



# Futures thinking in market-shaping research: Developing an onto-epistemological foundation and analytical framework

Aino Halinen <sup>a,\*</sup> , Valtteri Kaartemo <sup>b</sup> , Petri Tapio <sup>c</sup> 

<sup>a</sup> Department of Marketing and International Business, Turku School of Economics, University of Turku, Finland

<sup>b</sup> Faculty of Management and Business, Tampere University, Finland

<sup>c</sup> Finland Futures Research Centre, Turku School of Economics, University of Turku, Finland

## ARTICLE INFO

### Keywords:

Market shaping  
Futures thinking  
Contextual contingency  
Agency  
Ontology  
Epistemology

## ABSTRACT

Although market-shaping research is inherently future-oriented, it has paid limited attention to how actors envision future markets. Companies' visions are assumed to drive market-shaping efforts, yet how these visions are constructed and evolve remains underexplored. Two fundamental weaknesses account for this omission. First, the ontological and epistemological assumptions of market-shaping research are inconsistent. Second, the mental models that market-shaping actors form about future markets have largely been neglected. To address these shortcomings, this study proposes systematic incorporation of futures thinking into market-shaping research. Drawing on futures research, it develops an onto-epistemological foundation for future-oriented market-shaping studies and introduces an analytical framework for examining actors' mental models of how markets could or should be developed. The paper concludes with a research agenda encouraging empirical inquiry into how market actors anticipate and respond to uncertainties and cultivate alternative views beyond singular, deterministic visions.

## 1. Introduction

Businesses are under immense pressure to envision future markets, i. e., how market exchange, networks, representations, and market governing norms and institutions could or should be organized going forward (Nenonen, Storbacka, & Windahl, 2019; Nenonen, Storbacka, & Frethey-Bentham, 2019). This pressure consists of three interrelated forces. First, society expects companies to find solutions to grand challenges (e.g., climate change, increasing inequality, or biodiversity loss), calling on them to help create desirable futures (Friedrich & Hendriks, 2024; Gümüşay & Reinecke, 2022; Nenonen et al., 2021). Second, technological innovations and related trends (e.g., the development of artificial intelligence, sustainable production, or digital business) challenge companies to reconfigure their markets and value-creating activities (Keränen et al., 2023; Ottosson et al., 2020; Syväri et al., 2025). Third, market disruptions triggered by recent socio-economic crises (e.g., COVID-19, the Russian–Ukrainian war) have forced and enabled companies to reinvent their markets (Nenonen & Storbacka, 2020; Pedersen et al., 2020). Together, these forces have elevated the importance of conscious futures thinking as a strategic capability (Beckert, 2021; Halinen et al., 2024). For market-shaping actors (e.g., firms,

organizations, and managers), this means continuous creation of new mental models on how markets could or should be developed.

Market-shaping literature has been flirting with futures thinking since its early development, showing interest in 'market futures/future markets' (Kjellberg et al., 2012), and the topic remains relevant (Kjellberg & Humphreys, 2025). Referring to the purposeful efforts of market actors to change market elements (Nenonen, Storbacka, & Frethey-Bentham, 2019), scholars generally assume market actors have a clear goal or vision for future markets. A few studies have introduced concepts related to future markets, such as 'future market visions' (Kleinaltenkamp et al., 2021), 'market vision' (Flaig et al., 2021), 'future-oriented intentions' (Hawa et al., 2020), or 'conceivable trajectories to future markets' (Bulawa & Jacob, 2024). These concepts all implicitly refer to mental models of future markets that actors develop in their minds and potentially seek to realize. Visions are expected to guide market shaping (Kohli & Jaworski, 2023), and developing a scalable vision is considered central to the market-shaping process (Kleinaltenkamp et al., 2021). Dominant narratives of future markets are assumed to guide business practices by influencing managers' mental models (Bajde et al., 2022; Geiger & Finch, 2016). Some authors even posit the existence of a 'likely future shape of the market' (Nenonen &

\* Corresponding author at: FI-20014, University of Turku, Finland.

E-mail addresses: [aino.halinen-kaila@utu.fi](mailto:aino.halinen-kaila@utu.fi) (A. Halinen), [valtteri.kaartemo@utu.fi](mailto:valtteri.kaartemo@utu.fi) (V. Kaartemo), [petri.tapio@utu.fi](mailto:petri.tapio@utu.fi) (P. Tapio).

<https://doi.org/10.1016/j.jbusres.2026.116179>

Received 6 July 2024; Received in revised form 18 December 2025; Accepted 27 March 2026

Available online 2 April 2026

0148-2963/© 2026 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

Storbacka, 2020), suggesting market actors can evaluate the probability of future market changes (Kaartemo & Nyström, 2021).

Despite these future-oriented concepts, mental models of future markets remain largely unexplored in the market-shaping literature. Existing research tends to treat visions and future intentions as if they were ready-made, offering little insight into how they are constructed, what shapes them, or how they evolve. This represents a significant theoretical oversight. As Storbacka and Nenonen (2011, p. 247) note, “thinking and acting in a market take place in the context of [a manager’s] model of the market rather than in response to the whole ‘objective’ market.” Ignoring this internal cognitive context limits our understanding of how market shaping actually occurs and creates a discrepancy between the ontology of market shaping, which is conceived as future-oriented and intentional, and its epistemological foundation, which remains focused on present processes.

To elaborate further on these weaknesses, we argue that market-shaping theory lacks a robust account of market actors’ mental models of future markets. This blind spot of research warrants explicit examination. Without understanding how market-shaping actors construct their mental models of future markets, we cannot fully explain how shaping efforts emerge, persist, or succeed. The literature defines mental models as structured but flexible forms of knowledge that allow individuals to make sense of novel or ambiguous environments (Mathieu et al., 2000; Becker et al., 2025). They support the prediction and interpretation of system behavior, help recognize relationships among elements, and guide expectations and actions (Becker et al., 2025). Typically, managers form mental models of their environment before making strategic decisions (Hill & Levenhagen, 1995; Gary & Wood, 2011). These mental models frame what is considered possible; hence, they profoundly shape how actors imagine, evaluate, and pursue market-shaping strategies (Tóth et al., 2022).

Recent empirical studies provide some insights into how market actors make sense of future markets. For example, Abrahamsen et al. (2023) found that visioning helps managers actively consider the future, anticipate structural changes, identify likely trends, and shape strategic goals. However, their ability to do so is often limited by cognitive frames and network constraints that restrict the visioning process (what managers can perceive) and the strategizing action (what their organizations can pursue). While focusing on visioning probable futures, Abrahamsen et al.’s (2023) study offers only limited insight into how market visions are cognitively constructed or whether managers ultimately hold a mental model of a preferred market. Conversely, Syväri et al. (2025) show that an entrepreneur’s strong vision of a future sustainable market can drive and stabilize market-shaping efforts, but their study does not focus on the visioning itself. Other studies have explored how market actors discursively construct visions of possible future markets (Bajde et al., 2022; Purchase et al., 2024), yet they do not examine visions as mental models. Overall, our understanding of future markets as mental models remains limited.

We further argue that the discrepancy between the future-oriented theoretical literature and present-oriented empirical research undermines the theoretical development and practical relevance of market-shaping research. Empirical studies continue to primarily focus on present-oriented processes and strategic actions (Hawa et al., 2020), although market shaping is defined as distinctly future-oriented and intentional (Kohli & Jaworski, 2023; Nenonen, Storbacka, & Frethey-Bentham, 2019). This mismatch stems from unclear philosophical premises regarding the future. The ontological assumptions (the nature of the core research phenomena) and epistemological assumptions (what counts as scientific knowledge) (Creswell & Poth, 2016) do not seem to fully align, making it difficult to study future-oriented shaping activity coherently. To embrace a futures-thinking perspective, market-shaping research needs to carefully reevaluate its philosophical foundations. Analytical frameworks for exploring actors’ mental models of future markets would also be beneficial.

To effectively address these weaknesses, this study proposes

systematically incorporating futures thinking into market-shaping research. This can be achieved by drawing on futures research, an interdisciplinary field of study that examines and constructs images of various alternative futures—possible, probable, and preferable—and outlines paths to them (Ahvenharju et al., 2018; Amara, 1981; Voros, 2003). Adopting futures thinking requires a careful examination of the onto-epistemological foundation of market-shaping research in light of the assumptions of futures thinking. It also necessitates applying futures-thinking frameworks to explain how mental models of future markets are constructed and revised.

The study builds on Nenonen and Storbacka’s (2021) suggestion to incorporate new theoretical viewpoints into the market-shaping literature to better understand the efforts market actors undertake to form and transform markets. In an interdisciplinary spirit, we import the futures-thinking philosophy from futures research to enhance the forward-looking perspective of market-shaping research, thus applying theory adaptation as a methodology (Huutoniemi et al., 2010; Jaakkola, 2020). Our study contributes to market-shaping research in two ways. First, we propose revised onto-epistemological assumptions that explicitly foreground the future and problematize its role in market-shaping studies. Second, we propose an analytical futures-thinking framework for conducting studies on actors’ mental models of future markets, including their construction and evolution. The framework describes the most relevant dimensions of futures thinking: contextual contingencies, agentic approach, and deliberate future orientation, allowing the study of alternative future markets. The framework also provides a practical tool that can facilitate managers’ reflections and common discussions about future markets.

The remainder of the paper proceeds as follows. We first outline the core assumptions and dimensions of futures thinking as conceived in futures research, drawing on the foundational works of Amara (1981), Bell (1997), Voros (2003), Malaska and Holstius (2009), and Poli (2017). We then critically evaluate the onto-epistemological basis of market-shaping research in light of these assumptions and dimensions, clarifying how futures thinking is embedded and where notable gaps persist. Then, we present our futures-thinking framework for analyzing market actors’ mental models of future markets. The paper concludes by discussing theoretical and managerial implications and outlining an agenda for market-shaping research that integrates relevant futures research concepts and methods.

## 2. Futures research as a home base for futures thinking

### 2.1. Onto-epistemological assumptions of futures research

The academic field of futures research (or futures studies) explicitly studies the uncertainty of the future. Drawing on pioneering texts, Rubin and Kaivo-oja (1999, p. 353) define the aim of futures research as “to invent, evaluate, and propose possible and probable futures and to help people explore alternatives so that they can decide what kind of future they want, and plan effective actions for achieving it.” Given the future’s uncertainty, it is seen as multiple alternative pathways rather than a single trajectory (Bell, 1997). Voros (2003) depicts possible, probable, and preferable futures as follows: Possible futures form a broad set of different types of futures humans can imagine based on their past and future-related knowledge. Some possible futures are assessed as more probable than others, typically because the current trends are expected to continue. From the evaluating actor’s perspective, some possible futures seem more preferable than others, while others appear highly undesirable. In addition, the concept of a preferred future is relevant. It refers to a vision (van der Helm, 2009) and indicates that a specific future market is chosen as a target for a company. Appendix A provides a brief lexicon of key futures-thinking concepts and their applied meanings in the context of market shaping.

According to a strong ontological assumption, the future is not pre-determined (Flechtheim, 1971; Amara, 1981; Rubin & Kaivo-oja, 1999);

people can, to some extent, change what happens in the future (de Jouvenel, 1967), meaning various contingencies combined create the actualized future (de Jouvenel, 1967; Malaska & Holstius, 2009). The future is understood to emerge from the interplay of three key forces: (1) trends and megatrends shaping the operational context, (2) potential disruptions and discontinuities in trends, and (3) human intentions and actions at the individual and organizational levels (Malaska & Holstius, 2009; Qi & Tapio, 2018).

The ontology of the future and the epistemology of acquiring knowledge about it are specific to futures research. Knowledge of the future can be considered “scientific knowledge of contingent, intentional, and nonfactual (visionary) beliefs of the future” (Malaska & Holstius, 2009, 89). Since the future does not yet exist, it cannot be directly observed and is beyond empirical knowledge (Bell, 1997; Mannermaa, 1998). To study alternative futures scientifically, researchers need to describe them using objective knowledge about past trends and events (Voros, 2003). Alternatively, knowledge of the future can be constructed through people’s mental processes—their current beliefs, hopes, and fears; their imaginations; and their intentions, decisions, and resulting actions (Bell, 1997; Rubin & Kaivo-oja, 1999; Voros, 2007). Essentially, the future is a moving target—an endlessly evolving object (Mannermaa, 1998). Individuals and organizations continuously reconstruct their anticipations of the future in the ever-shifting present (Rubin & Kaivo-oja, 1999). Their views of alternative futures and future trajectories can be analyzed as a set of ‘if...then’ pathways.

Futures research has developed a broad portfolio of methods and procedural practices to analyze alternative futures as imagined potential states or to describe pathways toward a preferred future (Rohrbeck et al., 2015; Tapio & Hietanen, 2002). However, the field is unified by its deliberate orientation toward ‘the time-to-come’—often referred to as ‘futures thinking’ (Bell, 1997). Futures thinking has been applied in the context of strategic management, where it is generally referred to as corporate or strategic foresight (Marinković et al., 2022; Voros, 2003). Foresight refers to a business-oriented approach to futures research that equips firms with insights into their evolving environment, enabling them to anticipate change and take proactive action (Qi & Tapio, 2018; Rohrbeck et al., 2015). Table 1 features our summary of the key onto-epistemological assumptions of futures thinking.

## 2.2. Contextual contingencies and agency in futures thinking

Futures research does not provide a self-evident framework of futures thinking that could be directly applied to market-shaping research. However, various future-oriented frameworks have been proposed for different analytical purposes, such as global foresight (Voros, 2017),

**Table 1**  
Onto-epistemological assumptions in futures thinking (based on Amara, 1981; Bell, 1997; Malaska & Holstius, 2009; Voros, 2003; and Poli, 2017).

<b>Ontological assumptions</b>	<ul style="list-style-type: none"> <li>• The future is uncertain.</li> <li>• The future is not predetermined but socially constructed.</li> <li>• Actors’ free will and contextual contingencies combined fashion the future.</li> <li>• The future manifests in multiple alternative futures.</li> <li>• The future continuously evolves.</li> </ul>
<b>Epistemological assumptions</b>	<ul style="list-style-type: none"> <li>• The future cannot be observed directly.</li> <li>• The seeds of the future are partly present through anticipatory processes.</li> <li>• Alternative futures are accessible through objective or experiential knowledge of past and current trends and events; people’s beliefs, hopes, and fears; their imaginations, intentions, decisions, and consequent actions.</li> <li>• Futures knowledge involves contingent, intentional, and nonfactual beliefs about the future.</li> <li>• Futures knowledge can be attained through futures research methods and professional practices.</li> </ul>

strategic planning in organizations (Voros, 2003), and the study of individuals’ futures consciousness (Ahvenharju et al., 2018). Common to these frameworks is that they describe futures thinking through three fundamental dimensions: contextual contingencies influencing the future, individual and organizational agency in shaping it, and a deliberate future orientation embedded in both. Building on these frameworks and other futures research texts on organizations’ and individuals’ future-oriented behavior, we may assume that market actors’ mental models of future markets also include these dimensions (e.g., Godet & Roubelat, 1996; Qi & Tapio, 2018; Voros, 2003). Contextual contingencies are factors that actors can consider while anticipating future markets, and actors’ agency—their decisions and actions—unavoidably affect the emergence of tomorrow’s markets. Next, we will examine these dimensions in more detail to provide a benchmark for evaluating futures thinking in market-shaping research.

Envisioning future markets always occurs within a specific business environment at a specific point in time, where various *contextual contingencies* drive the emergence of future markets. Market actors are expected to interpret past trends and analyze market dynamics within complex and evolving business environments (Möller et al., 2020) to envision alternative future markets and market trajectories. Futures thinking promotes a layered view of the complex emerging context (cf. Inayatullah, 2002; Voros, 2005), involving five layers (Voros, 2017): trends, events, systems, worldviews, and history. Although Voros’s (2017) framework is designed for global foresight, its five elements are sufficiently generic to be applied to the examination of contextual contingencies in specific future markets. Here, the context should be interpreted broadly from the perspective of a market actor “purposefully looking forward or thinking about the future in order to create forward views and ideas about, or ‘images’ of, the future” (Voros, 2017, p. 5).

While the five layers help understand how the past has shaped the present, their true value lies in serving as a foundation for futures thinking. They enable a deeper and more critical engagement with the future than approaches based solely on reading trends (Voros, 2017). *Trends* include economic, social, technological, or ecological development patterns expected to affect future markets. Recent, current, and expected future trends, along with their discontinuities, influence business decisions and actions that, in turn, shape future trends (Qi & Tapio, 2018). *Events* are any observable occurrences in the business environment that can trigger market change and shape the future (Voros, 2017). The events typically refer to wild cards—low-probability events with major impact—or weak signals, which are early indicators of a potential systemic shift in an unknown direction (Mendonça et al., 2004).

*Systems* involve a systemic structure and system-specific drivers of change (Voros 2017), here referring to markets as systems (Kjeldgaard et al., 2017; Möller et al., 2020). Market actors, with their specific characteristics, intentions, and actions, are part of the market system and may change it from the inside. *Worldviews* encompass a broad range of constituents in human cognition and consciousness, limiting and allowing what the actor can and will envision. Voros (2017) lists mental models, discourses, and myths, but this category also includes moral values and concern for others (Ahvenharju et al., 2018; cf. Inayatullah, 2002). Finally, *history* refers to the macro-historical changes in society and the planet (Voros, 2017).

Regarding *agency*, futures thinking promotes two approaches to contextual change: preactive and proactive, rather than reactive. *Preactive agency* involves taking precautionary steps to anticipate contingencies, emphasizing openness to alternatives and flexibility in facing potential future trajectories (Ahvenharju et al., 2018). *Proactive agency* involves taking steps to realize the preferred future (Godet, 2006; Godet & Roubelat, 1996), emphasizing a vision and the actions taken toward it (Jokinen et al., 2022). Qi and Tapio (2018) provide examples of preactive and proactive approaches to future events. A preactive actor would ask how it could prepare for an event, while a proactive actor would ask how it could prevent the event or take full advantage of it (Qi

& Tapio, 2018).

Regarding proactive agency, foresight methods such as environmental scanning and scenario planning (Bowman & Parks, 2024; Haarhaus & Liening, 2020), as well as the concept of an organization's future preparedness (Rohrbeck & Kum, 2018), emphasize the need to be alert and actively prepared for potential changes. In environmental scanning, a company acquires "information about events, trends, and relationships in an organization's external environment" (Choo 2001, p. 72; Haarhaus & Liening, 2020). It "collects futures signals indicating the seeds of change (i.e., weak signals) and potential disruptions (i.e., wild cards)" (Qi & Tapio, 2018, p. 54). Scenario planning, in turn, refers to an organizational process in which alternative future trajectories of the business environment are crafted and used in long-term strategic planning (Bradfield et al., 2005).

Proactive agency emphasizes active shaping of future markets. Individuals, organizations, and collectives are expected to influence future developments especially by constructing images of preferred future (Godet & Roubelat, 1996). Thus, market actors, even small firms, can function as change agents, even if market trends and events compete with them in shaping the future (Sv Väri et al., 2025). They simply need to identify what can be taken as given and what can be influenced by them alone or through collective actions (Ahvenharju et al., 2018). Ultimately, it is a question of agency beliefs—"one's trust in their ability to influence future events" (Ahvenharju et al., 2018, p. 7). In the context of proactive agency, market actors' future images emerge as a key object of study, referring to 'snapshots' of potential futures constructed from their beliefs, values, knowledge, and imagination (Jokinen et al., 2022; Rubin, 2013). Consequently, collaborative foresight and the backcasting approach constitute relevant methods. Collaborative foresight refers to joint foresight activities conducted in an organizational or inter-organizational setting (Halinen et al., 2024; Jokinen et al., 2022), whereas backcasting means "working backwards from a particular desired future endpoint to the present to determine the physical feasibility of that future and what policy measures would be required to reach that point" (Robinson, 1990, pp. 822–823).

As dimensions of futures thinking, contextual contingencies and agentic approaches can be used to evaluate how and to what extent future-orientation is represented in market-shaping studies. To demonstrate the limitations of current market-shaping studies, we turn to this evaluation.

### 3. Future orientation in market-shaping literature

Market shaping is a future-oriented, intentional process where individual actors or collectives actively influence markets rather than merely adapt to them. Through strategic actions such as redesigning exchange content, reconfiguring networks, renewing representations, and reforming institutions, market actors seek to shape the competitive landscape and future markets (Nenonen, Storbacka, & Frethey-Bentham, 2019). Especially the market-driving perspective prioritizes deliberate interventions over emergent adaptations (Jaworski et al., 2000). Rather than viewing markets as self-organizing systems that evolve through continuous interaction, studies build on the idea that markets can be purposefully formed or transformed. Market shaping is particularly critical when firms create entirely new markets (Möller & Svahn, 2009; Ottosson et al., 2020) or navigate disruptions that generate uncertainty about the nature of future markets (Esbjerg et al., 2024; Kindström et al., 2023; Purchase et al., 2024). Against this background, the future-oriented perspective should be central to market-shaping studies, and envisioned future markets should be one of their key topics.

There are also limits to market-driving actions, as markets are complex and dynamic systems; numerous intentional actions by individual actors affect markets together with broader contextual and temporal forces (Kjeldgaard et al., 2017; Möller et al., 2020). Despite market shapers' deliberate efforts, various market interdependencies and the broader contextual factors may constrain their agency (Abrahamsen

et al., 2023; Möller et al., 2020). Given that market dynamism and the purposeful interventions of key actors affect markets (Hawa et al., 2020; Nenonen et al., 2021), one would also assume these factors influence market actors' mental models of future markets. Studies on these effects in the envisioned future markets, however, have been scarce, as shown below.

#### 3.1. Contextual contingencies of market shaping

The market-shaping literature adopts a broad perspective on contextual contingencies, recognizing that the state of a market significantly shapes the strategies available to actors seeking to shape it. These contingencies determine not only the actions that market shapers can take but the capabilities required to implement them and the likelihood of achieving favorable outcomes for the focal actor and the overall market configuration (Nenonen & Storbacka, 2020). Even when shared, market shapers' mental models of future markets rarely materialize as such, as market-shaping actions encounter various interdependencies, often leading to the emergence of multiple new, individually or collectively held mental models (Abrahamsen et al., 2023; Tóth et al., 2022).

Emerging technologies have received particular attention as contextual contingencies. For example, Purchase et al. (2024) found that autonomous vehicles constitute a technological disruption that engenders multiple competing visions of future markets and attempts to influence market change. This reflects the broader reality that actors often advocate divergent preferred futures, leading to competing visions and efforts to shape the evolution of markets. In examining the anticipation of business model transformations in the electric utility industry, Carlborg et al. (2021) found that technological innovations are fundamentally reshaping the role of utilities in the market. As emerging technologies generate hype and investment surges, market trajectories may eventually appear irreversible or even self-fulfilling, shaping present alternatives and projected future markets (Helmer et al., 2025). Some studies have also applied futures research methodologies to explore how experts assess the likelihood and impact of technology-driven market transformations (Kaartemo & Nyström, 2021; Nyström & Kaartemo, 2022). However, while market-shaping studies might connect technological trajectories to actors' expectations of market change, they typically overlook how these envisioned trajectories influence market shapers' mental models of future markets.

Technological and societal developments are often intertwined with events and broader movements that can accelerate or hinder market evolution. For instance, Hoffman (1999) demonstrated how a series of disruptive events and the rise of the environmental movement reshaped institutional structures in the US chemical industry between 1960 and 1993. Gauthier and Bally (2025) discuss how introducing a scanner app empowered consumers, disrupted the traditional food market, and transformed relationships among market shapers. In some cases, rare external shocks or wildcards, such as the COVID-19 pandemic, trigger unforeseen shifts in market dynamics (Mele et al., 2021). However, instead of exploring how such disruptions shape actors' mental models of future markets and the strategic alternatives that market shapers consider in response to them, existing research has focused on how actors adapt reactively to sudden changes (Mollinger-Sahba et al., 2021).

Contextual contingencies also direct our attention from what happens within a market to other markets. Interrelations with other markets significantly influence market shaping (Kjellberg & Olson, 2017), as market boundaries overlap and become contested (Chimenti, 2020; Esbjerg et al., 2024; Onyas, 2023). For instance, existing markets may serve as regulatory templates for developing specific rules and tools for new markets, and market actors with experience in other markets may act as conduits for transferring exchange practices (Kjellberg & Olson, 2017). Similar evidence is found in studies on market bifurcations (Diaz Ruiz & Makkar, 2021) and relational markets (Yang et al., 2022), which discuss boundary work between multiple alternative markets and the interlinkage of historical, political, cultural, and sociological forces with

markets. More recently, scholars have found that intersecting markets significantly influence market actors' expectations of future market change (Bulawa & Jacob, 2024; Esbjerg et al., 2024), as practices from one market are borrowed to organize another (Bulawa et al., 2024). While market-shaping research has expanded our understanding of contextual contingencies by exploring the dynamics between interrelated markets (Nenonen & Storbacka, 2021), it has largely neglected market actors' viewpoints, such as how these contingencies were anticipated and how they influenced market shapers' mental models of future markets.

In summary, while contextual contingencies are acknowledged, their connection to market-shaping processes remains underexplored. Little is known about how market shapers envision and interpret these contingencies when assessing markets and making strategic decisions to shape them. A deeper understanding of these interpretations would clarify how contextual contingencies shape market actors' mental models of current and envisioned future markets (Abrahamsen et al., 2023). Despite a few pioneering studies, we may conclude that the role of contextual contingencies in visioning future markets is overlooked.

### 3.2. Agency in market shaping

Regarding agentic approaches, market-shaping literature has been somewhat less neglectful, given that the agentic approach is a foundational feature of market shaping (Hawa et al., 2020). In this respect, a variety of concepts have been used, indicating that market actors' role in creating future markets has been recognized but not yet carefully analyzed. Market-shaping literature discusses how actors aim to shape markets by introducing 'tentative' market images or visions (Kindström et al., 2023), communicating future intentions (Eriksson et al., 2026), providing promissory market narratives (Geiger & Finch, 2016) or strategic narratives (Rindova & Martins, 2022), or engaging in market experiments (Mountford & Geiger, 2024) that encapsulate their views of future markets. Scholars refer to market vision as an envisioned market configuration that presents a compelling and beneficial view of a future market (Jaworski et al., 2020; Nenonen, Storbacka, & Windahl, 2019; Syväri et al., 2025). Future markets are expected to emerge in line with that vision when tailored to deliver attractive value propositions to market actors (Jaworski et al., 2020) and supported by deliberate shaping actions aligned with that vision (Brege & Kindström, 2020; Flaig et al., 2021). Depending on their competitive position, strategic intentions, and perceptions of market stability, market actors are expected to adopt different market-shaping strategies to realize their preferred future markets (Flaig et al., 2021). Thus, the market-shaping process clearly revolves around various expectations of market change (Esbjerg et al., 2024) and a compelling vision of a future market that can convince other participants to engage and work toward it (Möller & Svahn, 2009).

Visions and strategic intentions prompt a deeper exploration of intentionality in market shaping. Hawa et al. (2020) proposed a framework featuring two dimensions of temporality in actors' intentions: present and future orientation. Present-oriented agency suggests that context always shapes intentions, emphasizing immediate responses to unfolding situations without predetermined goals. Future-oriented intentions, in turn, provide a clear rationale for actions, signaling thoughtful coordination of plans and deliberate participation in strategic endeavors to reach a set goal (Hawa et al. 2020). While present-oriented intentions (e.g., tactically addressing concurrent competitive hurdles) drive some market shaping, a future-oriented stance is fundamental to 'market work': the deliberate efforts to create, maintain, or disrupt envisioned future markets (Hawa et al., 2020). Recent empirical studies offer valuable insights into the processes leading toward envisioned markets, e.g., disruptive market-shaping efforts by firms aiming to create new markets (Sandvik et al., 2024) or firm-level initiatives intended to generate environmental impact (Syväri et al., 2025). However, the nature of market visions and their role in

shaping markets towards a targeted future has not been thoroughly investigated.

The same applies to public promissory accounts and hype, which function as future-oriented narratives. Studies show that such narratives create collective visions of desirable futures (Bajde et al., 2022; Geiger & Finch, 2016) and contribute to producing markets through various market investments (Geiger & Gross, 2017). Geiger and Gross (2017) and Bajde et al. (2022) discuss the significance of positive media hype and how various actors, including technology journalists and consultants, create socio-technical imaginaries that affect markets. Luri et al. (2023) highlight the importance of narratives in building idealized technological futures and creating market heroes of the present. Overall, future-related narratives help market actors interpret current markets and strategize for the future, enabling comparisons between the present and future worlds (Araujo et al., 2014). These narratives align market practices with potential, often fictional outcomes, providing a framework for navigating the uncertainties of future markets or even creating self-fulfilling prophecies. However, because research on emerging markets often relies on secondary data (Bajde et al., 2022; Geiger & Gross, 2017), understanding why certain futures were considered better options at the time strategic decisions were made is difficult. Thus, current research does not reveal how different future-related narratives compete in the market or shape the mental models of those trying to influence future markets. In other words, what are, or were, the values, hopes, fears, assumptions, and expected scenarios leading to a particular vision?

Overall, empirical studies on future-oriented agency are scarce. Purchase et al. (2024) analyze current discourses on future autonomous vehicle markets, and Bulawa and Jacob (2024) examine conceivable practice trajectories toward a future market. Besides these valuable contributions, market-shaping research offers little empirical evidence of the nature or role of envisioned future markets. Research primarily draws on market shapers' retrospective accounts of past market developments, reinforcing a historical perspective. It tends to emphasize macro-level market emergence over individual actors' anticipations of future markets and their shaping efforts.

We may conclude that extant research has failed to integrate a future-oriented perspective into its empirical studies, leaving a significant gap in our understanding of intentional market shaping. The agentic role of market actors in anticipating future market change and envisioning alternative futures based on these anticipations and their strategic goals has received little scholarly attention. These omissions have important consequences for the field, as we discuss next.

### 3.3. Limitations of market-shaping research

Although the future is inherently present in conceptual discussions of market shaping, it is rarely problematized or explicitly addressed. Only a few empirical studies on market shaping discuss market futures—that is, *futures* in the plural (Bajde et al., 2022; Luri et al., 2023; Purchase et al., 2024). Beyond these pioneering studies, the underlying assumption in market-shaping studies appears to be that the *future*—in singular form—is implicitly embedded in market-shaping activities, as if, in the past, only one possible trajectory, constructed by one or a few successful market shapers, existed. Thus, market-shaping studies often fail to examine the broader contingencies and alternative futures influencing market-shaping decisions and activities.

Overall, the literature on market shaping shows scant interest in temporality (e.g., Esbjerg et al., 2024; Hawa et al., 2020). The significance of timing (Nenonen & Storbacka, 2020) and long-term market evolution (e.g., Baker & Nenonen, 2025; Baker et al., 2019; Burr, 2014) has been noticed to some extent. However, studies predominantly focus on retrospective sensemaking, making it challenging to identify alternative futures, agency, or contextual contingencies as actors have perceived them in the past. This is problematic because envisioning alternative futures changes in the ever-shifting present (Bowman &

Parks, 2024), making it potentially meaningless to refer to a single vision of the future market. Retrospectively produced stories often treat the future as a single, obvious outcome derived from past variations. Additionally, relying solely on retrospective methods (e.g., Alexander & Doherty, 2021; Yang et al., 2022) risks ex-post rationalization and memory bias. Thus, research tends to present emergent market-shaping stories in retrospect rather than addressing present-oriented responses to unfolding contextual contingencies or constructing visionary, future-oriented accounts of market shaping (Hawa et al., 2020). While longitudinal real-time studies are thought to provide more accurate process descriptions (Baker & Nenonen, 2020; Syväri et al., 2025), scholars have seemingly accepted the preference for retrospective data over present- or future-oriented data and that such data need not capture the various aspects of future-oriented agency.

In sum, two major inconsistencies undermine the development of future-oriented research in market shaping: (1) while assuming that mental models of future markets direct market shaping, forward-looking studies of such models are scarce, and (2) while assuming the contextual contingencies imposed by complex market systems and the broader environment influence market shaping, their influence on market actors' mental models have been overlooked. Consequently, we lack a proper understanding of how market shapers construct mental models of future markets, what influences these mental models, what they include, how they evolve, and how the envisioned future markets or trajectories leading to them ultimately look like.

These omissions reveal a mismatch between the ontological and epistemological assumptions of market-shaping research and highlight a research gap regarding agentic efforts to envision and change the market. The discrepancy underscores the need to reevaluate the onto-epistemological foundation of market-shaping research. Based on insights from futures research, we next suggest revising the premises of market-shaping research and adopting a broader, contextual, and temporal approach to analyzing mental models of future markets.

#### 4. Toward futures thinking in market-shaping research

##### 4.1. Revision of onto-epistemological foundation

Based on the previous review, it can be concluded that futures thinking and market-shaping literature share key ontological premises about the nature of the future. Both rest on the assumption that the future is inherently uncertain and open to influence. Market-shaping literature heavily relies on the assumption that markets are evolving structures, systems, practices, and representations (Mele et al., 2015; Nenonen & Storbacka, 2021) shaped by intentional actions and spontaneous emergent developments (Nenonen, Storbacka, & Windahl, 2019). Actors are seen as able to design future markets in a preferred direction (Windahl et al., 2020); occasionally, the future is even seen to unfold in various alternatives (Bajde et al., 2022; Luri et al., 2023; Purchase et al., 2024).

With respect to epistemology—how the future is known—futures thinking appears more distant. The visioning of futures, market actors' images of future markets, or the trajectories to the possible, probable, or preferable markets are rarely discussed. Instead, empirical studies on market shaping tend to analyze changes after they occur, framing market evolution as a series of events that, in hindsight, appear inevitable because of the actions of successful innovators and other key actors.

The limited conceptual work on mental models of future markets and the discrepancy between conceptual and empirical market-shaping studies call for revised onto-epistemological assumptions, which we propose based on the premises of futures thinking (Table 1). Adopting these assumptions and the novel temporal perspective would address current omissions in market-shaping research. Next, we develop a framework intended to support concrete empirical analyses. Its purpose is to help overcome potential cognitive barriers to adopting futures

thinking.

##### 4.2. A framework for analyzing future markets

Based on the proposed onto-epistemological assumptions (Section 2.1) and the dimensions of futures thinking (Section 2.2), we propose a framework for analyzing actors' mental models of future markets (Fig. 1). The framework positions the various dimensions (contextual contingencies, active agency, and the deliberate future orientation) and the layers of context (trends, events, systems, worldviews, and history) in a two-dimensional space, with the x-axis referring to the market actor's temporal orientation regarding the analytical task and the y-axis denoting the perceived change in contextual contingencies. *The market actor* in the middle refers to any potential market shaper—whether a firm, private or public organization, or movement. In particular, it refers to individuals who, as representatives of these collectives, anticipate change, envision markets, and exercise agency to shape markets in line with their worldview. The framework depicts the crucial elements of futures thinking, enabling an analysis of market actors' mental models of future markets. Taking a future-oriented perspective, it integrates the anticipatory and strategic aspects of market shaping into the analysis.

Consider sustainable agrifood markets, where actors can hold contrasting mental models of how the market may develop. A food manufacturer with a long-term temporal orientation might anticipate substantial shifts in contextual contingencies (e.g., stricter environmental regulation or the widespread adoption of regenerative farming) and adopt a proactive, agentic approach by exploring market innovations in alternative proteins. By contrast, a dominant distributor might view contextual change as limited, maintain a short-term temporal focus, and adopt a preactive stance that emphasizes incremental improvements to current supply chains and traceability systems rather than reconfiguring the market. These differences in perceived contingencies, future horizons, and agency illustrate how the framework can be used to analyze the futures thinking embedded in market actors' mental models of sustainable agrifood markets and other domains.

Futures thinking is an integral part of the exercise of the market actor's agency (Rindova & Martins, 2022). The framework incorporates interpreting the past and analyzing the present as necessary activities for anticipating market change and envisioning future markets. While focused on depicting the structural elements relevant to market envisioning, the framework should be considered dynamic. It aims to highlight how market-shaping actors repeatedly interpret and analyze market changes from the continuously moving present, reconstructing images of possible, probable, or preferable future markets (Gümüşay & Reinecke, 2022; Rubin & Kaivo-oja, 1999). The framework integrates prior insights from market-shaping literature on contextual contingencies (Nenonen & Storbacka, 2020) and agency (Flaig et al., 2021; Hawa et al., 2020) and how these relate to envisioned alternative futures (e.g., Bajde et al., 2022; Purchase et al., 2024).

*The actor's temporal orientation (x-axis)* defines the vantage point for viewing the market in the present and the direction of viewing (the past, present, or future), as well as how far into the future the actor aims to see (Andersson & Mattsson, 2010; Halinen et al., 2024). *The future horizon*, i. e., the temporal distance to the envisioned future market, may be subjectively defined, ranging from near to distant (Augustine et al., 2019). Alternatively, it may be based on short-, medium-, or long-term strategic planning horizons (Malaska & Holstius, 2009) or simply on the probable length of time until a preferred market change occurs, given the existing physical and social constraints (Robinson, 1990). Research has shown that managers tend to be temporally myopic in strategizing, opting for actions that are effective in the near term (Czakon et al., 2023) but farsighted in recognizing structural development trends in their markets (Abrahamsen et al., 2023). Conflicting temporalities (e.g., different time horizons and expectations regarding market change) effectively hinder coordinating activities for instance towards more sustainable products and market practices (Esbjerg et al., 2024). As the agrifood example

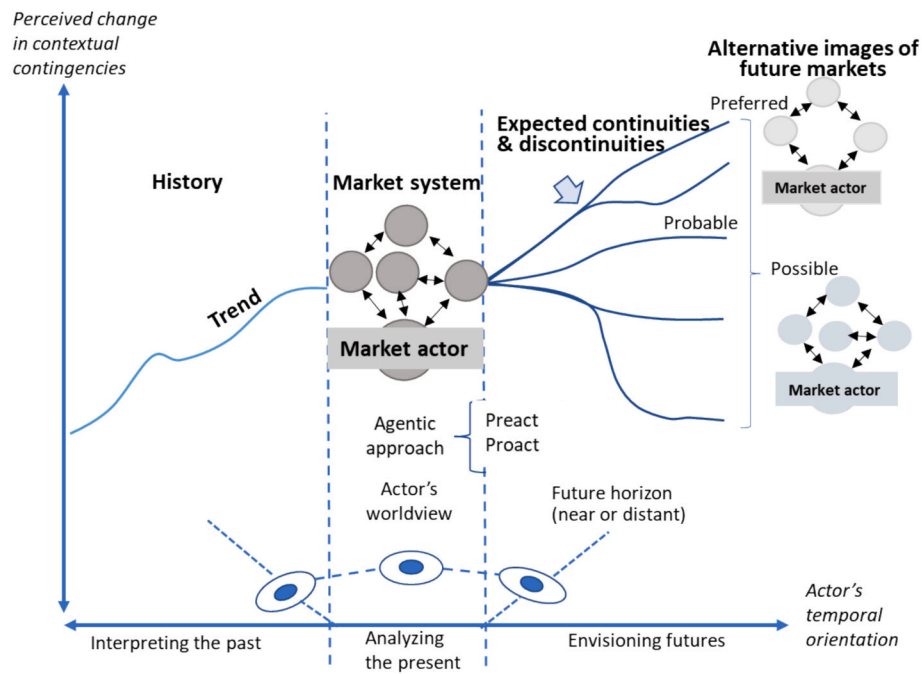


Fig. 1. A framework for analyzing market actors' mental models of future markets (Authors' own work).

illustrates, actors embedded in the same market can adopt markedly different temporal orientations, ranging from short-term operational focus to long-term anticipation of structural change.

Futures thinking identifies *various layers in the emerging context* (y-axis) (cf. Inayatullah, 2002; Voros, 2005; Voros, 2017). This resonates well with the need to examine markets (Möller et al., 2020) and market shaping (Nenonen & Storbacka, 2021) at multiple analytical levels—from macro-level megatrends, i.e., the large-scale, highly probable trends pointing to a common direction (Mittelstaedt et al., 2014), to micro-level capabilities, e.g., a firm's future preparedness (Rohrbeck & Kum, 2018). In the framework, *markets are considered complex and dynamic systems* (Möller et al., 2020; Vargo & Lusch, 2011), and futures thinking is seen to enhance the understanding of system interdependencies. As the agrifood example illustrates, futures thinking encourages attention to how contextual layers from macro-level climate and policy trends to *meso-level* supply-chain reconfigurations and micro-level farming practices interact in shaping emerging market conditions.

*History* matters while actors anticipate future market change. Recent organizational research indicates how historical consciousness shapes managers' views of future change and innovation (Sasaki & Ravasi, 2024). The weight of history not only manifests as path dependence grounded in objective events and past conditions such as structural inertia, coevolution, or institutional persistence (Dobusch & Schübler, 2013); it also appears as narratives used to legitimate future courses of action (Ravasi et al., 2019). History establishes a subjective and interpretative frame limiting managers' approach to future markets (Abrahamsen et al., 2023; Sasaki & Ravasi, 2024). As the agrifood example suggests, actors' interpretations of past market developments, shaped by historically developed production and logistics systems, influence how they envision future change while restricting the market trajectories they consider plausible or legitimate.

While analyzing the present, the actor interprets the contextual contingencies and how they influence the market system. While envisioning the future, the actor anticipates how these contingencies will develop and affect *the future market system*. This appears in *expected continuities*, e.g., megatrends and trends (Mittelstaedt et al., 2014), and *discontinuities* in trends, marked by events, e.g., wild cards or weak signals (Mendonça et al., 2004; Qi & Tapio, 2018). In sustainable agrifood markets, this can involve treating long-running shifts in consumer

demand or climate policy as continuities, while interpreting emerging technologies in soil monitoring or unexpected supply-chain disruptions as potential discontinuities that redirect future market development.

The framework highlights the influence of individual *actors' worldviews* on how they perceive the past, present, and future. An actor's worldview includes a variety of technology-, strategy, business model-, and identity-related mental models that moderate their interpretations of contextual contingencies (Penttilä et al., 2020). In addition, moral values influence what people consider a better future (Ahvenharju et al., 2018), shaping how a company imagines its preferred future markets. For instance, in shaping sustainable markets, a broadened value base and hybrid targets that combine environmental and social impacts with commercial objectives are necessary (Nesterova, 2021; Syväri et al., 2025). Mental models of future markets are not neutral. They encode what actors believe is possible, probable, or preferable. These embedded assumptions shape how actors interpret unfolding events, prioritize market-shaping actions, and respond to competing visions. As the agrifood example illustrates, one actor may interpret regenerative farming practices as essential to a preferable future market, while another prioritizes efficiency and scale, leading them to envision a future where technological intensification and broader sustainability goals play vastly different roles in defining market progress.

*The agentic approach, whether preactive or proactive*, refers to market actors' anticipatory behavior and highlights their crucial role in shaping the market. Market actors have a dual role as observers and interpreters of contextual change, as well as active participants in shaping future markets in line with their worldviews (Godet & Roubelat, 1996; Poli, 2017). While unexpected events may trigger reactive adaptations, the anticipatory activities—the preactive and proactive behavior—are characteristic of market shaping. To create or transform a market, the actor needs to decide how to approach the future by preparing to it and proactively shaping it. Preparing for the future enhances market actors' flexibility and resilience regarding systemic change (Blessley & Mudambi, 2022); however, intentionally shaping the market must be augmented into a proactive approach, such as when market shaping is chosen as a strategy (Brege & Kindström, 2020; Flaig et al., 2021). Ultimately, it is a question of a continuum rather than two different or unconnected approaches.

*Alternative images of future markets* as possible, probable, or

preferable, serve equally well for a single actor's strategizing and collective market-shaping efforts (Möller et al., 2020). In an ideal world, market actors should consider a range of possible future markets when engaging in visioning. The less probable the preferred future market is, the more extensive market shaping efforts are required. Relating to the agrifood market, one actor may adopt a preactive stance by preparing for expected shifts in consumer demand or regulation, approving several possible scenarios as preferable, while another pursues a proactive approach by investing in new production models or certification schemes designed to steer the market toward the preferred future.

In sum, the proposed framework suggests that envisioning future markets and the market-shaping actions required to realize them should be central topics to market-shaping studies. The framework can be applied to understand how managers create mental models of future markets—specifically, how they create images of future markets and envision trajectories toward them. Importantly, it helps analyzing how firms and organizations perform market visioning for strategic purposes: which kinds of scenarios are (or are not) built and which are seriously considered in the market-shaping endeavor. The framework enables projecting market actors and their context into potential futures, informing them of alternative future markets and helping them choose their preferred futures. Alternatively, by changing the vantage point, the framework enables projecting a preferred future into present actions, thus facilitating the intentional shaping of that future (Ahvenharju et al., 2021).

## 5. Discussion

### 5.1. Theoretical contributions

This study shows that the idea of future markets as targets of intentional efforts has largely been neglected in market-shaping research. Future orientation is inherent to the concept of market-shaping, but research rarely addresses it; it has not been problematized in conceptual studies and has only very recently become an object of empirical research (Bulawa & Jacob, 2024; Purchase et al., 2024). Studies adopting a market shaper's perspective on envisioned alternative markets have given way to retrospective accounts of market shaping. These accounts treat the future as known and the path to it as a single possible trajectory rather than an interplay of contingencies and actors navigating among a set of alternative scenarios. Therefore, we conclude that our understanding of how market shapers envision future markets and market-shaping processes over time remains limited. Key questions—such as how market actors construct mental models of future markets, what shapes these models, and how such future-oriented cognitive structures emerge and evolve—have largely gone unanswered. While we appreciate the substantial contributions of prior market-shaping research, the limited attention to actors' mental models of future markets leaves a significant blind spot, constraining the field's ability to fully account for the intentional, forward-looking nature of market shaping.

To bridge the gap between theoretical assumptions and empirical research in market shaping, we adapted ideas from futures research. We introduced onto-epistemological assumptions of futures thinking for market-shaping studies in particular. These assumptions provide a foundation for advancing the philosophical underpinnings of the market-shaping field and strengthening its conceptual development. We proposed a framework for analyzing market actors' mental models of future markets to further support forward-looking theorizing and empirical research.

The framework covers the dimensions of futures thinking necessary for anticipating market change and envisioning future markets: contextual contingencies, active agency, and deliberate future orientation. The framework enriches research with concepts enabling the study of market actors' mental models of future markets—the images of future markets and the trajectories required to realize them. A robust

framework based on the new onto-epistemological foundation allows for considering short- and long-term views of future markets, as well as seeing contextual contingencies at multiple levels of the market and its broader context. We maintain that the framework is a valuable analytical tool for researchers interested in studying market shaping as an intentional strategic activity.

With these contributions, our study aims to address scholarly calls to explore market shapers' future intentions (Hawa et al., 2020) and market visions (Kohli & Jaworski, 2023). Intentions and visions are closely linked to the concept of agency (Hawa et al., 2020; Rindova & Martins, 2022) and, according to recent empirical evidence, inform market-shaping actions (Abrahamsen et al., 2023; Kindström et al., 2023; Syväri et al., 2025). Elaborating on Hawa et al.'s (2020) ideas related to actors 'conducting' market shaping toward a predetermined future goal, we suggest that instead of future-oriented intentions, scholars should pay more attention to the nature and role of a market actor's mental models of alternative future markets. By placing mental models at the center of inquiry, this research reframes market shaping not only as a strategic or institutional process, but also as a fundamentally cognitive endeavor. Mental models serve as the interpretive foundation enabling strategic market-shaping efforts in uncertain environments. Without such models, there is a risk of overestimating the coherence of future visions and overlooking how limitations in mental models may ultimately lead to failure in market-shaping initiatives.

Regarding market visions, our study underscores the value of envisioning multiple alternative future markets rather than a single preferred market vision, as is customary in market-shaping research (cf. Flaig et al., 2021; Kohli & Jaworski, 2023; Kleinaltenkamp et al., 2021). Notably, from a market actor's viewpoint, multiple envisioned markets may be considered preferable. Mental models of future markets may extend to distant futures and represent imaginary rather than concrete, well-defined targets for market shaping (cf. Bajde et al., 2022; Luri et al., 2023). Besides market visions, they may also relate to possible, probable, or highly undesirable future markets. These other types of future markets may be less effective than market visions in driving immediate action, but they are relevant and influential enough to direct market development in the long term.

While sharing the views of Hawa et al. (2020) and Kohli and Jaworski (2023) that a future-oriented perspective in market shaping is lacking, we further argue that a variety of future-oriented concepts are needed to enhance market-shaping research. Our study offers, among other things, alternative future markets (possible, probable, and preferable), market actors' worldviews, and preactive and proactive agency as valuable conceptual tools for enhancing market-shaping research. In a broader assessment, our study elaborates on the theory (Kozlenkova et al., 2025) by integrating futures thinking into the market-shaping literature to advance conceptual development in this research field. By applying an interdisciplinary theory adaptation methodology (Huutoniemi et al., 2010; Jaakkola, 2020), the study establishes the relevance of futures thinking in market shaping theory, enhancing its explanatory power, conceptual accuracy, and applicability (Kozlenkova et al., 2025).

Our study, for its part, fills the need for theoretical frameworks that address how firms and organizations construct mental models of future markets in disrupted and continuously changing markets (Rindova & Martins, 2022). The turbulence of recent years has demonstrated that the future cannot be fully anticipated or controlled (Wenzel et al., 2020) but needs to be imagined in various alternative forms. Our framework suggests that actors' mental models of future markets will likely change over time due to shifting contextual contingencies, the adopted agentic approach, and the future time horizon.

Our study also resonates with recent calls to adopt corporate foresight methods and "a broadened scope of environmental scanning" in the study of markets (Möller et al., 2020, p. 391). The proposed framework applies to corporate and strategic foresight activities, especially for envisioning alternative futures through scenario planning

procedures and for scanning for weak signals and wild cards. Our study also adds a new, market-focused framework to corporate foresight research—a field in which scholars have called for a deeper understanding of how foresight is integrated into companies’ strategic planning and innovation processes (Marinković et al., 2022). Market innovation is the ultimate target of market shaping.

Together, our contributions enable a shift from the current retrospective view to a forward-looking perspective in market-shaping studies. To further support this target, we propose a research agenda for future-oriented market-shaping studies.

### 5.2. Future research agenda

Futures thinking challenges researchers to extend the prevailing implicit view of the future by posing questions that foster a temporally prolonged and contextually deeper understanding of market actors’ mental models of future markets. We recognize that the relationship between market actors’ mental models and the various contextual contingencies affecting them is bidirectional and dynamic. While mental models may guide actors’ market-shaping efforts, we also consider that contextual disruptions and emergent society-level narratives may reshape them over time. Accordingly, we frame this relationship as bidirectional and highlight the need for future empirical research to explore this dynamic.

Our study also highlights the need to select methods and approaches specifically designed for futures research. While existing market-shaping studies have largely relied on retrospective analyses, a growing need exists to incorporate methodologies that address the uncertainty, complexity, and dynamism of future markets. Based on the identified research gaps, we propose a research agenda for future empirical research (Table 2). Proposing appropriate concepts from futures research and integrating innovative methodological approaches used in recent studies, this agenda provides a structured roadmap for advancing market-shaping research toward a forward-looking perspective.

We hope our research inspires market-shaping scholars to engage in empirical studies that delve into visionary, future-oriented accounts of market shaping. These studies would focus broadly on scenarios, images, and envisioned trajectories regarding uncertain future markets and examine the purposeful actions and collaborative efforts required for preferred future markets to materialize. Clearly, the current concepts and methods of market-shaping studies are insufficient for future-oriented research. Strengthening interdisciplinary dialogue between futures research and market-shaping studies would greatly facilitate the application of the proposed research assumptions and framework.

### 5.3. Managerial implications

Futures thinking supports managers in taking an open approach to alternative futures, encouraging them to consider what the company needs to do to achieve the preferred future or cope with less attractive ones. Such a forward-looking perspective is crucial in the contemporary, highly volatile, and complex business environment, where companies are also expected to contribute to resolving global problems. In these conditions, market-shaping actors face a constant need to create new models and reinvent earlier mental models of how markets could or should be developed.

While primarily intended for scholarly use, the proposed framework also offers practical insights for managers and policymakers, equipping them with the tools to systematically anticipate and envision future markets. Referring to the weight of history and past trends, the framework suggests that market actors need to understand market realities and their position in the market before envisioning alternative future markets: possible, probable, or preferable. Individual actors are not free from their worldview while envisioning alternatives; therefore, to enable the formation and transformation of markets, actors’ values should be openly discussed and mental models carefully analyzed.

**Table 2**  
Research agenda for future-oriented market-shaping research.

Research gap	Potential research questions	Suggested relevant futures thinking concepts	Examples of future-oriented methodological approaches
Limited understanding of how managers construct mental models of future markets	How do market actors develop mental models of future markets over time? What kinds of mental models do they develop, and what types of visions do they seek to realize?	<i>Future images</i> ‘Snapshots’ of potential futures that people construct based on their beliefs, values, hopes, fears, knowledge, and imagination (Jokinen et al., 2022)	Longitudinal real-time studies incl. interviews, participatory workshops, and meeting observations (Jokinen et al., 2022) Framing the future images regarding the generic futures—continuation, collapse, discipline, or transformation (Dator, 2009) Discourse analysis of company-generated strategy documents (Nurminen et al., 2024)
	How do market actors anticipate changes in contextual contingencies? How do these changes affect their mental models of future markets, their images of future markets, and their envisioned trajectories to them?	<i>Environmental scanning</i> An anticipatory activity where a company acquires “information about events, trends, and relationships in an organization’s external environment” (Choo 2001, p. 72; Haarhaus & Liening, 2020) <i>Scenario planning</i> An organizational process in which alternative future pathways of the organizational environment are crafted and used for long-term strategic planning (Bradfield et al., 2005)	Traditional SWOT, PESTEL, and Value Chain analyses (Marinković et al., 2022) Analyzing what kind of future signals are considered: megatrends, trends, wild cards, and weak signals (Mendonca et al., 2004) Scenarios and Delphi studies complemented by roadmaps, i.e., backcasting (Marinković et al., 2022) Scenario-planning workshops and related observations and interviews (Bowman & Parks, 2024) Hybrid use of prospective and retrospective interviews (Abrahamsen et al., 2023)
	How do market actors practice futures thinking in everyday organizational processes? What cognitive, social, and organizational factors influence managers’	<i>Prospective sensemaking</i> A cognitive-social process where managers identify and interpret environmental cues, relying on their experience while considering their future expectations (Sarpong et al., 2013)	Inductive case studies on firm-internal sensemaking processes and practices (Tapinos & Pyper, 2018) Futures consciousness survey for individuals (Lalot

(continued on next page)

Table 2 (continued)

Research gap	Potential research questions	Suggested relevant futures thinking concepts	Examples of future-oriented methodological approaches
	ability to envision alternative future markets?	<i>Futures consciousness</i> “The heightened awareness of what could and should happen in the future,” consisting of agency beliefs, time perspective, seeing future as alternatives, systems thinking and care for others (Ahvenharju et al., 2018, p. 2)	et al., 2021)
Limited understanding of how contextual contingencies imposed by market systems and the broader environment affect market actors’ mental models	How do expected discontinuities and market disruptions affect market actors’ mental models of future markets?	<i>Wild card &amp; weak signal analysis</i> “Wild cards refer to sudden and unique incidents that can constitute turning points in the evolution of a certain trend” (Mendonca et al., 2004, p. 201). Weak signals are the early warning signs of “potential change of a system toward an unknown direction” (Mendonca et al., 2004, p. 205).	Longitudinal real-time studies ( Blessley & Mudambi, 2022) Mixed methods of environmental scanning and Delphi studies (Qi & Tapio, 2018) Cognitive mapping methods, e.g., fuzzy cognitive maps ( Alonso-Garcia et al., 2021), or network pictures ( Abrahamsen et al., 2023)
	How do socio-technical imaginaries or promissory narratives affect the envisioning of future markets?	<i>Socio-technical transition pathways</i> Archetypes of transition paths in socio-technical systems based on differences in timing, agency, and the nature of multi-level interactions (Geels & Schot, 2007)	Qualitative narrative analysis of consultancy reports, media articles, and promotional videos (Bajde et al., 2022) Delphi studies ( Kaartemo & Nyström, 2021; Nyström & Kaartemo, 2022)
	How do different actors (firms, policymakers, consumers) collaborate in envisioning alternative future markets? How do they intervene in vision development, e.g., with competing visions of future markets?	<i>Collaborative foresight</i> Refers to joint constructive foresight activities conducted in a group in an organizational or interorganizational setting (Jokinen et al., 2022)	Survey among network members (Heger & Boman, 2015) Participatory futures workshops (Jokinen et al., 2022) or scenario workshops ( Nygrén, 2019)
	How and to what extent do market visions drive market shaping toward preferred markets?	<i>Vision</i> Visioning refers to developing “a vision as the more or less explicit claim or expression of a future that is idealised in order to mobilise present potential to move into the direction of	Combined retrospective and follow-up studies in firms (Syväri et al., 2025) Discourse analysis on market actors’ vision-building practices ( Purchase et al., 2024)

Table 2 (continued)

Research gap	Potential research questions	Suggested relevant futures thinking concepts	Examples of future-oriented methodological approaches
		this future” (van der Helm, 2009, p. 100).	Roadmapping as a form of backcasting ( Tuominen & Ahlqvist, 2010)

Market actors also need to consider which type of agentic approach they can realistically adopt. For intentional shaping of the market—preparing for change *ex ante* and proactively taking steps towards a preferred change—are necessary. Here, communicating a clear market vision, including an idea of the preferred market and potential trajectories to it, is valuable.

The framework’s underlying assumption is that anticipating and envisioning alternative future markets should prepare market actors for market changes and help them respond in an agile manner, eventually allowing them to shape the market in accordance with their vision. Any market actor should imagine various alternative futures and be prepared for continuous change in the markets and the business environment. Even the market vision—the preferred market—will likely change.

Futures thinking challenges managers to address the future more explicitly, discuss long-term company goals and paths, and eventually question and amend these goals. Research shows that managers find anticipating market changes challenging, even for periods of up to five years (Abrahamsen et al., 2023), let alone longer time spans (Voros, 2003). When coping with uncertainty, managers tend to focus on the near-term future, the next quarter, or simply surviving the next day (Czakon et al., 2023). Envisioning a more distant future requires accepting ambiguity and extensively using imagination (Augustine et al., 2019).

Firms and organizations are advised to use corporate foresight to support strategic decision-making, anticipate and envision future markets, and stimulate innovation (Marinković et al., 2022). Empirical studies show that foresight enhances market actors’ flexibility and resilience during environmental changes (Blessley & Mudambi, 2022; Haarhaus & Liening, 2020) and may help them disengage from negative path dependencies. If firms prepare for the future in proportion to the complexity and volatility of their environment, they will likely outperform their competitors (Rohrbeck & Kum, 2018).

By applying the proposed framework, managers and policymakers should be better equipped to understand how individuals and organizations continuously reconstruct their anticipations of future markets, which factors to consider when envisioning futures, and which agency-related decisions are fundamental to enacting market shaping as a strategy.

### Declaration of generative AI and AI-assisted technologies in the writing process

During the later stages of preparing this work, the authors used ChatGPT-4 and ChatGPT-5 language models to polish the manuscript’s English. After using this service, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

### CRediT authorship contribution statement

**Aino Halinen:** Writing – review & editing, Writing – original draft, Project administration, Conceptualization. **Valteri Kaartemo:** Writing – review & editing, Writing – original draft, Investigation. **Petri Tapio:** Writing – review & editing, Visualization, Data curation.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Acknowledgements

We gratefully acknowledge the financial support received from the Dr. h.c. Marcus Wallenberg Foundation for Research in Business Administration, Finland, the Foundation for Economic Education, Finland, and the Strategic Research Council (SRC) within the Research Council of Finland grant for TRANSFORM-AI (#372923).

## Appendix A. A brief futures-thinking lexicon for market-shaping research

Concept	Meaning in this study advocated for the context of market shaping	Sources in applicable futures, strategy, or market-shaping research
Anticipation To anticipate (verb)	Creating expectations of future market changes based on relevant contextual contingencies and other actors' agentic efforts and letting these assessments affect market actors' present decisions and activities	Beckert, 2021; Poli, 2017
Visioning and envisioning To envision (verb)	Visioning refers to a cognitive-social process through which market actors construct, revise, and explore mental models of future markets. Visioning typically refers to strategic and organizational foresight processes, whereas envisioning denotes the human activity of creating individual future images, emphasizing their imaginative and transient nature.	Abrahamsen et al., 2023; Möller & Svahn, 2009; Voros, 2003
Futures research (or futures studies)	A label for the field of academic knowledge production to separate it from organizational or strategic foresight. Futures research is an interdisciplinary field of study that examines and constructs images and scenarios of various alternative futures—possible, probable, or preferable—and outlines paths to them. Futures research is also interested in anticipatory processes that individuals, organizations, and communities perform while dealing with the uncertainty of the future.	Amara, 1981; Ahvenharju et al., 2018; Rubin & Kaivo-oja, 1999; Voros, 2003
Organizational (or strategic) foresight	A business-oriented approach to futures research that equips firms with insights into their evolving environment, enabling them to anticipate change and take proactive action. Application of futures thinking for practical purposes, e.g., strategic planning, and for managing the future.	Malaska & Holstius, 2009; Marinković et al., 2022; Qi & Tapio, 2018; Rohrbeck et al., 2015; Voros, 2003
Futures thinking	A deliberate orientation toward 'the time-to-come' adopted in futures research. Denotes a specific philosophical perspective to the future, its ontology (the nature of the future as core research phenomenon), and epistemology (how the future is known).	Amara, 1981; Bell, 1997; Malaska & Holstius, 2009; Poli, 2017; Voros, 2003
Mental model of markets	Mental models are structured but flexible forms of knowledge that allow individuals to make sense of novel or ambiguous environments. They support prediction and guide expectations and action, allowing market actors to know how their market operates and how they can relate to their business environment.	Becker et al., 2025; Mathieu et al., 2000; Toth et al., 2022
Mental models of future markets	Mental models of future markets refer to market actors' images of future markets (state) and envisioned trajectories toward these images (path). These models frame what is considered possible, probable, or preferable; hence, they profoundly shape how actors imagine, evaluate, and pursue market-shaping strategies.	Ahvenharju et al., 2021; Rohrbeck et al., 2015; Toth et al., 2022
Vision (or market vision)	A preferred future market. A market actor's mental model of the future market considered the most beneficial for the organization. Sometimes labeled as 'a market vision'.	Flaig et al., 2021; Kohli & Jaworski, 2023; van der Helm, 2009
Possible future market	A market actor's mental model of a future market constructed based on its knowledge, experience, and imagination of what is considered possible.	Amara, 1981; Voros, 2003
Probable future market	A market actor's mental model of a future market considered likely to happen. All probable futures are also possible.	Amara, 1981; Voros, 2003
Preferable (or desirable) future market	A market actor's mental model of a future market considered normatively and ethically desirable, e.g., aligned with the actor's or collective's social and ecological values. May or may not be possible.	Amara, 1981; Voros, 2003

## Data availability

No empirical data was used for the research described in the article.

## References

- Abrahamsen, M. H., Halinen, A., & Naudé, P. (2023). The role of visioning in business network strategizing. *Journal of Business Research*, 154, 113–334.
- Ahvenharju, S., Minkkinen, M., & Lalot, F. (2018). The five dimensions of futures consciousness. *Futures*, 104, 1–13.
- Alexander, N., & Doherty, A. M. (2021). Overcoming institutional voids: Maisons spéciales and the internationalization of proto-modern brands. *Business History*, 63(7), 1079–1112.
- Alonso-Garcia, J., Pablo-Marti, F., & Nunez-Barriopedro, E. (2021). Omnichannel management in B2B. Complexity-based model. Empirical evidence from a panel of experts based on Fuzzy Cognitive Maps. *Industrial Marketing Management*, 95, 99–113.
- Amara, R. (1981). The futures field. Searching for Definitions and boundaries. *The Futurist*, 15(1), 25–29.
- Andersson, P., & Mattsson, L. G. (2010). Temporality of resource adjustments in business networks during severe economic recession. *Industrial Marketing Management*, 39(6), 917–924.
- Araujo, L., Mason, K., & Spring, M. (2014). Expectations in networks: Market shaping devices of the driverless car. In *30th IMP Conference*. Bordeaux, France.
- Augustine, G., Soderstrom, S., Milner, D., & Weber, K. (2019). Constructing a distant future: Imaginaries in geoenvironment. *Academy of Management Journal*, 62(6), 1930–1960.
- Bajde, D., Nøjgaard, M., & Kuruoglu, A. P. (2022). The social thickening of market futures: Exploring the discursive work of drone visioners. *Marketing Theory*, 22(3), 311–332.
- Baker, J. J., & Nenonen, S. (2020). Collaborating to shape markets: Emergent collective market work. *Industrial Marketing Management*, 85, 240–253.
- Baker, J. J., & Nenonen, S. (2025). Shaping markets, shifting burdens: collective opportunism and asymmetrical market-shaping. *Journal of Macromarketing*, 02761467251388876.
- Baker, J. J., Storbacka, K., & Brodie, R. J. (2019). Markets changing, changing markets: Institutional work as market shaping. *Marketing Theory*, 19(3), 301–328.
- Becker, P. B., Laureiro-Martinez, D., & Zagorac-Uremović, Z. (2025). Thirty years of managerial mental representations: A review guiding conceptualization and future research. *Journal of Management*, 01492063251318260.
- Beckert, J. (2021). The firm as an engine of imagination: Organizational prospecting and the making of economic futures. *Organization Theory*, 2(2), Article 26317877211005773.
- Bell, W. (1997). *Foundations of futures studies, Human science for a new era*. New Brunswick, USA: Transaction Publishers.

- Blessley, M., & Mudambi, S. M. (2022). A trade war and a pandemic: Disruption and resilience in the food bank supply chain. *Industrial Marketing Management*, 102, 58–73.
- Bowman, G., & Parks, R. W. (2024). Between episodes of strategy: Sociomateriality, sensemaking, and dysfunction in a scenario planning process. *Journal of Business Research*, 179, Article 114690.
- Bradfield, R., Wright, G., Burt, G., Carins, G., & van der Heijden, K. (2005). The origins and evolution of scenario techniques in long range business planning. *Futures*, 37(8), 795–812.
- Brege, H., & Kindström, D. (2020). Exploring proactive market strategies. *Industrial Marketing Management*, 84, 75–88.
- Bulawa, N., & Jacob, F. (2024). The unfolding of conceivable practice trajectories as market-making opportunities. *Marketing Theory*, 14705931241291022.
- Bulawa, N., Mason, K., & Jacob, F. (2024). Should the wheel be reinvented? Market-referencing in the electric vehicle market charging infrastructure. *Journal of Business Research*, 185, Article 114826.
- Burr, T. C. (2014). Market-widening: Shaping total market demand for French and American bicycles circa 1890. *Marketing Theory*, 14(1), 19–34.
- Carlborg, P. J., Hasche, N., & Kask, J. (2021). Overcoming the business model transformation dilemma: Exploring market shaping and stabilizing strategies in incumbent firms. *Journal of Business & Industrial Marketing*, 36(13), 66–77.
- Chimenti, G. (2020). Conceptual controversies at the boundaries between markets: The case of ridesharing. *Consumption Markets & Culture*, 23(2), 130–153.
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Los Angeles: SAGE Publications.
- Czakon, W., Klimas, P., & Kawa, A. (2023). Re-thinking strategic myopia: A necessary condition analysis of heuristic and firm's performance. *Industrial Marketing Management*, 115, 99–109.
- Dator, J. (2009). Alternative futures at the manoa school. *Journal of Futures Studies*, 14(2), 1–18.
- de Jouvenel, B. (1967). *The art of conjecture*. London: Weidenfeld and Nicolson.
- Dobusch, L., & Schüller, E. (2013). Theorizing path dependence: A review of positive feedback mechanisms in technology markets, regional clusters, and organizations. *Industrial and Corporate Change*, 22(3), 617–647.
- Diaz Ruiz, C., & Makkar, M. (2021). Market bifurcations in board sports: How consumers shape markets through boundary work. *Journal of Business Research*, 122, 38–50.
- Eriksson, P. E., Larsson, J., Hedgren, E., & Christopher, C. (2026). Public clients creating lead markets for innovation towards sustainability transitions: Market-shaping in the Swedish construction sector. *Environmental Innovation and Societal Transitions*, 58, Article 101046.
- Esbjerg, L., Laursen, K. B., & Olsen, J. V. (2024). Great expectations: Intersecting markets, conflicting temporalities and the difficulty of shaping markets. *Journal of Marketing Management*, 40(17–18), 1740–1770.
- Flaig, A., Kindström, D., & Ottosson, M. (2021). Market-shaping strategies: A conceptual framework for generating market outcomes. *Industrial Marketing Management*, 96, 254–266.
- Flechtheim, O. K. (1971). *Futurologie. Der Kampf um die Zukunft*. Verlag Wissenschaft und Politik (2nd ed.). Köln: Verlag Wissenschaft und Politik.
- Friedrich, J., & Hendriks, A. (2024). Imagined futures in sustainability transitions: Towards diverse future-making. *Futures*, 164, Article 103502.
- Gary, M. S., & Wood, R. E. (2011). Mental models, decision rules, and performance heterogeneity. *Strategic Management Journal*, 32(6), 569–594.
- Gauthier, C., & Bally, F. (2025). Digitalization and power shift in the food market. *Journal of Business Research*, 186, Article 115039.
- Geels, F. W., & Schot, J. (2007). Typology of sociotechnical transition pathways. *Research Policy*, 36(3), 399–417. <https://doi.org/10.1016/j.respol.2007.01.003>
- Geiger, S., & Finch, J. (2016). Promissories and pharmaceutical patents: Agencing markets through public narratives. *Consumption Markets & Culture*, 19(1), 71–91.
- Geiger, S., & Gross, N. (2017). Does hype create irreversibility? Affective circulation and market investments in digital health. *Marketing Theory*, 17(4), 435–454.
- Godet, M. (2006). *Creating futures: Scenario planning as a strategic management tool* (2nd ed.). London: Economica.
- Godet, M., & Roubelat, F. (1996). Creating the future: The use and misuse of scenarios. *Long Range Planning*, 29, 164–171.
- Gümüşay, A. A., & Reinecke, J. (2022). Researching for desirable futures: From real utopias to imagining alternatives. *Journal of Management Studies*, 59(1), 236–242.
- Haarhaus, T., & Liening, A. (2020). Building dynamic capabilities to cope with environmental uncertainty: The role of strategic foresight. *Technological Forecasting and Social Change*, 155, Article 120033.
- Hawa, J., Baker, J., & Plewa, C. (2020). Composing markets: A framework of intentionality in market-shaping. *Journal of Business Research*, 121, 47–57.
- Halinen, A., Nordberg-Davies, S., & Möller, K. (2024). Time to look forward: Advocating future orientation in business network research. *Journal of Business & Industrial Marketing*, 39(3), 447–460.
- Heger, T., & Boman, M. (2015). Networked foresight—The case of EIT ICT Labs. *Technological Forecasting and Social Change*, 101, 147–164.
- Helmer, J., Hawa, J., & Plewa, C. (2025). Digital technology as market shaper: A typology of digital technology roles for shaping markets. *Electronic Markets*, 35(1), 1–21.
- Hill, R. C., & Levenhagen, M. (1995). Metaphors and mental models: Sensemaking and sensegiving in innovative and entrepreneurial activities. *Journal of Management*, 21, 1057–1074.
- Hoffman, A. J. (1999). Institutional evolution and change: Environmentalism and the US chemical industry. *Academy of Management Journal*, 42(4), 351–371.
- Huutoniemi, K., Klein, J. T., Bruun, H., & Hukkinen, J. (2010). Analyzing interdisciplinarity: Typology and indicators. *Research Policy*, 39(1), 79–88.
- Inayatullah, S. (2002). Layered methodology: Meanings, epistemes and the politics of knowledge. *Futures*, 34(6), 479–491.
- Jaakkola, E. (2020). Designing conceptual articles: Four approaches. *AMS review*, 10(1), 18–26.
- Jaworski, B., Kohli, A. K., & Sahay, A. (2000). Market-driven versus driving markets. *Journal of the Academy of Marketing Science*, 28(1), 45–54.
- Jaworski, B. J., Kohli, A. K., & Sarin, S. (2020). Driving markets: A typology and a seven-step approach. *Industrial Marketing Management*, 91, 142–151.
- Jokinen, L., Mäkelä, M., Heikkilä, K., Apostol, O., Kalliomäki, H., & Saarni, J. (2022). Creating futures images for sustainable cruise ships: Insights on collaborative foresight for sustainability enhancement. *Futures*, 135, Article 102873.
- Kaartemo, V., & Nyström, A. G. (2021). Emerging technology as a platform for market shaping and innovation. *Journal of Business Research*, 124, 458–468.
- Keränen, O., Lehtimäki, T., Komulainen, H., & Ulkuniemi, P. (2023). Changing the market for a sustainable innovation. *Industrial Marketing Management*, 108, 108–121.
- Kindström, D., Makkonen, H., & Kaartemo, V. (2023). Delineating the fuzzy front end of market shaping. *Industrial Marketing Management*, 112, 51–59.
- Kjeldgaard, D., Askegaard, S., Rasmussen, J. Ø., & Østergaard, P. (2017). Consumers' collective action in market system dynamics: A case of beer. *Marketing Theory*, 17(1), 51–70.
- Kjellberg, H., & Humphreys, A. (2025). Futures of market society, seeing and studying market topographies editorial for the special issue "Exploring futures of market society". *Journal of Business Research*, 200, Article 115667.
- Kjellberg, H., & Olson, D. (2017). Joint markets: How adjacent markets influence the formation of regulated markets. *Marketing Theory*, 17(1), 95–123.
- Kjellberg, H., Storbacka, K., Akaka, M., Chandler, J., Finch, J., Lindeman, S., Löbber, H., Mason, K., McColl-Kennedy, J., & Nenonen, S. (2012). Market futures/future markets: Research directions in the study of markets. *Marketing Theory*, 12(2), 219–223.
- Kleinaltenkamp, M., Conduit, J., Plewa, C., Karpen, I. O., & Jaakkola, E. (2021). Engagement-driven institutionalization in market shaping: Synchronizing and stabilizing collective engagement. *Industrial Marketing Management*, 99, 69–78.
- Kohli, A. K., & Jaworski, B. J. (2023). Market driving: Some directions for future research. *Industrial Marketing Management*, 113, 348–351.
- Kozlenkova, I. V., Warren, C., Kotha, S., Boghrati, R., & Palmatier, R. W. (2025). Conceptual research: Multidisciplinary insights for marketing. *Journal of Marketing*, 89(4), 1–20.
- Lalot, F., Ahvenharju, S., Minkkinen, M., & Wensing, E. (2021). Aware of the future? Development and validation of the futures consciousness scale. *Psychological Test Adaptation and Development*, 2(1), 102–110. <https://doi.org/10.1027/2698-1866/a000014>
- Luri, I., Kaliyamurthy, A. K., & Farmer, M. (2023). "Sometime in the future"—The technology entrepreneur as utopian market hero. *Marketing Theory*, 23(1), 99–118.
- Malaska, P., & Holstius, K. (2009). Modern futures approach. *Futura*, 28(1), 85–96.
- Mannermaa, M. (1998). Politics + science = futures studies? *American Behavioral Scientist*, 42(3), 427–435.
- Marinković, M., Al-Tabbaa, O., Khan, Z., & Wu, J. (2022). Corporate foresight: A systematic literature review and future research trajectories. *Journal of Business Research*, 144, 289–311.
- Mathieu, J. E., Heffner, T. S., Goodwin, G. F., Salas, E., & Cannon-Bowers, J. A. (2000). The influence of shared mental models on team process and performance. *Journal of Applied Psychology*, 85(2), 273–283.
- Mele, C., Pels, J., & Storbacka, K. (2015). A holistic market conceptualization. *Journal of the Academy of Marketing Science*, 43, 100–114.
- Mele, C., Russo-Spena, T., & Kaartemo, V. (2021). The impact of coronavirus on business: Developing service research agenda for a post-coronavirus world. *Journal of Service Theory and Practice*, 31(2), 184–202.
- Mendonça, S., eCunha, M. P., Kaivo-oja, J., & Ruff, F. (2004). Wild cards, weak signals and organisational improvisation. *Futures*, 36(2), 201–218.
- Mittelstaedt, J. D., Shultz, C. J., Kilbourne, W. E., & Peterson, M. (2014). Sustainability as megatrend: Two schools of macromarketing thought. *Journal of Macromarketing*, 34(3), 253–264.
- Mollinger-Sahba, A., Flatau, P., Schepis, D., & Purchase, S. (2021). Micro-processes of public good social innovation in the Australian social impact investment market. *Industrial Marketing Management*, 93, 428–445.
- Möller, K., Nenonen, S., & Storbacka, K. (2020). Networks, ecosystems, fields, market systems? Making sense of the business environment. *Industrial Marketing Management*, 90, 380–399.
- Möller, K., & Svahn, S. (2009). How to influence the birth of new business fields—Network perspective. *Industrial Marketing Management*, 38(4), 450–458.
- Mountford, N., & Geiger, S. (2024). Public actor roles in market experiments: Innovating digital health markets in New York and Ireland. *Journal of Business Research*, 183, Article 114825.
- Nenonen, S., Fehrer, J., & Brodie, R. J. (2021). Editorial: JBR special issue on market shaping and innovation. *Journal of Business Research*, 124, 236–239.
- Nenonen, S., & Storbacka, K. (2020). On the marketness of markets and actor clout: Market-shaping roles. *SMR-Journal of Service Management Research*, 4(2–3), 170–184.
- Nenonen, S., & Storbacka, K. (2021). Market-shaping: Navigating multiple theoretical perspectives. *AMS Review*, 11(3–4), 336–353.
- Nenonen, S., Storbacka, K., & Windahl, C. (2019). Capabilities for market-shaping: Triggering and facilitating increased value creation. *Journal of the Academy of Marketing Science*, 47, 617–639.
- Nenonen, S., Storbacka, K., & Fretthey-Bentham, C. (2019). Is your industrial marketing work working? Developing a composite index of market change. *Industrial Marketing Management*, 80, 251–265.

- Nesterova, I. (2021). Small firms as agents of sustainable change. *Futures*, 127, Article 102705.
- Nurminen, M., Mattila, M., & Närviäinen, E. (2024). Companies' future visions for circularity: A frame analysis based on Finnish front-runner CE companies. *Cleaner Production Letters*, 7, Article 100066.
- Nygrén, N. A. (2019). Scenario workshops as a tool for participatory planning in a case of lake management. *Futures*, 107, 29–44.
- Nyström, A. G., & Kaartemo, V. (2022). Developing Delphi methodology for studying future market change. *Journal of Business & Industrial Marketing*, 37(13), 124–141.
- Onyas, W. I. (2023). Enacting overlapping exchanges to address market concerns: Evidence on sustainable and conventional coffee markets in Uganda. *Marketing Theory*, 23(3), 411–435.
- Ottosson, M., Magnusson, T., & Andersson, H. (2020). Shaping sustainable markets—A conceptual framework illustrated by the case of biogas in Sweden. *Environmental Innovation and Societal Transitions*, 36, 303–320.
- Pedersen, C. L., Ritter, T., & Di Benedetto, C. A. (2020). Managing through a crisis: Managerial implications for business-to-business firms. *Industrial Marketing Management*, 88, 314.
- Penttilä, K., Ravald, A., Dahl, J., & Björk, P. (2020). Managerial sensemaking in a transforming business ecosystem: Conditioning forces, moderating frames, and strategizing options. *Industrial Marketing Management*, 91, 209–222.
- Poli, R. (2017). Introducing anticipation. In R. Poli (Ed.), *Handbook of Anticipation: Theoretical and Applied Aspects of the Use of Future in Decision Making* (pp. 3–15). Switzerland, Cham: Springer Nature.
- Purchase, S., Schepis, D., & Ellis, N. (2024). Prospective market shaping: A discursive analysis of possible future autonomous vehicle markets. *Industrial Marketing Management*, 122, 37–47.
- Qi, Y., & Tapio, P. (2018). Weak signals and wild cards leading to transformative disruption: A consumer Delphi study on the future of e-commerce in China. *World Futures Review*, 10(1), 54–82.
- Ravasi, D., Rindova, V., & Stigliani, I. (2019). The stuff of legend: History, memory, and the temporality of organizational identity construction. *Academy of Management Journal*, 62(5), 1523–1555.
- Rindova, V. P., & Martins, L. L. (2022). Futurescapes: Imagination and temporal reorganization in the design of strategic narratives. *Strategic Organization*, 20(1), 200–224.
- Robinson, J. B. (1990). Futures under glass: A recipe for people who hate to predict. *Futures*, 22(8), 820–842.
- Rohrbeck, R., & Kum, M. E. (2018). Corporate foresight and its impact on firm performance: A longitudinal analysis. *Technological Forecasting and Social Change*, 129, 105–116.
- Rohrbeck, R., Battistella, C., & Huizingh, E. (2015). Corporate foresight: An emerging field with a rich tradition. *Technological Forecasting and Social Change*, 101, 1–9.
- Rubin, A. (2013). Hidden, inconsistent, and influential: Images of the future in changing times. *Futures*, 45, S38–S44.
- Rubin, A., & Kaivo-Oja, J. (1999). Towards a futures-oriented sociology. *International Review of Sociology*, 9(3), 349–371.
- Sarpong, D., Maclean, M., & Alexander, E. (2013). Organizing strategic foresight: A contextual practice of 'way finding'. *Futures*, 53, 33–41.
- Sasaki, I., & Ravasi, D. (2024). Historical consciousness and bounded imagination: How history inspires and shapes innovation in long-lived firms. *Academy of Management Discoveries*, 10(1), 59–90.
- Storbacka, K., & Nenonen, S. (2011). Markets as configurations. *European Journal of Marketing*, 45(1/2), 241–258.
- Syväri, M., Tähtinen, J., & Nordberg-Davies, S. (2025). Enacting 'true business sustainability' – Market shaping for environmental impact. *Journal of Business Research*, 186, Article 114949.
- Tapinos, E., & Pyper, N. (2018). Forward looking analysis: Investigating how individuals 'do' foresight and make sense of the future. *Technological Forecasting and Social Change*, 126, 292–302.
- Tapio, P., & Hietanen, O. (2002). Epistemology and public policy: Using a new typology to analyse the paradigm shift in Finnish transport futures studies. *Futures*, 34(7), 597–620.
- Tóth, Z., Biggemann, S., & Williams, M. (2022). Unintentionality in market shaping—A multiple case study of touring exhibitions from New Zealand, Australia, and the United Kingdom. *Industrial Marketing Management*, 103, 117–129.
- Tuominen, A., & Ahlqvist, T. (2010). Is the transport system becoming ubiquitous? Socio-technical roadmapping as a tool for integrating the development of transport policies and intelligent transport systems and services in Finland. *Technological Forecasting and Social Change*, 77(1), 120–134.
- Van der Helm, R. (2009). The vision phenomenon: Towards a theoretical underpinning of visions of the future and the process of envisioning. *Futures*, 41(2), 96–104.
- Vargo, S. L., & Lusch, R. F. (2011). It's all B2B... and beyond: Toward a systems perspective of the market. *Industrial Marketing Management*, 40(2), 181–187.
- Voros, J. (2003). A generic futures research process framework. *Futures research*, 5, 10–21.
- Voros, J. (2005). A generalised "layered methodology" framework. *Foresight*, 7(2), 28–40.
- Voros, J. (2007). On the Philosophical foundations of futures research. In P. van der Duin (Ed.), *Knowing Tomorrow?: How Science Deals with the Future* (pp. 69–90). Delft, The Netherlands: Eburon Academic Publishers.
- Voros, J. (2017). Big History and anticipation: Using Big History as a framework for global foresight. In R. Poli (Ed.), *Handbook of Anticipation: Theoretical and applied aspects of the use of future in decision making*, chapter 95, Springer International. DOI: 10.1007/978-3-319-31737-3\_95-1.
- Wenzel, M., Krämer, H., Koch, J., & Reckwitz, A. (2020). Future and organization studies: On the rediscovery of a problematic temporal category in organizations. *Organization Studies*, 41(10), 1441–1455.
- Windahl, C., Karpen, I. O., & Wright, M. R. (2020). Strategic design: Orchestrating and leveraging market-shaping capabilities. *Journal of Business & Industrial Marketing*, 35(9), 1413–1424.
- Yang, I. C. M., Ismail, A. S., & French, J. A. (2022). Reproduction as consumption: Unravelling the sociological shaping of reproductive tourism market in China. *Journal of Marketing Management*, 38(5–6), 515–543.

**Dr. Aino Halinen** is Professor of Marketing at Turku School of Economics, University of Turku, Finland. Her current research focuses on visioning and sustainability in business markets and networks. Her earlier studies on relationship marketing and management, professional service marketing, business network dynamics, longitudinal research methodology and b2b research paradigms have been published in acknowledged journals such as *Journal of Management Studies*, *Journal of Business Research*, *Industrial Marketing Management*, and *Journal of Service Management*. <https://www.utu.fi/en/people/aino-halinen-kaila>

**Dr. Valtteri Kaartemo** is an Associate Professor of Marketing (tenure track) at Tampere University, Finland. His current research focuses on market shaping and the role of technology in markets, service experiences, and value cocreation. His earlier studies on market dynamics, service ecosystems, and future markets have been published in acknowledged journals such as *Industrial Marketing Management*, *Journal of Business Research*, and *Journal of Service Management*. <https://researchportal.tuni.fi/fi/persons/valtteri-kaartemo/>

**Dr. Petri Tapio** is Professor of Futures Research at Finland Futures Research Centre, at Turku School of Economics, University of Turku. His research interests lie in futures research methodology and the alternative futures of transport, energy and agri-food from the sustainability point of view. His specialty is in facilitating systematic mixed method stakeholder discussions to create scenarios and images of the future. His work has been published in numerous acknowledged journals in the field of futures research and policy including *Technological Forecasting and Social Change*, *Futures*, and *Transport Policy*. He is the co-editor of the book *Transdisciplinary Sustainability Studies: A Heuristic Approach* (Routledge). <https://www.utu.fi/en/people/petri-tapio>