solution” (Adner, 2006, p. 98), and more specifically as “the alignment structure of the multilateral set of partners that need to interact in order for a focal value proposition to materialize” (Adner, 2017, p. 40).</p> <p>Jacobides, Cennamo, and Gawer (2018) specify the perspective further. They argue the distinguishing features of ecosystems are the modularity of resources and their complementarity (unique per actor, requiring collaboration, and supermodular, i.e., providing extra gains by collaborative use), which are not hierarchically governed. Accordingly, “an ecosystem is a set of actors with varying degrees of multilateral, nongeneric complementarities that are not fully hierarchically controlled” (p. 2264).</p> <p><u>The nestedness perspective</u></p> <p>On a more general level, the Business Ecosystems approach sensitizes us to the <i>nested character of business ecosystems (and fields)</i>. For example, the mobile services ecosystem/field comprises several focal ecosystems, e.g., Apple/iPhones/iTunes system and Google's Android system, which may further involve sub-ecosystems with their own organizational and/or technological platforms.</p> <p>Nestedness is also reflected in Thomas, Autio and Gann's (2014,) view of <i>platform ecosystems</i>: “For the platform ecosystem stream, the platform is a set of shared core technologies and technology standards underlying an organizational field that support value co-creation through specialization and complementary offerings” (p. 201). That definition ties platform ecosystems to not only the Business Ecosystems approach but also the conceptualization known as organizational fields.</p>
Managerial frameworks or tools	<p>As the theoretical research on business ecosystems overlaps significantly with the Business Networks Approach, we submit only a few extra observations.</p> <p><u>Innovation ecosystem emergence</u></p> <p>Dattée, Alexy, and Autio (2018) propose a three-phase process for analyzing and influencing from an orchestrator perspective the emergence of radically new innovations in contexts characterized by uncertainty, opaqueness, and flux:</p> <ul style="list-style-type: none"> ● <i>Creating a “protovision”</i> (sensemaking of enabling technologies and identifying potential futures); ● <i>Constructing an envisioned blueprint</i> (clarifying the envisioned value system and its control points); and ● <i>Developing “enacted resonance”</i> (orchestrating external and internal momentum to realize the blueprint among key actors/members). <p><u>Business ecosystems construction – systemic elements</u></p> <p>Talmar, Walrave, Podoyntsina, Holmström, and Romme's (2018) distinguishes two levels, ecosystem and actor, and offers a key two-part construct summary:</p> <ul style="list-style-type: none"> ● <i>Ecosystem-level constructs</i>: value-offering and value system, customer segments, actors; and ● <i>Actor-level constructs</i>: resources, activities, value-addition, value-capture, actor dependence, and risk. <p>Analysis and co-construction first identify value-systems then analyses the roles and risk of actors carrying out the necessary actions through their resources. Note the great similarity to the value-system perspective, A-R-A framework, and capabilities-based logic of constructing strategic networks, c.f., Partanen and Möller (2012); and to the management book by Adner (2012) addressing the “down-stream and up-stream interdependencies” and value-creation logics of participating actors in the ecosystem development.</p> <p><u>Modularity and complementarity</u></p> <p>Jacobides et al. (2018) advise managers to examine the types of complementarity of modules/resources brought by the ecosystem members and ask whether these are unique per actor, requiring collaboration, and/or supermodular, e.g., providing extra gains by collaborative use. This affects actors' relative power position and value-capture potential; see also Partanen and Möller (2012).</p>
Market Systems	<p>The common denominator to this loosely coupled and evolving research approach is the conceptualisation of “market”: markets are viewed as parts of a wider socio-technical-material systemic context for value creation.</p> <p>This implies that markets are <i>socially constructed human artefacts</i>, created by actors who populate a specific context and engage in various practices (Araujo, 2007; Callon, 1998; Fligstein, 2001).</p> <p>As markets are socially constructed, they are also consciously re-constructible, or malleable. A <i>systemic view</i> forces firms to look beyond the blinders of the seller–buyer dyad and see it as part of a larger system of actors who contribute to value creation (Mele et al., 2015).</p> <p>Research investigating systemic markets (c.f., Araujo, Finch, & Kjellberg, 2010; Kjellberg et al., 2015; Kjellberg & Helgesson, 2006, 2007; Storbacka & Nenonen, 2011a) draws both on the above-described research traditions and various streams of economic sociology, management, complexity theory and evolutionary economics.</p> <p>There are several classifications of theoretical approaches to the study of systemic markets, such as that put forward by Geiger, Kjellberg, and Spencer (2012) using the dimensions of socialization and materialisation. For the purposes of this paper, we adopt the classification proposed by Mele et al. (2015), who drew on the etymology of the word “market” and identified two overarching dimensions: market-as-verb and market-as-noun. In our nomenclature these become the two perspectives of our overall Market Systems approach. The verb perspective on market systems highlights processes and activities, whereas the noun perspective illuminates entities and outcomes (Kjellberg & Helgesson, 2007; Mele et al., 2015).</p> <p><u>Market-as-Verb: market practices and market work</u></p> <p>Markets are enacted as actors engage in three types of <i>market practices</i> (Andersson, Aspenberg, & Kjellberg, 2008; Kjellberg & Helgesson, 2006, 2007):</p> <ul style="list-style-type: none"> ● <i>Exchange practices</i> relate to consummating individual economic exchanges; ● <i>Representational practices</i> portray markets and the way they work and thus produce shared images of the market; and ● <i>Normalizing practices</i> relate to the formation of norms and rules guiding the actions of market actors. <p>Under this worldview, markets are always in the making: markets are not, they become (Kjellberg et al., 2012). Markets evolve in a perpetual, reciprocal process because of the constant, evolving translation between actors' market practices (Andersson et al., 2008; Storbacka & Nenonen, 2011b;). This yields many co-existing markets (Kjellberg & Helgesson, 2006), which take on multiple forms as actors perform market practices guided by their subjective perceptions of the market.</p> <p>Besides performing markets through market practices, actors do <i>market-related work to make or shape market systems</i>. Drawing on institutional work (Lawrence & Suddaby, 2006; Lawrence, Suddaby, & Leca, 2011; Michel, Saucède, Pardo, & Fenneteau, 2018), Nenonen, Storbacka, and Frethey-Bentham (2019, p. 251) define <i>market work</i> as “purposeful efforts by a focal actor to perform and transform markets”.</p> <p>Mason et al. (2017) focus on marketization and market-making and identify three forms of conceptualization work necessary for new markets to emerge: <i>conceptualizing actors' roles; conceptualizing markets; and conceptualizing goods</i>. Baker and Nenonen (2020), on the other hand, focus on how existing market systems transform. They put forward twelve forms of <i>collective market work</i>, from selectively enrolling collaborators to negotiating rules and demonizing opposition.</p> <p><u>Market-as-Noun: market system elements, devices, and infrastructures</u></p> <p>Albeit recognizing the irreducibility of socio-technical-material systems, i.e., that they cannot be exhaustively reduced to their constituent parts, scholars have tried to map the entities or elements comprising market systems. Nenonen, Storbacka, & Frethey-Bentham, 2019, Nenonen, Storbacka, & Windahl, 2019) suggest three categories of shapeable <i>market system elements</i>:</p> <ul style="list-style-type: none"> ● <i>Exchange</i> by which the focal firm connects with customers (e.g., offering, price and pricing mechanism, channels and matching methods); ● <i>Actor network</i> that supports the exchange and customers' use practices (e.g., focal firms' own supply network, network of competitors, customer network); ● <i>Institutional transmitters</i>, i.e., the representations used to symbolize the market, and the norms that guide all interactions in it.

In order to highlight the importance of inanimate market system elements, various researchers have concentrated on *market devices*, defined by Muniesa, Millo, and Callon (2007, p. 2) as “the material and discursive assemblages that intervene in the construction of markets”. Research on material market devices has covered topics such as the impact of shopping trolleys (Cochoy, 2009) or crucial infrastructure like barcode scanners (Kjellberg, Hagberg, & Cochoy, 2019) or roads (Burr, 2014). *Immaterial market devices* are market representations used to conceptualize and communicate systemic markets (Diaz Ruiz, 2013; Diaz Ruiz & Kowalkowski, 2014) such as segmentation models (Harrison & Kjellberg, 2010) or labels for new categories or market systems (Azimont & Araujo, 2007; Granqvist, Grodal, & Woolley, 2013). Other examples are the value propositions and business models of focal market actors (Storbacka & Nenonen, 2011b).

Despite their inanimate character, market devices have *performative power*: by influencing market actions they accomplish the market and hence manipulate its development path (MacKenzie & Millo, 2003; Pollock & Williams, 2009).

Managerial frameworks or tools

Market shaping

Viewing markets as malleable value-creating systems widens decisions regarding markets beyond market selection or positioning in an existing space. *Markets are not* precursors, but *outcomes of agent-driven efforts* to influence them (Nenonen, Storbacka, & Windahl, 2019).

Firms with the right set of capabilities can engage in market-shaping activities (Kindström, Ottosson, & Carlberg, 2018; Nenonen & Storbacka, 2018; Nenonen, Storbacka, & Windahl, 2019). Nenonen, Storbacka, and Windahl (2019) identified two sets of capabilities in market-shaping:

- *Triggering capabilities* directly influence market elements; and
- *Facilitating capabilities* relate to actors' creative ability to decide how to apply triggering capabilities, by informing their purpose, ways of combining activities, and other principles for action.

Non-predictive strategy and effectuation

Being inherently complex, market systems require replacing traditional “analyze-plan-control” management by non-predictive strategy (Read, Dew, Sarasvathy, Song, & Wiltbank, 2009). This rests on effectuation theory (Sarasvathy, 2008) and suggests adaptive trial/error and rapid pivoting to create market opportunities (Alvarez & Barney, 2007).

Business models are externally oriented and manifest in the focal actor's practices, which influence how the focal actor relates to others (Storbacka & Nenonen, 2011b). Hence, all *interactions between market actors are in fact interactions between actors' business models*. Key to market-shaping strategies is to engage in business model innovation: “designed, novel, and nontrivial changes to the key elements of a firm's business model and/or the architecture linking these elements” (Foss & Saebi, 2017, p. 216).

Value propositions and business models as market-shaping devices

Research identifies discontinuous value propositions as a key ingredient in market-shaping strategies (Kumar, Scheer, & Kotler, 2000; Nenonen, Storbacka, Sklyar, Frow, & Payne, 2019). Storbacka and Nenonen (2011b) propose that focal actors can offer “*market propositions*” that engage others in creating a shared market vision, which, in turn, can build the confidence to initiate market-level change involving many market actors (Kindström et al., 2018).

Phases and triggers

Market shaping takes time and evolves sequentially through an inter-related and overlapping three-phase process (Storbacka & Nenonen, 2011b, 2015):

- *Origination* implies inventing or introducing a new market element or changing an existing one.
- *Mobilization* - the performativity of the new/changed element depends on the scripting actor's ability to mobilize support for the idea or new/changed practice both inside the firm and on a *meso* level of the market.
- *Stabilization* refers to a state where the proposed changes have solidified into the dominant logic of the market.

However, markets are path dependent and characterized by inertia (Nenonen et al., 2014). Therefore, triggering the phases above takes a *discontinuous event*, a “disorienting dilemma” or “crisis”, best characterized as breakdowns in the flow of actions that forces actors to question current practice (Cope, 2003; Mezirow, 1991).

References

- Aarikka-Stenroos, L., Jaakkola, E., Harrison, D., & Mäkitalo-Keinonen, T. (2017). How to manage innovation processes in extensive networks: A longitudinal study. *Industrial Marketing Management*, 67, 88–105.
- Aarikka-Stenroos, L., & Ritala, P. (2017). Network management in the era of ecosystems: Systematic review and management framework. *Industrial Marketing Management*, 67, 23–36.
- Aarikka-Stenroos, L., Sandberg, B., & Lehtimäki, T. (2014). Networks for the commercialization of innovations: A review of how divergent network actors contribute. *Industrial Marketing Management*, 43(3), 365–381.
- Abrahamsen, M. H., Henneberg, S. C., Huemer, L., & Naudé, P. (2016). Network picturing: An action research study of strategizing in business networks. *Industrial Marketing Management*, 59, 107–119.
- Adner, R. (2006). Match your innovation strategy to your innovation ecosystem. *Harvard Business Review*, 84(4), 98–107.
- Adner, R. (2012). *The wide lens: A new strategy for innovation*. Penguin UK.
- Adner, R. (2017). Ecosystem as structure: An actionable construct for strategy. *Journal of Management*, 43(1), 39–58.
- Adner, R., & Kapoor, R. (2010). Value creation in innovation ecosystems: How the structure of technological interdependence affects firm performance in new technology generations. *Strategic Management Journal*, 31(3), 306–333.
- Åge, L. J., Cederlund, C. A., & Gummesson, E. (2014). The theory/practice gap in B2B marketing: Reflections and search for solutions. *The Journal of Business and Industrial Marketing*, 29(7/8), 619–625.
- Alvarez, S. A., & Barney, J. B. (2007). Discovery and creation: Alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal*, 1(1–2), 11–26.
- Alvesson, M., & Gabriel, Y. (2013). Beyond formulaic research: In praise of greater diversity in organizational research and publications. *Academy of Management Learning & Education*, 12(2), 245–263.
- Andersen, P. H., Medlin, C. J., & Törnroos, J. Å. (2019). Re-appraising interaction and process for industrial network research: The future plunging mirror hall metaphor. *Industrial Marketing Management*. <https://doi.org/10.1016/j.indmarman.2019.06.011>.
- Anderson, P., & Tushman, M. L. (1990). Technological discontinuities and dominant designs: A cyclical model of technological change. *Administrative Science Quarterly*, 35(4), 604–633.
- Andersson, P., Aspenberg, K., & Kjellberg, H. (2008). The configuration of actors in market practice. *Marketing Theory*, 8(1), 67–90.
- Araujo, L. (2007). Markets, market-making and marketing. *Marketing Theory*, 7(3), 211–226.
- Araujo, L., Finch, J., & Kjellberg, H. (Eds.). (2010). *Reconnecting marketing to markets*. Oxford: Oxford University Press.
- Araujo, L., Kjellberg, H., & Spencer, R. (2008). Market practices and forms: Introduction to the special issue. *Marketing Theory*, 8(1), 5–14.
- Argyres, N. S., De Massis, A., Foss, N. J., Frattini, F., Jones, G., & Silverman, B. S. (2020). History-informed strategy research: The promise of history and historical research methods in advancing strategy scholarship. *Strategic Management Journal*, 41(3), 343–368.
- Autio, E., & Thomas, L. (2014). In M. Dodgson, N. Philips, & D. M. Gann (Eds.). *The Oxford handbook of innovation management* (pp. 204–288). Oxford: Oxford University Press.
- Autio, E., & Thomas, L. D. (2016, January). Tilting the playing field: Towards an endogenous strategic action theory of ecosystem creation. *Academy of management proceedings* (Vol. 2016, No. 1). Briarcliff Manor, NY 10510: Academy of Management.
- Azimont, F., & Araujo, L. (2007). Category reviews as market-shaping events. *Industrial Marketing Management*, 36(7), 849–860.
- Backhaus, K., Kai Lügger, K., & Koch, M. (2011). The structure and evolution of business-to-business marketing: A citation and co-citation analysis. *Industrial Marketing Management*, 40(6), 940–951.
- Baker, J. J., & Nenonen, S. (2020). Collaborating to shape markets: Emergent collective market work. *Industrial Marketing Management*, 85, 240–253.
- Barile, S., Pels, J., Polese, F., & Saviano, M. (2012). An introduction to the viable systems approach and its contribution to marketing. *Journal of Business Market Management*, 5(2), 54–78.
- Barile, S., & Polese, F. (2010). Smart service systems and viable service systems: Applying systems theory to service science. *Service Science*, 2(1–2), 21–40.
- Beal, D., Eccles, R., Hansell, G., Lesser, R., Unnikrishnan, S., Woods, W., & Young, D. (2017). *Total societal impact: A new lens for strategy*. Boston Consulting Group <https://www.bcg.com/publications/2017/total-societal-impact-new-lens-strategy.aspx>.
- Berger, P. L., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. New York: Doubleday.
- Bhaskar, R. (2010). *Reclaiming reality: A critical introduction to contemporary philosophy*. Routledge.
- Blatter, J., & Haverland, M. (2012). Causal-process tracing. In J. Blatter, & M. Haverland (Eds.). *Designing case studies. Explanatory approaches in small-N research* (pp. 79–143). London: Palgrave Macmillan.
- Boje, D. M., Osrick, C., & Ford, J. D. (2004). Language and organization: The doing of discourse. *Academy of Management Review*, 29(4), 571–577.
- de la Boulaye, P., Erriquez, M., Iribarren, A. J., & Russo, F. (2019). *How B2B online marketplaces could transform indirect procurement*. McKinsey & Company <https://www.mckinsey.com/business-functions/operations/our-insights/how-b2b-online-marketplaces-could-transform-indirect-procurement>.

- Bourdieu, P. (2005). *The social structures of the economy. Polity*.
- Brennan, R., Tzempelikos, N., & Wilson, J. (2014). Improving relevance in B2B research: Analysis and recommendations. *Journal of Business & Industrial Marketing*, 29(7/8), 601–609.
- Brodie, R. J. (2017). Enhancing theory development in the domain of relationship marketing: How to avoid the danger of getting stuck in the middle. *Journal of Services Marketing*, 31(1), 20–23.
- Burr, T. C. (2014). Market-widening: Shaping total market demand for French and American bicycles circa 1890. *Marketing Theory*, 14(1), 19–34.
- Buttriss, G. J., & Wilkinson, I. F. (2006). Using narrative sequence methods to advance international entrepreneurship theory. *Journal of International Entrepreneurship*, 4(4), 157–174.
- Callon, M. (1998). Introduction: The embeddedness of economic markets in economics. In M. Callon (Ed.), *The Laws of the markets* (pp. 1–57). Oxford: Blackwell Publishers.
- Callon, M., & Muniesa, F. (2005). Peripheral vision: Economic markets as calculative collective devices. *Organization Studies*, 26(8), 1229–1250.
- Caren, N., & Panofsky, A. (2005). TQCA: A technique for adding temporality to qualitative comparative analysis. *Sociological Methods & Research*, 34(2), 147–172.
- Carvalho, A. D. P., da Cunha, S. K., de Lima, L. F., & Carstens, D. D. (2017). The role and contributions of sociological institutional theory to the socio-technical approach to innovation theory. *RAI Revista de Administração e Inovação*, 14(3), 250–259.
- Cearley, D. W., Burke, B., & Walker, M. J. (2016). *Top 10 strategic technology trends for 2016*. Gartner research report, available at <https://www.gartner.com/doc/3231617?srclid=1-6595640781>.
- Chandler, J. D., & Vargo, S. L. (2011). Contextualization and value-in-context: How context frames exchange. *Marketing Theory*, 11(1), 35–49.
- Christenson, C. (1997). *The innovator's dilemma*. Cambridge, Mass: Harvard Business School Press.
- Cochoy, F. (2009). Driving a shopping cart from STS to business, and the other way round: On the introduction of shopping carts in American grocery stores (1936–1959). *Organization*, 16(1), 31–55.
- Cope, J. (2003). Entrepreneurial learning and critical reflection: Discontinuous events as triggers for “higher-level” learning. *Management Learning*, 34(4), 429–450.
- Cortez, R. M., & Johnston, W. J. (2017). The future of B2B marketing theory: A historical and prospective analysis. *Industrial Marketing Management*, 66, 90–102.
- Dattée, B., Alexy, O., & Autio, E. (2018). Maneuvering in poor visibility: How firms play the ecosystem game when uncertainty is high. *Academy of Management Journal*, 61(2), 466–498.
- Davenport, T. H. (2013). Analytics 3.0. *Harvard Business Review*, 91(12), 64–72.
- Dhanaraj, C., & Parkhe, A. (2006). Orchestrating innovation networks. *Academy of Management Review*, 31(3), 659–669.
- Diaz Ruiz, C. A. (2013). Assembling market representations. *Marketing Theory*, 13(3), 245–261.
- Diaz Ruiz, C. A., & Kowalkowski, C. (2014). Market representations in industrial marketing: Could representations influence strategy? *Industrial Marketing Management*, 43(6), 1026–1034.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
- DiMaggio, P. J., & Powell, W. W. (1991). *The new institutionalism in organizational analysis*. Chicago, IL: University of Chicago Press.
- Doh, J. P. (2015). From the editor: Why we need phenomenon-based research in international business. *Journal of World Business*, 50(4), 609–611.
- Dopfer, K., Foster, J., & Potts, J. (2004). Micro-meso-macro. *Journal of Evolutionary Economics*, 14(3), 263–279.
- Doz, Y. L., & Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. *Long Range Planning*, 43(2–3), 370–382.
- Doz, Y. L., Santos, J., & Williamson, P. J. (2001). *From global to Metanational: How companies win in the knowledge economy*. Boston: Harvard Business School Press Books.
- Easton, G. (2010). Critical realism in case study research. *Industrial Marketing Management*, 39(1), 118–128.
- Eisend, M. (2015). Have we progressed marketing knowledge? A meta-meta-analysis of effect sizes in marketing research. *Journal of Marketing*, 79(3), 23–40.
- Engel, J. S. (2015). Global clusters of innovation: Lessons from Silicon Valley. *California Management Review*, 57(2), 36–65.
- Financial Times (2019). *How to build a more responsible corporate capitalism*. editorial on October 13, 2019.
- Fligstein, N. (1991). The structural transformation of American industry: An institutional account of the causes of diversification in the largest firms, 1919–1979. In W. W. Powell, & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 311–336). Chicago, IL: University of Chicago Press.
- Fligstein, N. (2001). *The architecture of markets: An economic sociology of twenty-first-century capitalist societies*. Princeton, NJ: Princeton University Press.
- Foss, N. J., & Saebi, T. (2017). Fifteen years of research on business model innovation: How far have we come, and where should we go? *Journal of Management*, 43(1), 200–227.
- Fourcade, M. (2007). Theories of markets and theories of society. *American Behavioral Scientist*, 50(8), 1015–1034.
- Frels, J. K., Shervani, T., & Srivastava, R. K. (2003). The integrated networks model: Explaining resource allocations in network markets. *Journal of Marketing*, 67(1), 29–45.
- Frow, P., McColl-Kennedy, J. R., & Payne, A. (2016). Co-creation practices: Their role in shaping a health care ecosystem. *Industrial Marketing Management*, 56, 24–39.
- Fuller, J., Jacobides, M. G., & Reeves, M. (2019). The myths and realities of business ecosystems. *MIT Sloan Management Review*, 60(3), 1–9.
- Garud, R., Hardy, C., & Maguire, S. (2007). Institutional entrepreneurship as embedded agency: An introduction to the special issue. *Organization Studies*, 28(7), 957–969.
- Garud, R., Jain, S., & Tuertscher, P. (2008). Incompleteness by design and designing for incompleteness. *Organization Studies*, 29(3), 351–371.
- Gawer, A., & Cusumano, M. A. (2002). *Platform leadership: How Intel, Microsoft, and Cisco drive industry innovation*. Boston, MA: Harvard Business School Press.
- Geels, F. W. (2002). Technological transitions as evolutionary reconfiguration processes: A multi-level perspective and a case-study. *Research Policy*, 31(8–9), 1257–1274.
- Geels, F. W. (2005). *Technological transitions and system innovations: A co-evolutionary and socio-technical analysis*. Edward Elgar Publishing.
- Geels, F. W. (2010). Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective. *Research Policy*, 39(4), 495–510.
- Geiger, S., Kjellberg, H., & Spencer, R. (2012). Shaping exchanges, building markets. *Consumption Markets & Culture*, 15(2), 133–147.
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. University of California Press.
- Godfrey, P. C., Hassard, J., O'Connor, E. S., Rowlinson, M., & Ruef, M. (2016). What is organizational history? Toward a creative synthesis of history and organization studies. *Academy of Management Review*, 41(4), 590–608.
- Granqvist, N., Grodal, S., & Woolley, J. L. (2013). Hedging your bets: Explaining executives' market labeling strategies in nanotechnology. *Organization Science*, 24(2), 395–413.
- Hadjikhani, A., & LaPlaca, P. (2013). Development of B2B marketing theory. *Industrial Marketing Management*, 42(3), 294–305.
- Hagel, J., Brown, J. S., & Davison, L. (2008). Shaping strategy in a world of constant disruption. *Harvard Business Review*, 86(10), 80–89.
- Håkansson, H., & Ford, D. (2002). How should companies interact in business networks? *Journal of Business Research*, 55(2), 133–139.
- Håkansson, H., & Snehota, I. (Eds.). (1995). *Developing relationships in business networks*. London: Routledge.
- Håkansson, H., & Waluszewski, A. (2002). *Managing technological development. IKEA, the environment and technology*. London and New York: Routledge.
- Harrison, D., & Kjellberg, H. (2010). Segmenting a market in the making: Industrial market segmentation as construction. *Industrial Marketing Management*, 39(5), 784–792.
- Henneberg, S. C., Mouzas, S., & Naudé, P. (2006). Network pictures: Concepts and representations. *European Journal of Marketing*, 40(3/4), 408–429.
- Hunt, S. D. (1983). General theories and the fundamental explananda of marketing. *Journal of Marketing*, 47(4), 9–17.
- Hunt, S. D. (1997). Resource-advantage theory: An evolutionary theory of competitive firm behavior? *Journal of Economic Issues*, 31(1), 59–78.
- Hutchinson, R., Aré, L., Rose, J., & Bailey, A. (2019). *The bionic company*. Boston Consulting Group <https://www.bcg.com/publications/2019/bionic-company.aspx>.
- Iansiti, M., & Levien, R. (2004). *The keystone advantage: What the new dynamics of business ecosystems mean for strategy, innovation, and sustainability*. Boston, MA: Harvard Business Press.
- Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. *Strategic Management Journal*, 39(8), 2255–2276.
- Jarillo, J. C. (1988). On strategic networks. *Strategic management journal*, 9(1), 31–41.
- Jaworski, B. J. (2011). On managerial relevance. *Journal of Marketing*, 75(4), 211–224.
- Jaworski, B. J., & Kohli, A. K. (2017). Conducting field-based, discovery-oriented research: Lessons from our market orientation research experience. *AMS Review*, 7(1–2), 4–12.
- Kimura, R., Reeves, M., & Whitaker, K. (2019). *Winning in the '20s: The new logic of competition*. Boston Consulting Group <https://www.bcg.com/publications/2019/new-logic-of-competition.aspx>.
- Kindström, D., Ottosson, M., & Carlberg, P. (2018). Unraveling firm-level activities for shaping markets. *Industrial Marketing Management*, 68, 36–45.
- Kjellberg, H., Azimont, F., & Reid, E. (2015). Market innovation processes: Balancing stability and change. *Industrial Marketing Management*, 44, 4–12.
- Kjellberg, H., Hagberg, J., & Cochoy, F. (2019). Thinking market infrastructure: Barcode scanning in the US grocery retail sector, 1967–2010. *Thinking infrastructures (Research in the Sociology of Organizations, Volume 62)* (pp. 207–232). Emerald Publishing Limited.
- Kjellberg, H., & Helgesson, C. F. (2006). Multiple versions of markets: Multiplicity and performativity in market practice. *Industrial Marketing Management*, 35(7), 839–855.
- Kjellberg, H., & Helgesson, C. F. (2007). On the nature of markets and their practices. *Marketing Theory*, 7(2), 137–162.
- Kjellberg, H., Storbacka, K., Akaka, M., Chandler, J., Finch, J., Lindeman, S., & Nenonen, S. (2012). Market futures/future markets: Research directions in the study of markets. *Marketing Theory*, 12(2), 219–223.
- Knight, L., Pfeiffer, A., & Scott, J. (2015). Supply market uncertainty: Exploring consequences and responses within sustainability transitions. *Journal of Purchasing and Supply Management*, 21(3), 167–177.
- Kramer, M. R., & Porter, M. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), 62–77.
- Kumar, N., Scheer, L., & Kotler, P. (2000). From market driven to market driving. *European Management Journal*, 18(2), 129–142.
- Langlois, R. N., & Robertson, P. L. (1995). *Firms, markets and economic change: A dynamic theory of business institutions*. London: Routledge.
- LaPlaca, P., & da Silva, R. V. (2016). B2B: A paradigm shift from economic exchange to behavioral theory: A quest for better explanations and predictions. *Psychology & Marketing*, 33(4), 232–249.
- Lawrence, T. B., & Suddaby, R. (2006). Institutions and institutional work. In S. R. Clegg, C. Hardy, T. B. Lawrence, & W. R. Nord (Eds.), *The SAGE handbook of organization studies* (pp. 215–254). (2nd ed.). London: SAGE Publications Ltd.
- Lawrence, T. B., Suddaby, R., & Leca, B. (2011). Institutional work: Refocusing

- institutional studies of organization. *Journal of Management Inquiry*, 20(1), 52–58.
- Layder, D. (1981). *Structure, interaction and social theory*. London: Routledge & Kegan Paul.
- Layder, D. (1993). *New strategies in social research: An introduction and guide*. Cambridge, UK: Polity Press.
- Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues*, 2, 34–46.
- Lichtenthal, J. D., Mummalaeni, V., & Wilson, D. T. (2008). The essence of business marketing theory, research, and tactics: Contributions from the journal of business-to-business marketing. *Journal of Business-to-Business Marketing*, 15(2), 91–179.
- Lilien, G. L. (2016). The B2B knowledge gap. *International Journal of Research in Marketing*, 33(3), 543–556.
- Lindgreen, A., & Di Benedetto, A. (2017). Letter from the co-editors-in-chief. *Industrial Marketing Management*, 100(61), 1–3.
- Lundvall, B.Å. (2007). National innovation systems—Analytical concept and development tool. *Industry and Innovation*, 14(1), 95–119.
- Maciel, A. F., & Fischer, E. (2020). Collaborative market driving: How peer firms can develop markets through collective action. *Journal of Marketing*, 84(5), 41–59. <https://doi.org/10.1177/0022242920917982>.
- MacKenzie, D., & Millo, Y. (2003). Constructing a market, performing theory: The historical sociology of a financial derivatives exchange. *American Journal of Sociology*, 109(1), 107–145.
- Mason, K., Friesl, M., & Ford, C. J. (2017). Managing to make markets: Marketization and the conceptualization work of strategic nets in the life science sector. *Industrial Marketing Management*, 67, 52–69.
- McGrath, R. (2019). *Seeing around corners: How to spot inflection points in business before they happen*. New York: Houghton Mifflin.
- McKinsey Global Institute (2011). Big data: The next frontier for innovation, competition and productivity. available at <http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/big-data-the-next-frontier-forinnovation>.
- Medlin, C. J., & Törnroos, J.Å. (2014). Interest, sensemaking and adaptive processes in emerging business networks—An Australian biofuel case. *Industrial Marketing Management*, 43(6), 1096–1107.
- Mele, C., Pels, J., & Storbacka, K. (2015). A holistic market conceptualization. *Journal of the Academy of Marketing Science*, 43(1), 100–114.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.
- Michel, S., Saucède, F., Pardo, C., & Fenneteau, H. (2018). Business interaction and institutional work: When intermediaries make efforts to change their position. *Industrial Marketing Management*, 80(2018), 266–279.
- Möller, K. (2010). Sense-making and agenda construction in emerging business networks—How to direct radical innovation. *Industrial Marketing Management*, 39(3), 361–371.
- Möller, K. (2013). Theory map of business marketing: Relationships and networks perspectives. *Industrial Marketing Management*, 42(3), 324–335.
- Möller, K. (2017). Questioning the theory-praxis gap in marketing—types and drivers of research implementation. *European Journal of Marketing*, 51(7/8), 1163–1172.
- Möller, K., & Halinen, A. (2017). Managing business and innovation networks—From strategic nets to business fields and ecosystems. *Industrial Marketing Management*, 67, 5–22.
- Möller, K., & Halinen, A. (2018). IMP thinking and IMM: Co-creating value for business marketing. *Industrial Marketing Management*, 69, 18–31.
- Möller, K., & Rajala, A. (2007). Rise of strategic nets—New modes of value creation. *Industrial Marketing Management*, 36(7), 895–908.
- Möller, K., Rajala, A., & Svahn, S. (2005). Strategic business nets—Their type and management. *Journal of Business Research*, 58(9), 1274–1284.
- Möller, K., & Svahn, S. (2006). Role of knowledge in value creation in business nets. *Journal of Management Studies*, 43(5), 985–1007.
- Möller, K., & Svahn, S. (2009). How to influence the birth of new business fields—Network perspective. *Industrial Marketing Management*, 38(4), 450–458.
- Möller, K. K., & Halinen, A. (1999). Business relationships and networks: Managerial challenge of network era. *Industrial Marketing Management*, 28(5), 413–427.
- Moore, G. A. (1999). *Crossing the chasm: Marketing and selling high tech products to mainstream customers*. New York, NY: Harper Collins.
- Moore, J. F. (1993). Predators and prey: A new ecology of competition. *Harvard Business Review*, 71(3), 75–86.
- Moore, J. F. (1996). *The death of competition: Leadership and strategy in the age of business ecosystems*. New York, NY: HarperBusiness.
- Muniesa, F., Millo, Y., & Callon, M. (2007). An introduction to market devices. *The Sociological Review*, 55(2, suppl), 1–12.
- Nononen, S., Brodie, R. J., Storbacka, K., & Peters, L. D. (2017). Theorizing with managers: How to achieve both academic rigor and practical relevance? *European Journal of Marketing*, 51(7/8), 1130–1152.
- Nononen, S., Kjellberg, H., Pels, J., Cheung, L., Lindeman, S., Mele, C., ... Storbacka, K. (2014). A new perspective to market change: Market plasticity and the stability-fluidity dialectics. *Marketing Theory*, 14(3), 269–289.
- Nononen, S., & Storbacka, K. (2018). *SMASH: Using market shaping to design new strategies for innovation, value creation, and growth*. Bingley, UK: Emerald Publishing Limited.
- Nononen, S., Storbacka, K., & Fretheim-Bentham, C. (2019). Is your industrial marketing work working? Developing a composite index of market change. *Industrial Marketing Management*, 80, 251–265.
- Nononen, S., Storbacka, K., Sklyar, A., Frow, P., & Payne, A. (2019). *Value propositions as market-shaping devices: A qualitative comparative analysis*. *Industrial Marketing Management* <https://doi.org/10.1016/j.indmarman.2019.10.006>.
- Nononen, S., Storbacka, K., & Windahl, C. (2019). Market-shaping capabilities: Triggering and facilitating increased value creation. *Journal of the Academy of Marketing Science*, 47(4), 617–639.
- North, M. J., & Macal, C. M. (2007). *Managing business complexity: Discovering strategic solutions with agent-based Modeling and simulation*. Oxford University Press.
- O'Reilly, C. A., III, & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of Management Perspectives*, 27(4), 324–338.
- Partanen, J., & Möller, K. (2012). How to build a strategic network: A practitioner-oriented process model for the ICT sector. *Industrial Marketing Management*, 41(3), 481–494.
- Pels, J., Möller, K., & Saren, M. (2009). Do we really understand business marketing? Getting beyond the RM and BM matrimony. *Journal of Business & Industrial Marketing*, 24(5/6), 322–336.
- Peters, L. D., Pressey, A. D., Vanharanta, M., & Johnston, W. J. (2013). Constructivism and critical realism as alternative approaches to the study of business networks: Convergences and divergences in theory and in research practice. *Industrial Marketing Management*, 42(3), 336–346.
- Pisano, G. P., & Verganti, R. (2008). Which kind of collaboration is right for you? *Harvard Business Review*, 86(12), 78–86.
- Pollock, N., & Williams, R. (2009). The sociology of a market analysis tool: How industry analysts sort vendors and organize markets. *Information and Organization*, 19(2), 129–151.
- Powell, W. W., Koput, K. W., & Smith-Doerr, L. (1996). Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative Science Quarterly*, 116–145.
- Putnam, R. D. (2007). 'E pluribus unum: diversity and community in the twenty-first century: the 2006 Johan Skytte Prize Lecture'. *Scandinavian Political Studies*, 30(2), 137–174.
- Ragin, C. C. (2008). *Redesigning social inquiry: Fuzzy sets and beyond*. Chicago, IL: University of Chicago Press.
- Read, S., Dew, N., Sarasvathy, S. D., Song, M., & Wiltbank, R. (2009). Marketing under uncertainty: The logic of an effectual approach. *Journal of Marketing*, 73(3), 1–18.
- Reeves, M., Haanaes, K., & Sinha, J. (2015). Navigating the dozens of different strategy options. *Harvard Business Review*, 93(6), 1–17.
- Reibstein, D. J., Day, G., & Wind, J. (2009). Guest editorial: Is marketing academia losing its way? *Journal of Marketing*, 73(4), 1–3.
- Ritala, P., & Gustafsson, R. (2018). Q&A. innovation and entrepreneurial ecosystem research: Where are we now and how do we move forward? *Technology Innovation Management Review*, 8(7), 52–67.
- Ritter, T., Wilkinson, I. F., & Johnston, W. J. (2004). Managing in complex business networks. *Industrial marketing management*, 33(3), 175–183.
- Rogers, E. M. (2010). *Diffusion of innovations*. Simon and Schuster.
- Rosenkopf, L., & Schilling, M. A. (2007). Comparing alliance network structure across industries: Observations and explanations. *Strategic Entrepreneurship Journal*, 1(3–4), 191–209.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393–404.
- Sarasvathy, S. D. (2008). *Effectuation: Elements of entrepreneurial expertise*. Northampton, MA: Edward Elgar.
- Sawyer, R. K. (2005). *Social emergence: Societies as complex systems*. Cambridge University Press.
- Sayer, A. (2000). *Realism and social science*. London: Sage.
- Schwarz, G. M., & Stensaker, I. G. (2016). Showcasing phenomenon-driven research on organizational change. *Journal of Change Management*, 16(4), 245–264.
- Scott, R. W. (2014). *Institutions and organizations: Ideas, interests and identities* (4th ed.). SAGE Publications.
- Scott, W. R., & Davis, G. F. (2007). *Organizations and organizing: Rational, natural, and open system perspectives*. Pearson Education.
- Slater, S. F., Hult, G. T. M., & Olson, E. M. (2010). Factors influencing the relative importance of marketing strategy creativity and marketing strategy implementation effectiveness. *Industrial Marketing Management*, 39(4), 551–559.
- Snowden, D. J., & Boone, M. E. (2007). A leader's framework for decision making. *Harvard Business Review*, 85(11), 68–76.
- Spender, J. C. (1989). *Industry recipes*. Oxford: Basil Blackwell.
- Steenkamp, J. B. E. (2018). The future of the marketing department at business schools. *Journal of the Academy of Marketing Science*, 46(2), 169–172.
- Storbacka, K., & Nenonen, S. (2011a). Markets as configurations. *European Journal of Marketing*, 45(1/2), 241–258.
- Storbacka, K., & Nenonen, S. (2011b). Scripting markets: From value propositions to market propositions. *Industrial Marketing Management*, 40(2), 255–266.
- Storbacka, K., & Nenonen, S. (2015). Learning with the market: Facilitating market innovation. *Industrial Marketing Management*, 44, 73–82.
- Sudbury-Riley, L., Hunter-Jones, P., Al-Abidin, A., Lewin, D., & Naraine, M. V. (2020). The trajectory touchpoint technique: A deep dive methodology for service innovation. *Journal of Service Research*, 23(2), 229–251. [10.1096/0519894642](https://doi.org/10.1096/0519894642).
- Taillard, M., Peters, L. D., Pels, J., & Mele, C. (2016). The role of shared intentions in the emergence of service ecosystems. *Journal of Business Research*, 69(8), 2972–2980.
- Talmar, M., Walrave, B., Podoynitsyna, K. S., Holmström, J., & Romme, A. G. L. (2018). Mapping, analyzing and designing innovation ecosystems: The ecosystem pie model. *Long Range Planning*. <https://doi.org/10.1016/j.lrp.2018.09.002>.
- Thomas, L. D., Autio, E., & Gann, D. M. (2014). Architectural leverage: Putting platforms in context. *Academy of Management Perspectives*, 28(2), 198–219.
- Thornton, P. H., & Ocasio, W. (1999). Institutional logics and the historical contingency of power in organizations: Executive succession in the higher education publishing industry, 1958–1990. *American Journal of Sociology*, 105(3), 801–843.
- Toth, Z., Henneberg, S. C., & Naudé, P. (2017). Addressing the “qualitative” in fuzzy set qualitative comparative analysis: The generic membership evaluation template. *Industrial Marketing Management*, 63, 192–204.

- Tsoukas, H. (2017). Don't simplify, complexify: From disjunctive to conjunctive theorizing in organization and management studies. *Journal of Management Studies*, 54(2), 132–153.
- Vaara, E., & Lamberg, J.-A. (2016). Taking historical embeddedness seriously: Three historical approaches to advance strategy process and practice research. *Academy of Management Review*, 41(4), 633–657.
- Van Bockhaven, W., & Matthyssens, P. (2017). Mobilizing a network to develop a field: Enriching the business actor's mobilization analysis toolkit. *Industrial Marketing Management*, 67, 70–87.
- Van Tulder, R., Verbeke, A., Jankowska, B., & Buckley, P. (2019). *International business in a VUCA world: The changing role of states and firms*. Bingley, UK: Emerald Publishing Limited.
- Vargo, S. L., & Lusch, R. F. (2016). Institutions and axioms: An extension and update of service-dominant logic. *Journal of the Academy of Marketing Science*, 44(1), 5–23.
- Vargo, S. L., & Lusch, R. F. (2017). Service-dominant logic 2025. *International Journal of Research in Marketing*, 34(1), 46–67.
- Venkatesh, A., Peñaloza, L., & Firat, A. F. (2006). The market as a sign system and the logic of the market. In R. F. Lusch, & S. L. Vargo (Eds.). *The service-dominant logic of marketing* (pp. 251–265). New York: M.E. Sharpe.
- Von Krogh, G., Rossi-Lamastra, C., & Haefliger, S. (2012). Phenomenon-based research in management and organisation science: When is it rigorous and does it matter? *Long Range Planning*, 45(4), 277–298.
- Webster, F. E., & Lusch, R. F. (2013). Elevating marketing: marketing is dead! Long live marketing!. *Journal of the Academy of Marketing Science*, 41(4), 389–399.
- Wiersema, F. (2013). The B2B agenda: The current state of B2B marketing and a look ahead. *Industrial Marketing Management*, 42(4), 470–488.
- Wittmann, C. M., Hunt, S. D., & Arnett, D. B. (2009). Explaining alliance success: Competences, resources, relational factors, and resource-advantage theory. *Industrial Marketing Management*, 38(7), 743–756.
- Yadav, M. S. (2010). The decline of conceptual articles and implications for knowledge development. *Journal of Marketing*, 74(1), 1–19.
- Zaheer, A., McEvily, B., & Perrone, V. (1998). Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization Science*, 9(2), 141–159.
- Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review*, 27(2), 185–203.
- Zeithaml, V. A., Jaworski, B. J., Kohli, A. K., Tuli, K. R., Ulaga, W., & Zaltman, G. (2020). A theories-in-use approach to building marketing theory. *Journal of Marketing*, 84(1), 32–51.