

Market innovation: A literature review and new research directions[☆]

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ABSTRACT

Over the past three decades, a rapidly expanding academic literature has investigated how new markets are created and how existing markets are transformed, phenomena this article refers to as “market innovation”. The literature on market innovation is currently fragmented and characterized by heterogeneity of terminology, theoretical paradigms, and empirical research settings. The purpose of this article is to map the field, identify distinct research clusters, and uncover shifts in the literature’s underpinning conceptual perspectives. Specifically, using bibliometric mapping, the article identifies six clusters of market innovation research. Further analysis reveals three major shifts in the literature over time: (1) a shift from reductionism to emergence, (2) a shift from central agency to distributed agency, and (3) a shift from linearity to non-linearity. To advance the understanding of all three shifts and move theory development forward, complexity theory offers a valuable meta-theoretical framework. Future research directions are derived from complexity theory.

1. Introduction

Markets are fundamental to managerial thought and practice because they present the domain of action for firms. Over time, existing markets can undergo dramatic changes and entirely new markets may emerge, posing significant challenges to firms. Consider, for example, the case of Low Emission Vehicles (LEVs); electric, hybrid and fuel-cell vehicles which created a new market space in the automotive industry. LEV manufacturers had to make major technology design decisions (e.g., purely electric vehicles versus hybrid cars combining an electric motor with an internal combustion engine); challenge players in the automotive industry with a vested interest in the technological status quo; establish new preferences among consumers; navigate complex networks of stakeholders, including car dealers, health and safety authorities, lawmakers, and governments; promote the creation of an adequate charging infrastructure; and achieve market legitimacy by addressing concerns regarding infrastructure requirements and net effects on the environment (Pinkse, Bohnsack & Kolk, 2014).

Over the past three decades, these complex challenges related to the emergence, change, and transformation of markets have received significant scholarly scrutiny, resulting in a substantial body of literature.

The more recent research in this field departs from the neoclassical view that a market is an objective given of reality (Mele, Pels, & Storbacka, 2015), and studies “market creation” (Aarikka-Stenroos & Lehtimäki, 2014; Humphreys, 2010), “market (co)construction” (Read, Dew, Sarasvathy, Song, & Wiltbank, 2009; Santos & Eisenhardt, 2009), “market driving” (Humphreys & Carpenter, 2018), and “market shaping” (Nenonen et al., 2019). In this review, we refer to the broader phenomenon underlying these terms as “market innovation” (e.g., Kjellberg, 2015; Vargo et al., 2015). We broadly define market innovation as *purposive actions by market stakeholders that result in a distinctively new or altered form of market*. Studies on market innovation draw on a broad set of theories, such as actor-network theory (Giesler, 2012), institutional theory (Humphreys, 2010), practice theory (Kjellberg & Helgesson, 2006) and the resource-based view (Pitelis & Teece, 2010). Moreover, research on market innovation is set in different empirical contexts, such as radical and breakthrough innovation (Aarikka-Stenroos & Lehtimäki, 2014; O’Connor & Rice, 2013), entrepreneurship (Read et al., 2009), bottom-of-the-pyramid markets (Ansari, Munir, & Gregg, 2012; Seelos & Mair, 2007), consumer activism (Weber, Heinze, & DeSoucey, 2008), and innovation policy (Mazzucato, 2016).

As a result, a rich and diverse literature has emerged that has

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uncovered valuable insights on the nature of market innovation. However, the diversity in terminology, theoretical perspectives, and empirical contexts suggests that this literature is also fragmented and characterized by significant conceptual ambiguity. While this is not uncommon in new research fields where shared sets of concepts and goals are yet to be established (Raasch, Lee, Spaeth, & Herstatt, 2013), the fragmentation and complexity of the market innovation literature has made research in this area less cumulative than it could have been, thereby hampering theory development. Against this backdrop, the purpose of this article is to provide a review of the literature and reveal the underlying structure of the field of market innovation, identify distinct research streams, and uncover major shifts in perspectives.

This article's contributions are the following. First, it maps the market innovation literature and identifies six clusters representing different research streams. In doing so, this article provides an overview of key concepts, phenomena, and theoretical paradigms discussed in the literature. Second, using the results of this analysis, the article identifies three major shifts in market innovation research which can serve as shared foundations for future research: the shifts toward emergence, distributed agency, and non-linearity. Third, the article uses complexity theory as a meta-theory to identify opportunities for future research aimed at moving theory development forward.

2. Scope of the review

In order to determine the scope of the review, we first provide an overview of key terminology used to refer to the focal phenomenon, and offer exemplary conceptualizations of market innovation. Table 1 shows the heterogeneity of terminology related to the phenomenon of market innovation. Furthermore, Table 1 shows that many articles leave the definition implicit and do not formally define the focal phenomenon.

A more careful analysis of the conceptualizations in Table 1 helps us discern several recurring themes that reflect the three central elements of market innovation. First, most conceptualizations employ a structural notion of market. For example, they refer to product-market structures (Darroch & Miles, 2011), exchange structures (Giesler, 2012), market norms and market representations (Harrison and Kjellberg, 2010), and market configurations (Storbacka & Nenonen, 2011). Products and services perceived as homogenous in terms of their structural features are grouped into a product or service "category" (e.g., Rosa, Porac, Runser-Spanjol, & Saxon, 1999). In this regard, the innovation literature also uses the term "niche" (e.g., Kemp, Schot, & Hoogma, 1998) to denote a market. Hence, the scope of our review includes the notions of market, niche, product category and service category.

Second, the conceptualizations in Table 1 highlight some form of purposive actions of involved market stakeholders to create or shape markets. For example, some definitions focus on managerial practices to proactively create markets (O'Connor & Rice, 2013), others on advancing a firm's vision to shape preferences (Humphreys & Carpenter, 2018), and yet others on conscious activities conducted by market actors to alter market configurations (Storbacka & Nenonen, 2011). Hence, the scope of our review includes the wide variety of notions that signify that markets can be actively created or shaped.

Third, the conceptualizations in Table 1 indicate that the result of market innovation is perceived as distinctively novel and different from existing markets, implying that a notion of "newness" is a central element of market innovation. For example, this newness may occur in the form of new solutions (Vargo et al., 2015) or the opening or creation of new markets (Kjellberg et al., 2015; O'Connor & Rice, 2013). Table 1 suggests that, implicitly or explicitly, some authors focus on the creation and opening up of completely new markets (e.g., Vargo et al., 2015; Sarasvathy and Dew, 2005), whereas others tend to focus on shaping and changing existing markets (e.g., Jaworski et al., 2000). Hence, the scope of our review includes the element of newness.

Table 1
Terminology and conceptualizations in the literature.

Terminology	Conceptualization
Market innovation	<ul style="list-style-type: none"> • "The emergence and institutionalization of new solutions (i.e., the temporal durability of new integrative, normative and representational practices)" (Vargo et al., 2015) • "[...] implies a broader definition of market innovation than the opening up of new markets, including changing existing market structure, introducing new market devices, altering market behavior, and reconstituting market agents. In general, market innovation means altering the way in which business is done" (Kjellberg et al., 2015)
Market creation	<ul style="list-style-type: none"> • "a process involving a new network of stakeholders. The network is initiated through an effectual commitment that sets in motion two concurrent cycles of expanding resources and converging constraints that result in the new market" (Sarasvathy & Dew 2005) • "a political and social process, [...] affected by the environment that exists outside the firm or industry. [...] a process of legitimation" (Humphreys, 2010) • "a firm develop[ing] an innovation that lacks close product substitutes. Once the new product is launched, a new market is created. By creating a new market, the market-creating innovation alters the existing product-market structure of an industry" (Darroch & Miles, 2011) • "a progressive sequence of brand image contestations among opposing groups of stakeholders through which their divergent interests are aligned and concrete exchange structures between producers and consumers are established" (Giesler, 2012) • "Managerial practices, [...] can be brought to bear in a proactive manner to create markets when a technological innovation enables new, valuable functions. [...]" (O'Connor & Rice, 2013)
Market shaping	<ul style="list-style-type: none"> • "five interrelated subprocesses in which users may be involved as agents: qualifying goods, fashioning modes of exchange, configuring actors, establishing market norms and generating market representations" (Harrison & Kjellberg, 2016) • "a purposive process by a focal firm to (1) discover the value potential of linking intra- and inter-stakeholder resources in novel ways, (2) trigger changes in various market characteristics to enable the formation of new resource linkages, and (3) mobilize relevant stakeholders to free up extant resources for new uses" (Nenonen et al., 2019).
Market driving	<ul style="list-style-type: none"> • "Influencing the structure of the market and/or behavior of market players in a direction that enhances the competitive position of the firm" (Jaworski et al., 2000) • "Market driving relies on a system for advancing the firm's vision to shape preferences" (Humphreys & Carpenter, 2018)
Market scripting	<ul style="list-style-type: none"> • "The conscious activities conducted by a market actor in order to alter the current market configuration in its favor" (Storbacka & Nenonen, 2011)
Market formation	<ul style="list-style-type: none"> • "Articulation of demand and more 'hard' market development in terms of demonstration projects, 'nursing markets' (or niche markets), bridging markets and, eventually, mass markets (large-scale diffusion)" (Berger et al., 2008)
Market pioneering	<ul style="list-style-type: none"> • Being among "the first firms to develop and commercialize a new product" (Lambkin, 1992) • "A particular form or manifestation of entrepreneurial behavior whereby the organization proactively creates or is among the first to enter a product-market arena that others have not recognized or actively sought to exploit" (Covin et al., 2000)

3. Methods

3.1. Approach

To achieve our goals of mapping the field of market innovation, identifying distinct research streams, and uncovering shifts in perspectives, we followed an approach that combines bibliometric analysis and a more traditional, interpretative analysis. We use a bibliometric analysis because the literature in the field is characterized by a great heterogeneity in terminology. Linkages between articles are therefore difficult to observe using a traditional approach to literature reviews. By visualizing the underlying structure of the field that lies 'hidden' in the

citation network, bibliometric analysis allows us to bring order to the variety of perspectives on market innovation. However, bibliometric analysis relying on citation data has three major shortcomings. First, interpreting the results of the bibliometric analysis requires an understanding of the content of the articles. Second, although most citations indicate substantive agreement, citations can also express disagreement, which is not recognized by bibliometric analysis. Third, the citations (or databases containing citation data) used for bibliometric analysis can contain errors. To mitigate these shortcomings, we turned to a more traditional, interpretative approach to add meaning to the results of the bibliometric analysis. We will now describe the data collection, the method for bibliometric analysis, and subsequent interpretative analysis.

3.2. Data collection

To extract the data for bibliometric analysis, we used the Social Science Citation Index in the Web of Science (WoS) database to search for bibliographic records of articles (excluding book reviews) in the English language published between 1956 (the earliest year in the database) up to and including 2018 (the last complete year in the database). Full bibliographic records from WoS contain, among others, title, authors, abstract and all citations in the document. In WoS, we searched the title, abstract and keyword fields to identify articles using a comprehensive search query. By constructing a comprehensive query, we were able to identify a large set of articles that study market innovation under a wide variety of labels.

To build the search query, we used the three central elements of market innovation we established earlier to synthesize 890 noun phrases and verb phrases. For each of the three central elements, we first generated alternative wordings, such as ‘product category’ or ‘niche’ to reflect *market*, ‘constructing’ or ‘co-creation’ to reflect *creation* and *shaping*, and ‘new’ or ‘novel’ to reflect *newness* (see Table 2). Because newness as a central element is often implied – “market creation” and “new market creation” are used interchangeably in the literature – we also synthesized phrases that omitted ‘new’ and its alternates. Examples of synthesized noun phrases include “market creation”, “category coconstruction” and “niche building”. Examples of synthesized verb phrases include “creating a market”, “create new markets” and “coconstructing a novel market”. In addition, based on several iterations of screening the literature and on feedback from expert researchers¹ we added fixed phrases, such as “market innovation”, “market system dynamics” and “market scripting”, and even synthesized possible alternatives for these fixed phrases, such as “product category scripting”. Upon initial screening, we discovered that some synthesized phrases had alternative meanings in their general use. For instance, the phrase “developing markets” is generally not used to refer to the creation of a new market but to markets that are developing, “market development” is generally used to refer to a development *in* the market rather than the development *of* a market, and “market making” is generally referred to as a trading activity on financial markets. We excluded these terms with alternate meanings in their general use, and restricted the search query to “developing new(/novel) markets”, “new(/novel) market development” and “new(/novel) market making”.

We then used a selection process based on Moher et al. (2009) to refine the set of articles (see Fig. 1). First, we filtered the search results to include only journals from relevant research domains, using the WoS

¹ We acknowledge participants of the combined meeting of the EMAC SIG Innovation & Stakeholders with the ANZMAC SIG Market Shaping and Innovation (MASHIN) about “Shaping Markets in Multi-Stakeholder Contexts” at the 2018 EMAC conference, and the participants of the 2017 conference Bringing Institutional Theory to Marketing in Paris, for their general comments on the research and their comments on the fixed phrases to include in our search terms.

Table 2
Search query construction by synthesizing phrases.

	Phrases based on key elements of market innovation			Fixed phrases
	<creation noun/verb>	<market>	<new>	
Terms	<noun> creation co-creation cocreation construction co-construction coconstruction development <verb> creating/create co-creating/co-create cocreating/ cocreate constructing/ construct co-constructing/ co-construct coconstructing/ coconstruct shaping/shape developing building/build	market market category product category service category niche	new novel	market scripting/ scripting markets market driving/ driving markets market system dynamics market formation market pioneering market innovation
Synthesized phrases	<market> <creation noun > ^a <creation verb > a < market> <creation noun > of a < market> <creation verb > a < new> <market> <creation noun > of a < new> <market>			<market > scripting/ scripting < markets > ^b <market > driving/driving < markets> <market > system dynamics <market > formation <market > pioneering <market > innovation “market scripting” “driving categories” “category system dynamics” “category formation” “market innovation”
Examples of synthesized phrases	“market category creation” “co-creating a niche” “cocreation of a market category” “co-constructing a new product category” “coconstruction of a novel service category”			

^a The results for < new> <market> <creation noun > are already in the results for < market> <creation noun > . Such redundant phrases were not synthesized.

^b Nonsensical phrases, such as “niche system dynamics” were not synthesized.

categories ‘business’ and ‘management’. The second step involved a screening to determine whether the subject matter of the articles was in the realm of market innovation. The following screening rules were developed to exclude articles: (1) Articles were excluded when the only occurrence of a search phrase contained a hyphen, comma or other punctuation mark that separated the search terms (e.g., “... market. Development...” and “... market, creating a...”). (2) Articles were excluded where the word ‘market’ or its alternatives was not used as a noun but as a qualifier for another word (e.g., “creating a market distortion”). (3) Articles were excluded where the word ‘market’ reflected non-product / service markets (e.g., “labor market formation” or “capital market creation”). (4) Articles were excluded where our search terms only occurred in keywords that were assigned by the WoS

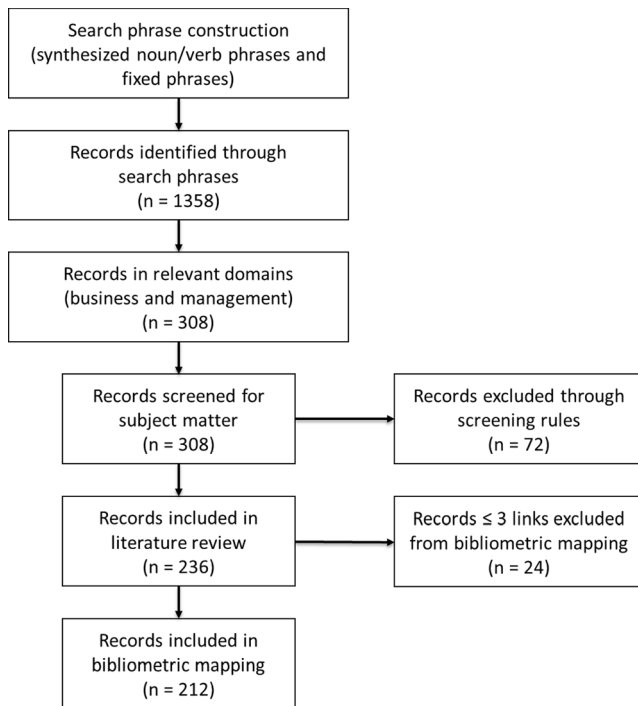


Fig. 1. Article selection process (based on Moher, Liberati, Tetzlaff, Altman, and the PRISMA Group, 2009).

database (instead of the author keywords), because we found many of these externally assigned keywords to be irrelevant. As a result, 236 articles were included in the literature review².

3.3. Bibliometric mapping

For the bibliometric analysis, we use a method known as bibliometric mapping to simultaneously cluster and map the bibliometric network (Van Eck & Waltman, 2009; Waltman, Van Eck, & Noyons, 2010). Bibliometric mapping is a relatively new method that has been used successfully in marketing (Donthu, Kumar, & Pattnaik, 2020; Martínez-López, Merigó, Valenzuela-Fernández, & Nicolás, 2018; Valenzuela, Merigó, Johnston, Nicolas, & Jaramillo, 2017; Zhang & Banerji, 2017), innovation studies (Van der Have & Rubalcaba, 2016), and human resource management (Lee, Felps, & Baruch, 2014). It is also employed to gain insights in the multidisciplinary study of broader phenomena such as the circular economy (Homrich, Galvão, Abadia, & Carvalho, 2018).

We generated bibliometric network data using bibliographic coupling (Kessler, 1963), where articles are the network nodes and the strength of the link between two articles is determined by the number of cited references that the two articles have in common. The underlying idea is that two articles that share many references are rooted in the same theoretical traditions, share a common perspective, and use similar key concepts. Bibliographic coupling yields a measure for the relatedness of two articles that does not rely on shared terminology. The latter is important given the lack of shared terminology within the literature that studies market innovation. Bibliographic coupling has been used in similar bibliometric mapping studies aimed at identifying research streams related to a specific phenomenon (e.g., Van der Have and Rubalcaba, 2016).

For the bibliometric mapping, we use the *visualization of similarities* (VOS) technique (Van Eck & Waltman, 2009; Waltman et al., 2010). The

VOS technique produces a two-dimensional distance-based map, where the distance on the map reflects the relatedness of the articles. The VOS mapping technique is closely related to multi-dimensional scaling (Waltman et al., 2010). In general, articles in the center of the map have more relatedness to the other articles in the map than articles on the edges of the map. In combination with the map, the VOS technique produces a clustering of articles on the map, using the same underlying principle that is used to produce the map. The VOS clustering technique is a generalization of modularity-based clustering (Waltman et al., 2010). We used VOSviewer software (Van Eck & Waltman, 2009) to apply the VOS technique.

The bibliometric network data contained articles that were either completely or almost isolated in the network. Such articles contain very little information about existing research streams and their relative positions to each other. Therefore, articles with three or less links to other articles in the dataset (based on bibliographic coupling) were excluded from the bibliometric mapping. While these articles are part of the literature review and can be interesting papers in their own right, they do not contribute to a meaningful and parsimonious map (these articles would show up on the map as an outer circular rim of largely unconnected nodes on the edge of the map). This reduced the number of articles that are included in the map to 212, or 90% of the original set, which is in line with earlier papers that use bibliographic mapping to identify research streams (Van der Have & Rubalcaba, 2016).

The VOS technique offers a unified approach of mapping and clustering, meaning that articles are mapped and clustered at the same time. The number of clusters depends on the level of detail required in light of the research objectives, and can be modified by changing the value of resolution parameter γ and by setting a minimum cluster size (Van Eck & Waltman, 2019). We set the minimum cluster size to its default value of 1. Our goal then was to arrive at a cluster solution in which the articles of each cluster are characterized by high similarity with regards to the cluster's general view on market innovation (see Table 4, second column). By implication, we aimed for high variation between clusters regarding this criterion. Based on this reasoning, we interpreted the results for different values of γ , and arrived at a cluster solution of six clusters (at $\gamma = 1.1$), which presents a meaningful structure of this field of research.

3.4. Interpretative analysis

Bibliometric mapping yields clusters that represent research streams, positioned on a two-dimensional map. To understand the commonality of each cluster and their relative positions on the map, we reviewed all articles in each cluster, interpreting their titles and abstracts. If certain information could not be extracted from the abstract, title and keywords, we engaged in a more careful reading of the article. In addition, we used results from bibliometric analysis to identify 'exemplary articles', which represent a particular cluster. For each cluster, we generated different 'top-fives' of articles in terms of citations, normalized citations (i.e., citations corrected for the age of articles, recognizing that older articles have a higher chance of accumulating citations than younger articles), and link strength (i.e., the degree to which an article is strongly related to other articles in terms of bibliographic coupling). A more focused re-reading of these top 5 articles helped us to put these articles into the context of their research streams. In this manner, we were able to understand how their content relates to their own cluster and the other clusters, overcoming the shortcomings of bibliometric analysis. Through this interpretive analysis, we developed richer descriptions of the identified streams which allowed us to label and characterize the six clusters, and gain a better understanding of the research streams' positions on the bibliographic map.

² A complete list of articles is available upon request from the first author.

4. Results

4.1. Market innovation as a growing field

The articles in the set were published between 1991 and 2018. Fig. 2 shows the distribution over time of the complete set of articles used in our analysis ($n = 236$), and shows a steady increase of articles on the subject. Given this growing body of research, mapping the extant literature in an attempt to structure and guide future research is warranted. In the year 2015, scholarly attention for the subject peaked, with a large number of contributions in Industrial Marketing Management (with a special issue on “Market innovation processes”) and Journal of Marketing Management (with a special issue on “Exploring the performativity of marketing: theories, practices and devices”). At least 15 articles have been published each year between 2016 and 2018, including articles from a special issue on “Market system dynamics” in Marketing Theory in 2016. A large number of academic journals has published articles about market innovation. Specifically, journals with a keen interest in both innovation and marketing have been receptive to this topic, with Industrial Marketing Management clearly leading in terms of number of articles published (see Fig. 3).

4.2. Research streams

Using the VOS technique, we identified six distinct but interrelated clusters, represented by different colors (see Fig. 4). Descriptive metrics of the clusters, including the number of articles and average year of publication, are presented in Table 3. The clusters *Market Pioneering and Market Driving* (C2), *Innovation Systems* (C1), and *Field Creation* (C4) are the three clusters with the highest number of citations. This suggests that the articles in these clusters are the most influential in the wider business and management literature. In terms of the average year of publication, we find the highest number of recent articles in the cluster *Markets as*

Practice (C3), indicating that this cluster represents a relatively new research stream.

We now turn to describing the clusters. We interpreted the complete set of articles within a cluster on the basis of their titles, abstracts and author keywords, and extracted commonalities, particularly with regards to their view on market innovation (i.e., the conceptualization of market innovation underpinning the cluster), main theoretical traditions the cluster is based on, typical contexts studied within the cluster, key concepts used, terminology employed to denote the phenomenon of market innovation, main type of research (i.e., conceptual, qualitative, or quantitative), and exemplary articles for the cluster. Table 4 provides an overview of these commonalities. The exemplary articles in the last column of each row reflect some part of the commonalities described for that cluster. It should be noted that an individual article may have characteristics that are not fully aligned with the cluster description. This is because in bibliographic mapping, articles are assigned to only one cluster, which is the cluster with which it has the greatest (quantitative) commonality in terms of its literature base (using bibliographic coupling). Although articles are always assigned to a specific cluster, they can be linked to other clusters. We provide some prominent examples of linkages between clusters at the end of this section.

4.2.1. Cluster 1: Innovation systems

In the cluster *Innovation Systems* (C1), market innovation is the result of a variety of stakeholders performing different functions in innovation systems. As such, this cluster mostly views markets as networks of actors. Articles in this cluster are often rooted in the study of innovation in economics, specifically the work on innovation systems (e.g., Freeman, 1987), evolutionary economics (e.g., Nelson & Winter, 1982), or in evolutionary theories of the firm (e.g., Teece, Pisano, & Shuen, 1997). A substantial part of the cluster *Innovation Systems* (C1) focuses on innovation policy. Studies focus on how policy can stimulate technological transitions, i.e., the substitution of one technology for a different

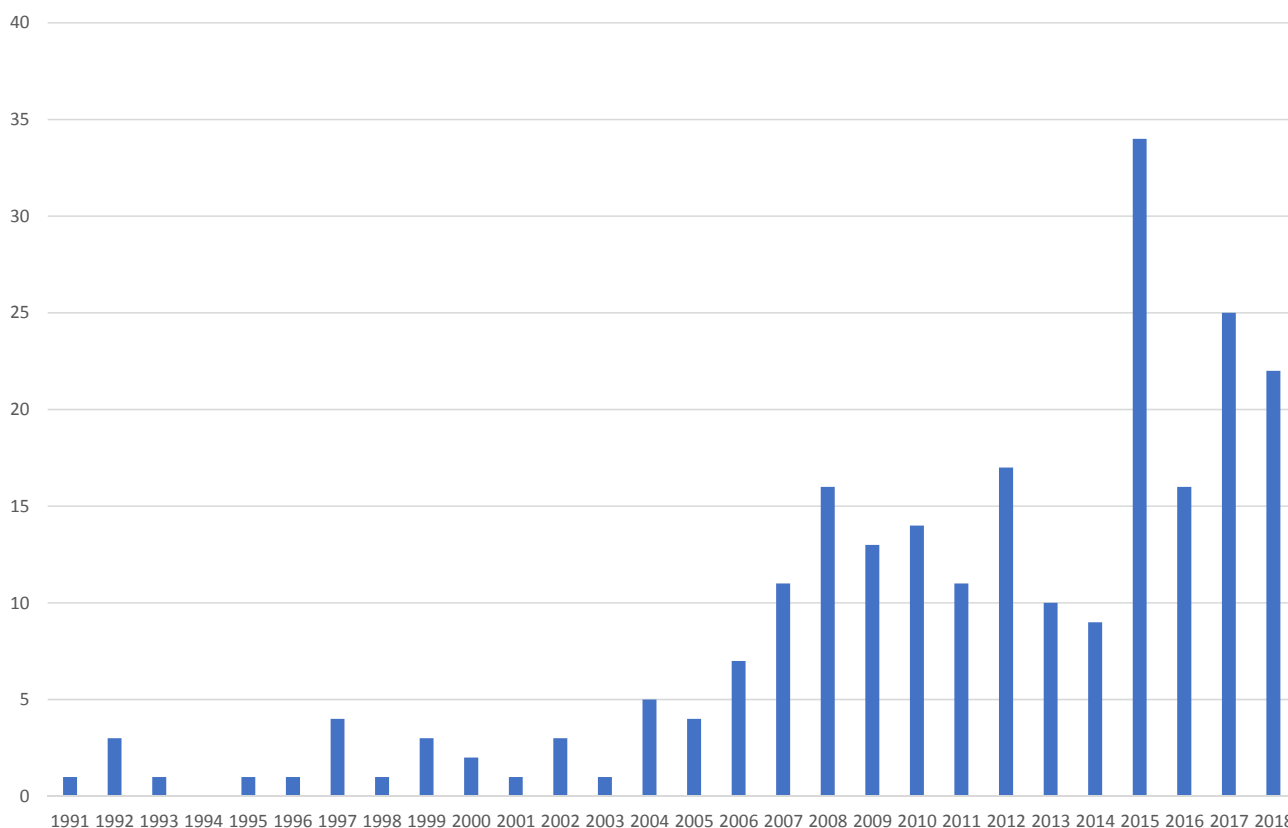


Fig. 2. Number of articles over time ($n = 236$).

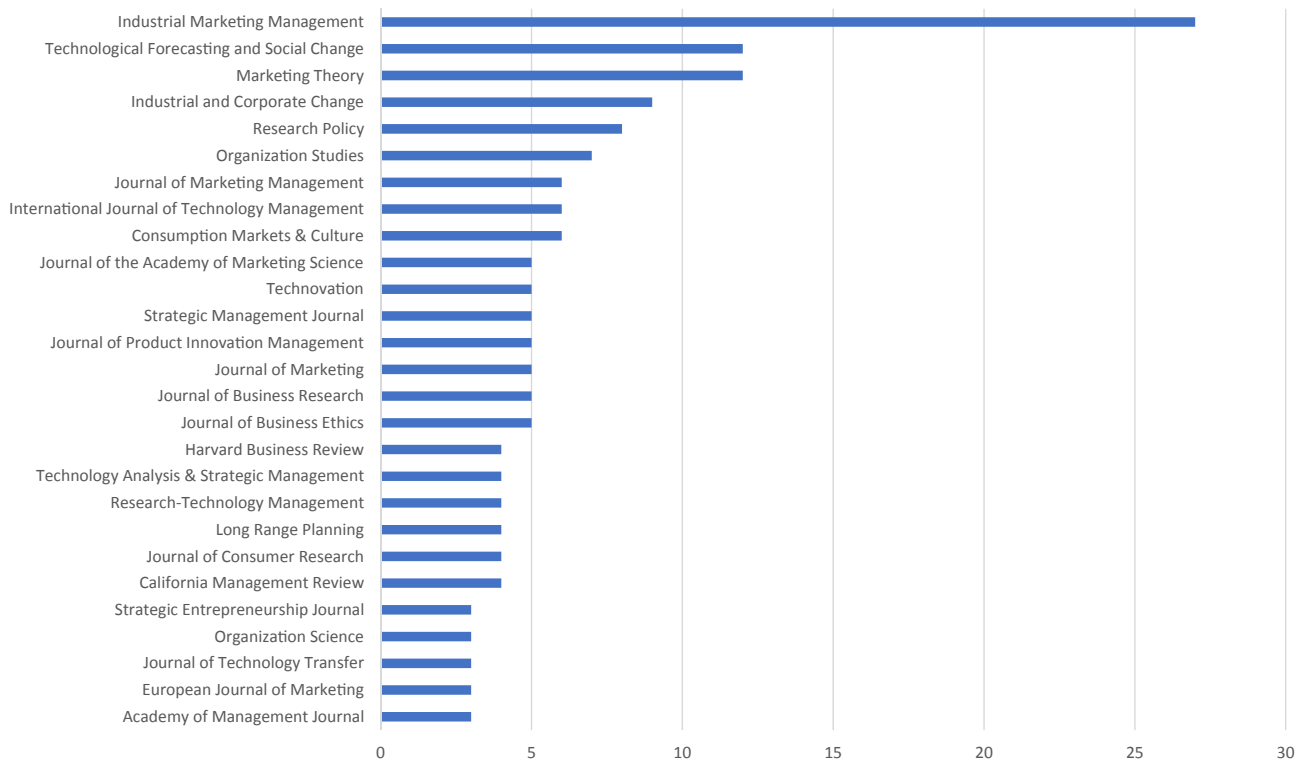


Fig. 3. Number of articles per academic journal (for journals with 3 articles or more).

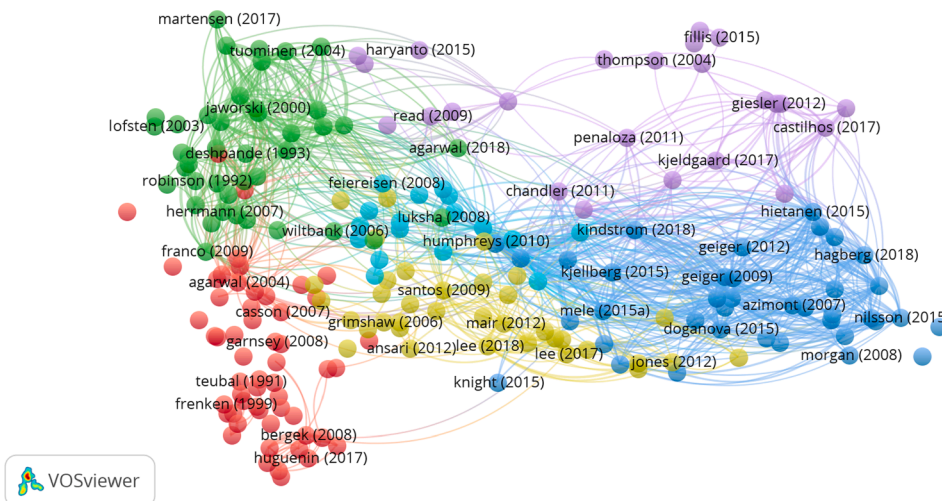


Fig. 4. Bibliographic map with clusters. Red: Innovation Systems (C1); Green: Market Driving and Market Pioneering (C2); Blue: Markets as Practice (C3); Yellow: Field Creation (C4); Purple: Market System Dynamics (C5); Cyan: Innovation Commercialization (C6). (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

Table 3
Cluster descriptives.

Clusters	Color	Number of articles	Total number of citations	Average number of citations per article	Average publication year
C1: Innovation Systems	Red	55	1860	33.8	2010.6
C2: Market Driving and Market Pioneering	Green	42	3423	81.5	2007.9
C3: Markets as Practice	Blue	38	619	16.3	2014.1
C4: Field Creation	Yellow	36	1971	54.8	2012.6
C5: Market System Dynamics	Purple	24	1346	56.1	2013.3
C6: Innovation Commercialization	Cyan	17	386	22.7	2012.8
Total mapped articles		212			

Table 4
Characterization of the clusters.

Clusters	View on market innovation	Theoretical traditions	Typical contexts	Key concepts	Terminology	Main type of research	Exemplary articles
C1: Innovation Systems (red)	Market innovation results from activities of different stakeholders in an innovation system	Innovation systems, evolutionary theories of the firm	Innovation policy, social innovation, sustainability, entrepreneurship	Dynamic capabilities, technological transition	Market formation, niche creation, market co-creation	Quantitative and qualitative	Bergek et al. (2008), Mazzucato (2016), Pitelis & Teece (2010) Covin, Slevin, & Heeley (2000), Jaworski et al. (2000)
C2: Market Driving and Market Pioneering (green)	Markets are ‘given’, but firms can change the structure of markets through a broadened market orientation and technological innovation	Market orientation, resource-based view	Radical innovation	Proactive market orientation, firm capabilities	Market driving, market shaping, market pioneering	Quantitative	
C3: Markets as Practice (blue)	Markets are constantly in the making and are shaped and performed by technological artifacts, firms and other network actors	Actor-network theory, Markets-as-networks, Service-dominant logic	B2B, Technology	Performativity, service ecosystems	Market emergence, market innovation	Conceptual	Azimont & Araujo, (2007), Kjellberg et al. (2015)
C4: Field Creation (yellow)	Market innovation results from the legitimation of organizational field through creating formal and informal rules that structure our understandings and practices of exchange	Institutional theory	Contested industries, social movements, bottom-of-the pyramid	Institutions, organizational fields, legitimation	Market creation, market building, market construction	Qualitative	Humphreys (2010), Weber et al. (2008)
C5: Market System Dynamics (purple)	Market innovation involves the introduction of cultural and socio-technical artifacts in dynamic market systems, through an interplay between consumers, producers, and other stakeholders	Consumer culture theory, actor-network theory, effectuation theory	Consumer community, entrepreneurs	Market dynamics, non-linearity, value (co)creation	Market emergence, market co-creation	Qualitative	Giesler (2008), Humphreys and Carpenter (2018)
C6: Innovation Commercialization (cyan)	Market innovation is the result of network creation by entrepreneurs commercializing (radical/breakthrough) innovations	Interorganizational networks, effectuation theory	Early stage commercialization of radical innovation	Learning, non-linearity	Market creation, market shaping, market innovation, market scripting	Qualitative	O’Connor et al. (2013), Aarikka-Stenroos & Lehtimäki (2014), Storbacka & Nenonen (2015)

technology by creating a market for the new technology. For example, Bergek et al. (2008) show how activities of actors in an innovation system can lead to market creating policy measures, for example ‘tax exemptions’, to increase the chances of success of innovation systems. Notably, recent articles argue that governments should not only engage in ‘fixing’ market failure, but also actively engage in the creation of markets (Mazzucato, 2016; Mazzucato & Robinson, 2018). Others focus more on dynamic capabilities, i.e., an organization’s ability to adapt its resource base in changing business environments, in the context of entrepreneurial activity and market co-creation (Pitelis and Teece, 2009, 2010). This cluster can also be characterized by its tendency to study innovation with social relevance, such as innovation in the pharmaceutical industry (Kukkk, Moors, & Hekkert, 2016) and sustainable innovation (Dewald & Truffer, 2011). Articles in this cluster use a variety of terms to refer to market innovation (such as market formation, niche creation, and market co-creation), and use both qualitative and quantitative methods.

4.2.2. Cluster 2: Market driving and market pioneering

The cluster *Market Driving and Market Pioneering* (C2) has its conceptual roots in the resource-based view (Barney, 1991) and the market orientation literature (e.g., Deshpandé, Farley, & Webster, 1993). It views market innovation as the result of firm activities that aim to

change the structure of markets to suit their capabilities, rather than the other way around (Jaworski, Kohli, & Sahay, 2000). Markets are mostly considered a ‘given’, but through a broadened market orientation, firms can purposively influence other market actors. In other words, market innovation occurs when firms recognize or exploit new markets. Firms can ‘start’ a market, for example, by introducing a radical innovation (Robinson & Chiang, 2002), while market evolution is considered an external phenomenon that firms can leverage and exploit. Especially the introduction of radical innovations is a much-studied context within this cluster (e.g., Herrmann, Gassmann, & Eisert, 2007; Silva, Styles, & Lages, 2017), with firms that engage in market innovation through radical innovations frequently being referred to as ‘market pioneers’ or ‘driving’ markets. Market-driving firms serve latent or emerging needs through a proactive market orientation, involving activities such as eliminating and adding market players, changing the mind-set of players, building competitor constraints, and exerting influence on non-market actors (Chen, Li, & Evans, 2012; Jaworski et al., 2000). The empirical articles in this cluster tend to use quantitative methods, examining the relationship between firm capabilities and market driving or market pioneering and success. Regarding terminology, this cluster mostly refers to the activities that influence markets as market shaping or market driving.

4.2.3. Cluster 3: Markets as Practice

The cluster *Markets as Practice* (C3) views market innovation as the result of practices of actors in a market system (Geiger et al., 2012; Hietanen & Rokka, 2015). Markets emerge from the performances of a variety of actors at a particular moment in time, they are constantly in the making and never finished. Studies in this cluster are rooted in two main theoretical traditions: actor-network theory and service-dominant logic (SD-logic). A key concept derived from actor-network theory is performativity in market practice. Performativity suggests that markets are continuously enacted and both humans and artifacts (such as technologies and models) influence market innovation (Kjellberg, Azimont, & Reid, 2015; Kjellberg & Olson, 2017). Scholars in this cluster thus explore how both artifacts (such as technologies and models used by actors) and calculative agencies (i.e., market and non-market actors) come together to act as a whole. Artifacts and calculative agencies together are involved in the creation of markets-as-networks by framing, negotiating, and finding compromises regarding the nature, value and meaning of innovations (e.g., Azimont & Araujo, 2007, 2010). A typical context in this cluster is business-to-business (B2B). Here, research has, for example, shown how artifacts employed by retailers and manufacturers such as presentations, data, metrics, definitions, and maps facilitate the creation of markets for beverages (Azimont & Araujo, 2007). This cluster therefore emphasizes the co-creation of value and markets, as well as the recursive nature of how actors, artifacts and markets interact and influence each other in networks or (service) ecosystems (Vargo et al., 2015). This cluster has the largest number of purely conceptual contributions, and the empirical studies are mostly qualitative case studies. Regarding terminology, many of the articles take a more constructivist perspective and use ‘market emergence’ as a term to signify how markets come into existence, and ‘market shaping’ as a way to indicate that markets change through purposive action. Market innovation (e.g., Kjellberg et al., 2015) is also used as a term in this cluster.

4.2.4. Cluster 4: Field creation

The cluster *Field Creation* (C4) is largely based on (neo)institutional theory (Suchman, 1995). The central concept of “institution” refers to formal and informal rules, norms, and beliefs that enable and constrain human interaction and make social life predictable and meaningful (Scott, 1995). The cluster typically views markets as organizational fields: sets of 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” (DiMaggio & Powell, 1983, p. 148). Building on this notion, it considers market innovation to be a process of institutionalizing shared understandings and practices of exchange through legitimation (Fligstein, 1996; Humphreys, 2010). More specifically, it views market innovation as “collective projects that mobilize the necessary economic, cultural, and socio-political resources” (Weber et al., 2008, p. 529) aimed at legitimizing a market (Humphreys, 2010). This involves changing institutional logics (Thornton & Ocasio, 1999) through institutional work (Suddaby & Greenwood, 2005). Typical contexts in this cluster are so-called contested industries (i.e., industries where sets of interrelated institutions are in conflict with each other), such as the casino gambling industry (Humphreys, 2010), and industries created by social movements, such as the grass-fed meat industry (Weber 2008). Other contexts are emerging markets and market building at the bottom of the pyramid, which focus on institution-building from the ground up (Mair, Martí, & Ventresca, 2012; Seelos & Mair, 2007). The cluster *Field Creation* (C4) has mostly qualitative contributions based on case study research. The terminology used to refer to the focal phenomenon is “market building”, “market construction”, and “market creation”.

4.2.5. Cluster 5: Market system dynamics

The cluster *Market Systems Dynamics* (C5) focuses on cultural and

socio-technical artifacts in dynamic market systems, which are created through an interplay between consumers, producers, and other stakeholders. Due to this interplay between heterogeneous actors, there is “enduring cultural tension” (Giesler, 2008, p. 739), resulting in perpetual dynamic and instable markets. These market system dynamics are a focal point of attention in this cluster. Theoretical traditions are consumer culture theory (e.g., Thompson & Arsel, 2004) and actor-network theory (Callon, 1984). In this cluster, key research contexts are consumer and brand communities (Giesler, 2012; Martin & Schouten, 2014). Research is mainly focused on how the collective actions of consumers (rather than those of the firm) result in market innovation (Biraghi, Gambetti, & Pace, 2018; Martin & Schouten, 2014). It also describes how actors outside the value chain, such as critics, the press, and media, influence market innovation (Humphreys & Carpenter, 2018), and how these stakeholders are involved in legitimation processes mediated by cultural artifacts (Giesler, 2012). The terms market co-creation (Giesler, 2012) and market emergence (Martin & Schouten, 2014) are frequently employed in this cluster to refer to the focal phenomenon.

4.2.6. Cluster 6: Innovation Commercialization

The cluster *Innovation Commercialization* (C6) tends to see market innovation as the result of network creation by firms or entrepreneurs commercializing (radical) innovations. Theoretically, this cluster is informed by various interorganizational network approaches (for an overview, see Aarikka-Stenroos, Sandberg, & Lehtimäki, 2014) and entrepreneurial theories, such as effectuation theory (e.g., O’Connor & Rice, 2013; Storbacka & Nenonen, 2015). In terms of research contexts, articles in this cluster frequently focus on the early stages of the commercialization process of radical and breakthrough innovations. Through market learning (e.g., Storbacka & Nenonen, 2015), sense and probe processes (Aarikka-Stenroos & Lehtimäki, 2014), or feedback processes (O’Connor & Rice, 2013), commercializing firms are creating a market for their innovation. This process is considered to be non-linear, exploratory, and unpredictable process and involves continuous experimentation and iterative probing (O’Connor & Rice, 2013; Aarikka-Stenroos & Lehtimäki, 2014). The empirical articles in this cluster are mostly qualitative case studies. Terminology in this cluster is diverse, ranging from market creation and market shaping (especially for articles taking an entrepreneurial approach) to market innovation (Storbacka & Nenonen, 2015) and market scripting (Storbacka & Nenonen, 2011). The latter two terms are linked to the more practice-based and performative approaches to market innovation.

4.3. Linkages across clusters

The relative absence of open spaces in our bibliometric map (see Fig. 4) shows that the market innovation field is highly interlinked. In a field with fewer linkages between the articles, clusters would be distinct ‘islands’ in the map, separated by relative voids. The absence of such voids in our map suggests that the boundaries of most clusters are to some extent permeable, and that linkages exist. Recent articles illustrate three types of linkages. First, the theoretical roots of one cluster can be used in other clusters. For example, Kukkk et al. (2016) illustrates how institutional theory (typical for C4) is also used in articles about innovation systems (C1). Second, terminology typical for one cluster can be found in other clusters. For example, Mazzucato (2016) is an exemplar of the cluster *Innovation Systems* (C1), but uses the terms market creation as well as market shaping, while market shaping is more common in C2 and C6. Third, some articles integrate different research streams. For example, Humphreys and Carpenter (2018) merge a market systems approach (common in C5) with the market driving literature (C2). The permeability of the cluster boundaries does not undermine the existence of the clusters. Distinctively different perspectives on the phenomenon do exist, as we have shown above. These linkages, however, show that many authors that study market innovation draw on work from other

clusters.

4.4. Developments over time

To investigate developments over time, we subjected the bibliometric map to a diachronic analysis. We used overlay visualizations based on publication year and normalized citation scores (see Fig. 5). Note that the underlying maps for both Figs. 4 and 5 are identical and have the same number of nodes. In Fig. 5, nodes vary in color (using a continuum of colors from blue to yellow) and size (leaving some nodes invisible through overlaps). The color of a node reflects publication year, where blue represents older articles, while the yellow nodes represent more recent articles. The size of a node reflects the normalized citations to the article. Normalization of citations means that the number of citations is divided by the average number of citations for the publication year in our dataset, to correct for the effect that older articles have had more time to accumulate citations than new articles (Van Eck & Waltman, 2019). Thus, large nodes in Fig. 5 are articles that have accumulated many citations, corrected for their age.

Fig. 5 shows the general trend in the literature that most of the older contributions to the literature are on the left-hand side of the bibliographic map (indicated in blue), while most recent contributions to the literature are on the right-hand side of the bibliographic map (indicated in yellow). A closer inspection of the data on publication years suggests that two distinct but interrelated shifts in perspectives are underlying this development over time: a shift (1) from reductionism towards emergence and (2) from central agency towards distributed agency. In addition, the data on normalized citation scores for recent articles suggests a third shift: from linearity towards non-linearity. We discuss these three shifts below.

From reductionism towards emergence. On the left-hand side of Fig. 5, research largely adopts market conceptualizations that are rooted in the economics, marketing, and management literatures that focus on the role of specific elements of market reality. For example, the older articles in the cluster Innovation Systems (C1), as well as the market-driving and market-pioneering articles, focus on specific actors' behaviors that impact distinct elements of the market structure (Agarwal, Echambadi, Franco, & Sarkar, 2004; Jaworski et al., 2000; Tuominen, Rajala, & Möller, 2004). Hence, we find that the older articles on the left-hand side of Fig. 5 tend to be based on reductionist perspectives, which refers to

their tendency to assume that the constituent elements of market reality, such as firm behaviors, entrepreneurial activities, firm characteristics, policy measures, and structural factors, can be clearly distinguished and analyzed. In contrast, on the right-hand side of Fig. 5, we find clusters that are largely rooted in practice theory, cultural theory, and actor-network theory. These theories suggest a richer view of market reality. Articles in these clusters are younger on average and call for analyses of multi-level relationships (Giesler & Fischer, 2017). For example, research in the cluster Market System Dynamics (C5) shows how the interplay between consumer innovativeness and existing technological artifacts on the micro-level results in novel market assemblages on the macro-level (Martin & Schouten, 2014). Similarly, recent research in the cluster Markets as Practice (C3) shows how, on the micro-level, market actors engage in specific market practices that give rise to new market configurations on the macro-level (e.g., Hietanen & Rokka, 2015). Hence, we find that articles located near the right-hand side are based on an emergentist perspective. The notion of emergence is rooted in the 1843 work of John Stuart Mill "A system of logic" (2011) and refers to the idea that micro-level events, such as activities of individual market actors, generate macro-level properties, such as the emergence of new market configurations. The point to note is that macro-level properties cannot be simply inferred from the characteristics of micro-level events. Rather, they critically depend on the way micro-level events interact as a whole. A focus on emergence sheds light on how micro-level firm activities can lead to new markets on the macro-level.

From central agency towards distributed agency. On the left-hand side of Fig. 5, especially in the upper-left corner, articles are strongly focused on the role of individual firms in market innovation. More precisely, research in the cluster Market Driving and Market Pioneering (C2) studies specific firm behaviors such as pioneering and radical innovation (e.g., Robinson et al., 1992; Herrmann, Gassmann, & Eisert, 2007), and firm characteristics such as marketing and technological capabilities (e.g., Franco, 2009; Darroch, 2011). These articles, which are generally less recent, tend to be based on the assumption of central agency, meaning that research (implicitly) assumes that there is a central agent who "steers" and "controls" the market innovation process. In contrast, articles located to the right-hand side of Fig. 5 primarily investigate the social practices within ecosystems and networks of market stakeholders (e.g., Hietanen & Rokka 2015; Mele, Pels, & Storbacka, 2015; Vargo, Wieland, & Akaka, 2015). Specifically, these articles highlight the

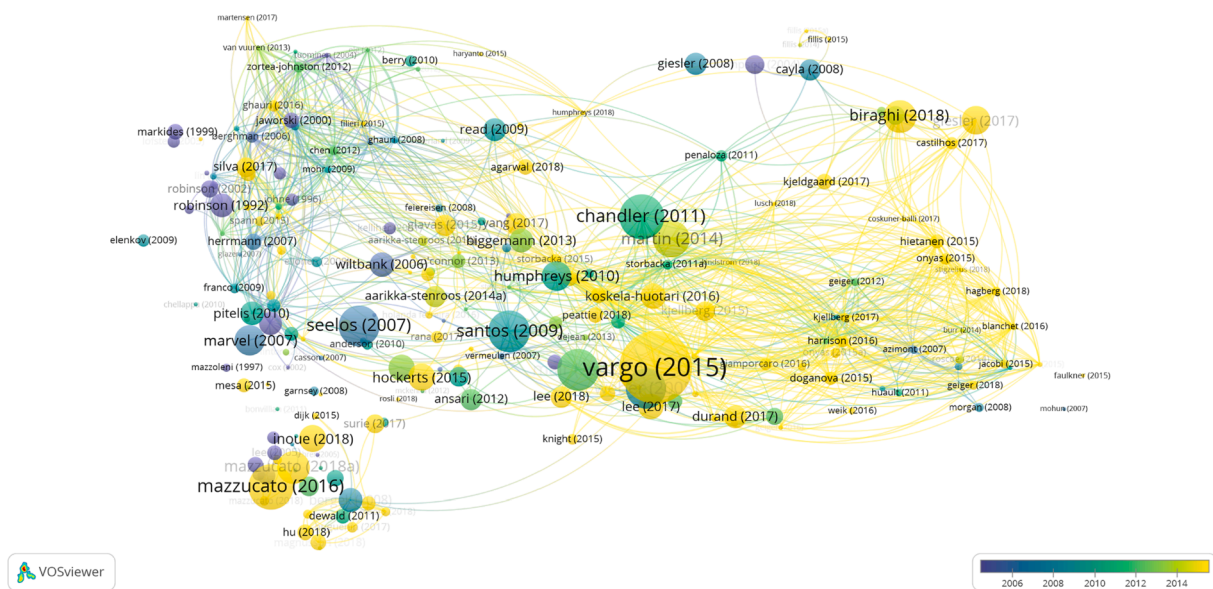


Fig. 5. Bibliographic map with publication years and normalized citation score. Colors refer to publication years (with blue = oldest; yellow = newest). Node sizes refer to normalized citation scores (small nodes = few citations, compared to articles of same publication year; large nodes = many citations, compared to articles of same publication year).

dynamics between different stakeholders and how stakeholders jointly shape new market configurations. This more collective view on market innovation is particularly prevalent in the clusters Markets as Practice (C3) and Market System Dynamics (C5). Hence, we find that the more recent articles located near the right-hand side of Fig. 5 are based on the assumption of distributed agency, which refers to the idea that stable patterns of repeated interactions between multiple agents occur without the intervention of a central agent. In other words, these recent articles take the perspective that new markets are created through collective self-organization.

From linearity towards non-linearity. The normalized citation scores of the articles as visualized in Fig. 5 suggest another shift in the literature: from linearity towards non-linearity. More specifically, we find that the most impactful recently published articles embrace various notions of non-linearity. This can be observed by looking at the five articles with the highest normalized citation scores of the last five years: Vargo et al. (2015), Mazzucato (2016), Martin & Schouten (2014), Biraghi et al. (2018), and Mazzucato & Robinson (2018) (represented by the five largest yellow nodes in Fig. 5). Note that these articles are dispersed throughout the map and are in three different clusters. These impactful and recent articles all view market innovation as an essentially non-linear process, which contrasts with (implicit) linearity assumptions underpinning much earlier research. Non-linearity refers to the idea that the elements of the market innovation process do not follow an ordered and logical sequence, that the roles of the market creating actors are subject to ambiguity, and that the outcomes of the process are highly uncertain and not suited for a rational planning approach. For example, Vargo et al. (2015) stress the non-linearity of the institutionalization process they view as the core of market innovation. Similarly, Biraghi et al. (2018) stress liquidity: there is ambiguity about the role of the entrepreneur, swinging back and forth between being a consumer and producer. Mazzucato (2016) and Mazzucato & Robinson (2018) emphasize the importance of bottom-up exploration, constant discovery and continuous learning, instead of rational planning, by public organizations that are trying to create markets for innovations. Martin & Schouten (2014) demonstrate how their model of market emergence points to the importance of non-linear approaches to market innovation, such as effectuation. These recent articles and their ability to attract citations point to an increasing interest for a non-linear perspective in the literature.

5. Discussion and conclusion

5.1. Directions for future research

The previous analysis suggests the existence of three major shifts in the market innovation literature: the shifts toward emergence, distributed agency, and non-linearity, which underscore the complex nature of market innovation. Future research should aim to identify generalizable theoretical mechanisms that capture this complexity and advance our understanding of emergence, distributed agency, and non-linearity in the context of market innovation. We suggest that complexity theory (Boisot & McKelvey 2010; Maguire et al. 2006) presents a potential meta-theoretical framework that offers concepts and tools that can improve the explanatory power of market innovation research.

The promise of complexity theory. Complexity theory is focused on the emergent self-organization of complex systems (McKelvey, 1999). The hallmark of complexity theory is the view that macro-level outcomes (e.g., new market structures) emerge from the interactions of micro-level elements (e.g., market stakeholders). These interactions on the micro-level are crucial for explaining the emergence of macro-level order (Anderson, 1999), yet have not been systematically studied in extant market innovation research. Complexity theory has a strong tradition in modelling emergent, non-linear processes involving multiple, interconnected agents (e.g., Maguire et al., 2006). Modelling techniques such as agent-based modelling can be used to study micro-level interactions

to help explain under which conditions the emergence of a new market is more or less likely to occur (e.g., Maguire et al., 2006; Rand & Rust, 2011; Vargo & Lusch, 2017). Next, we suggest several research directions, informed by complexity theory, that aim to advance our understanding of emergence, distributed agency, and non-linearity. Table 5 provides an overview of the suggested research directions.

Advancing our understanding of emergence. Three concepts derived from complexity theory are particularly useful to advance our understanding of emergence in the context of market innovation. First, complexity theory suggests that the notion of “fluctuation dynamics” is important to understand disturbances in the existing order of a market system (Chiles et al., 2004; Plowman et al., 2007). Any change on the micro-level of an established market system (e.g., new actors, new resources, new activities) can present a fluctuation that induces new micro-level interactions, which may prompt market actors to change their behaviors. Market innovation research is rife with indications of fluctuations, such as new technologies, new policies, or new market practices. Future research should focus on understanding how fluctuations impact market actors’ connections and change their behaviors, which would help explain why some fluctuations initiate the emergence of a new, macro-level order, while others do not.

Second, complexity theory suggests that “feedback dynamics” are required to amplify initial fluctuations (Anderson, 1999; Chiles et al., 2004; Plowman et al., 2007). Feedback dynamics occur in the form of actions taken by market actors that escalate the consequences of a specific market change on the micro-level. Therefore, feedback dynamics explain why fluctuations gain hold, scale, and induce macro-level changes. Consider for example the case of entrepreneurial farmers producing grass-fed beef as an alternative for factory-farmed beef in the 1990s (Heinze and DeSoucey, 2008). Positive feedback dynamics from a network of market stakeholders, including environmental activists, journalists, and health experts were critical in the emergence of the new market system. Feedback dynamics provided not only emotional support to entrepreneurial farmers, but also helped create a novel meaning system that offered action frames for farmers. While current research implicitly acknowledges the role of feedback dynamics, future research should seek to explain when feedback dynamics occur, and how they unfold. Specifically, research should examine how, on the micro-level, the connections between market actors and their behaviors facilitate the amplification of market changes. Understanding these dynamics would help explain the transition from micro-level changes to new macro-level order and thus the emergence of new markets.

Third, complexity theory highlights the role of “stabilization dynamics” which help stabilize a new, emerging macro-level market order. Specifically, self-referencing processes help achieve stability by mirroring and copying existing, deep-rooted practices and norms of the established market system from which the new market order emerges (Chiles et al., 2004; Plowman et al., 2007). Existing market innovation research emphasizes the importance of self-referencing for achieving market legitimacy. For example, Baker et al. (2018) show how the emerging market domain of New Circus created a variety of new market practices and norms, but also retained key elements of the traditional circus, namely the tent and the clowns. While current research studies the consequences of self-referencing, future research should seek to explain how self-referencing actually occurs. Specifically, research should study how market actors decide which market practices and norms should be retained, and how these decisions strengthen (or weaken) the connections between market actors. Understanding these micro-level dynamics would help explain if and how a new emerging macro-level order will reach stability. Methods developed to make sense of complexity, such as contextualization and alternative history exercises (Kurtz & Snowden, 2003), could inform research on each of these three dynamics of emergence.

Advancing our understanding of distributed agency. Complexity theory spotlights the role of “dissipative structures” in the emergence of a new market order. Dissipative structures present new, often informal,

Table 5
Implications of complexity theory for future market innovation research.

Identified shifts in the literature		Complexity theory concepts in the context of market innovation		Potential future research directions
Emergence	Interactions of micro-level elements generate new macro-level phenomena	Fluctuation dynamics	Micro-level changes in an established market system, (e.g., new actors, new resources, new activities) that induce novel micro-level interactions	<ul style="list-style-type: none"> • How do fluctuations change market actors' connections and behaviors? • Why do some fluctuations initiate market emergence while others do not? • How do market actors' connections shape feedback dynamics? • How do feedback dynamics impact market actors' behaviors? • How do market actors' behaviors shape self-referencing processes, and vice versa? • How do self-referencing processes impact actors' connections? • How are new connections between market actors formed? • How do novel connections impact market actors' behaviors? • How do emerging macro-level elements impact market actors' behaviors? • How do emerging macro-level elements impact market actors' connections? • How do resulting behavior
		Feedback dynamics	Actions taken by market actors that amplify and escalate the consequences of a specific micro-level fluctuation and induce macro-level changes	
		Stabilization dynamics	Stabilization of a new macro-level market order via self-referencing: the mirroring and copying of existing, deep-rooted market practices and norms	
Distributed agency	Self-organization in the absence of a central controller steering the market innovation process	Dissipative structures	The formation of new, often informal, networks of previously unconnected actors that support and amplify fluctuations on the micro-level	
Non-linearity	The market innovation process does not follow an ordered and logical sequence	Reciprocal causation	Micro-level elements produce macro-level outcomes which in turn shape micro-level elements	

Table 5 (continued)

Identified shifts in the literature	Complexity theory concepts in the context of market innovation	Potential future research directions
		changes impact macro-level elements?

networks of previously unconnected market actors that support initial market changes (Chiles et al., 2004; Plowman et al., 2007). Existing market innovation research implicitly highlights the relevance of dissipative structures. For example, in the case of the Mini Moto market, Martin and Schouten (2014) showed that a novel community of adult minibike riders (i.e., a dissipative structure) supported the new practice of minibike riding without a central controller steering this process. While current research describes, often implicitly, the presence of dissipative structures, future research should study how, on the micro-level, novel connections between previously unconnected actors are formed, and how this reshapes their behaviors. Examining these mechanisms would further improve our understanding of how agents self-organize and steer towards new markets in the absence of a central controller.

Advancing our understanding of non-linearity. Finally, complexity theory directs our attention to the critical role of “reciprocal causation” and provides the tools to study dynamics of reciprocal causation. The concept shows that market innovation events do not follow an ordered, logical sequence from the micro- to the macro-level. Reciprocal causation suggests that new macro-level outcomes emerging from micro-level elements also influence and change the micro-level elements themselves, which in turn may again impact macro-level outcomes (Anderson, 1999; Chiles et al., 2004). Consider the case of a mobile payment service in Kenya (Oborn et al., 2019). Users at the micro-level repurposed a mobile micro-credit service so it became an entirely new market domain of peer-to-peer payment. This macro-level change, however, then had a profound impact on micro-level practices: it allowed Kenyans to send money to their families living in rural areas of the country, and thus changed local migration patterns. The nature and implications of such reciprocal causal mechanisms are under-researched in the market innovation literature. We encourage future research to examine such reciprocal causal processes to develop a more complete understanding of market innovation.

5.2. Conclusion

In this article, we reviewed the market innovation literature, identified six research clusters, discussed their interrelations, identified major shifts in the literature, and proposed new directions for future research. The analyses organize existing market innovation research based on underlying conceptualizations of the focal phenomenon, theoretical paradigms, empirical settings, and methodological approaches. These insights, together with our findings on the interrelatedness of the clusters, can help researchers to better understand the nature and structure of the field. Furthermore, we identified and discussed three major shifts in the literature: (1) the shift from reductionism to emergence, (2) the shift from central agency to distributed agency, and (3) the shift from linearity to non-linearity. These shifts present shared foundations for future research. Finally, we showed how complexity theory can be used as a meta-theoretical framework to advance our understanding of emergence, distributed agency, and non-linearity in the context of market innovation. We hope this article reduces the ambiguity that plagues the field of market innovation, and will move theory development forward by highlighting new avenues for

future research.

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