



The market-shaping potential of a crisis

Carsten Lund Pedersen^{a,b}, Thomas Ritter^{c,*}

^a Department of Marketing, Copenhagen Business School, Solbjerg Plads 3, DK-2000 Frederiksberg, Denmark

^b Department of Business IT, IT University of Copenhagen, Rued Langgaards Vej 7, DK-2300 Copenhagen S, Denmark

^c Department of Strategy and Innovation, Copenhagen Business School, Kilevej 14A, DK-2000 Frederiksberg, Denmark

ARTICLE INFO

Keywords:

Market shaping
Resilience
Responsiveness
Crisis
Strategy

ABSTRACT

A crisis, like the COVID-19 pandemic or a cyber attack, not only creates the necessity for crisis management in business-to-business firms aimed at addressing the immediate challenges, but also offers opportunities to shape business markets by changing exchanges, collaborations, and institutions. In order to develop a conceptual framework to capture the market-shaping potential of a crisis, we integrate insights from risk management and strategic management, and discuss their implications for market shaping. As such, this paper builds a bridge between the reactive nature of crisis management during a crisis and proactive market shaping, and offers new insights into market shaping based on an underutilized source of inspiration, namely crisis management. Based on resilience (from risk management) and responsiveness (from strategic management), we propose four market-shaping opportunities. Beyond the theoretical novelty of contributing to our understanding of market shaping based on crisis management, our framework has managerial implications for market shaping and highlights a set of interesting research questions that can guide future studies.

1. Introduction

In addition to being resilient and adaptive, firms should also utilize shocks such as COVID-19 to generate new business opportunities... This malleability, in turn, creates multiple opportunities for firms to shape their markets and hence drive the market's development in favorable directions.

(Nenonen & Storbacka, 2020, p. 265)

As this quote suggests, the COVID-19 pandemic is an external event that has required many firms to continually react in a timely manner by, for instance, being resilient or adaptive. Many of the impacts of the pandemic are sector specific (e.g., higher profits in online supermarkets and IT services; lower profits in business travel and industry fairs). As such, the pandemic entails both threats and opportunities for companies. Ritter and Pedersen (2020) differentiate among potential impacts that capture the COVID-19-infused outcome spectrum, which ranges from devastating effects to profitable growth. This view corresponds with the Chinese word for “crisis,” which entails one brush stroke for “danger” and another for “opportunity.”¹

While external shocks and disruptions may have both positive and

negative impacts, the literature on crisis management generally focuses on the negative impacts and the managerial issues that are associated with avoiding or mitigating those effects. In line with recent work (Pedersen, Ritter, & Di Benedetto, 2020, p. 315), we define a crisis as “a sequence of events that can have substantial negative consequences if not managed appropriately.” Given this definition, crisis management inherently involves reactions to a sequence of events and the mitigation of potential negative consequences based on the perceptions of those consequences. Therefore, whether a sequence of events is considered a crisis depends not only on the events per se but also on the perceptions of those events and their consequences. Therefore, the same events may be regarded differently by different actors, as actors vary in their perceptions of those events and their consequences.

The events causing a crisis may also interrupt the stasis of a market system by forcing it “into movement” and, in so doing, create malleability in market-shaping behavior (Nenonen & Storbacka, 2020; for market shaping, cf. also, e.g., Baker & Nenonen, 2020; Kindström, Ottosson, & Carlborg, 2018; Kumar, Scheer, & Kotler, 2000; Maciel & Fischer, 2020; Peters, Nenonen, Polese, Frow, & Payne, 2020). The shape of a market is altered “by re-designing the content of exchange, and/or re-configuring the network of stakeholders involved, and/or re-

* Corresponding author.

E-mail address: ritter@cbs.dk (T. Ritter).

¹ <https://www.jfklibrary.org/archives/other-resources/john-f-kennedy-speeches/indianapolis-in-19590412>

forming the institutions that govern all stakeholders’ behaviors in the market” (Nenonen, Storbacka, & Windahl, 2019, p. 618). Such alterations of market shape can be observed in relation to the COVID-19 pandemic. For instance, in-person maintenance services have been replaced with online customer tutorials (re-design of exchange), global suppliers have been replaced with local suppliers (re-configuration of the network), and social-distancing rules governing personal interactions have been introduced by authorities that formerly did not govern market behavior (re-forming institutions). As such, the pandemic shows that reactive crisis management and proactive market shaping coexist.

We are interested in how an organization’s crisis management may affect its market shaping—that is, whether the organization is proactive and engages in “purposive actions” (Nenonen et al., 2019, p. 618) aimed at changing the defining elements of a market. The business-marketing literature has surprisingly little to offer on crisis management (Pedersen et al., 2020). Moreover, crisis management has not yet been sufficiently discussed in terms of market shaping (for a notable exception, see Nenonen & Storbacka, 2020). Thus, we lack an understanding of the different crisis-management options, which might help explain market-shaping behavior. More specifically, a review of theories on resilience and responsiveness can inform the market-shaping literature by providing an understanding of how crisis management can create market-shaping potential.

In this paper, we demonstrate how crisis-related research from the fields of risk management (i.e., *resilience*; see, e.g., Aven, 2011; Haimes, 2009) and strategic management (i.e., *responsiveness*; see, e.g., Bettis & Hitt, 1995; Teece, Pisano, Shuen, & David Teece, 1997) may inform market management (i.e., *market shaping*; see, e.g., Baker & Nenonen, 2020; Nenonen & Storbacka, 2020), where resilience and responsiveness are reactive behaviors in light of a crisis, and market shaping is a proactive behavior aimed at developing a market into its future form. In other words, resilience and responsiveness respond to a sequence of events that may have negative effects on the organization, whereas market shaping reflects the view of the market as an object for proactive, purposive actions. We contend that companies can leverage a crisis as a market-shaping opportunity and that the set of market-shaping choices at their disposal is predicated upon their crisis management. In other words, reactive behaviors during a crisis (i.e., the pursuit of resilience or responsiveness strategies) provide a basis for the pursuit of proactive market-shaping opportunities.

We follow Jaakkola (2020) in integrating resilience and responsiveness (method theories) with market shaping (domain theory) by paying close attention to their commonalities. This paper makes two main contributions to the market-shaping literature. First, we introduce the paradox of “reactive market shaping,” which suggests that reactive crisis management is not meant to shape markets but may still do so. Second, we develop a conceptual framework that combines the dimensions of resilience and responsiveness, and classifies four managerial options in crisis management in order to determine how they can inform market-shaping opportunities. In this regard, we respond to Swedberg’s (2012) call for theorizing that involves more creative discovery than justification through falsification or verification based on empirical testing.

The article proceeds as follows. First, we conceptualize the dimensions of crisis management based on a combination of risk-management and strategic-management literature. We identify four options available to organizations when responding to a crisis. Second, we introduce the notion of market shaping and discuss the four crisis-management options in terms of their market-shaping potential. Finally, we discuss managerial implications and questions for future research.

2. Conceptualization of crises and crisis management

2.1. Crisis

In line with established work (Pedersen et al., 2020, p. 315), we define a crisis as “a sequence of events that can have substantial negative consequences if not managed appropriately.” This definition encompasses three defining elements of a crisis. First, a crisis is triggered by a sequence of observable events. This allows for between-actor variations in the observation of events. Second, the events need to carry the potential for substantial negative consequences. In other words, there must be a potential threat. Third, there is an opportunity to manage the crisis in a way that mitigates (some of) the consequences. This means that the actor can benefit from taking action.

Crises can be classified according to their nature (i.e., underlying causes and time horizons; see Fig. 1). For instance, a crisis can be categorized as man-made or inflicted by nature (e.g., Rosenthal & Kouzmin, 1993), and a crisis can be sudden (i.e., unexpected, happens overnight) or smoldering (i.e., structural and slowly developing) (e.g., James & Wooten, 2005). Consequently, a typology with four different types of crises emerges. As suggested by the matrix, a crisis can take different forms with varying implications for firms.

While most firms have been affected by the COVID-19 pandemic and the subsequent lockdowns and restrictions, they differ in terms of the pandemic’s impact on their businesses. Some have benefitted from the pandemic (e.g., streaming, home delivery, online communication), while others have experienced grave consequences (e.g., airlines, restaurants, event venues). Crises may affect business models in six ways, ranging from antifragile to retired (Ritter and Pedersen, 2020). Our main focus in this paper is on crisis management and, therewith, on managerial issues triggered by a crisis’ potential negative consequences. In contrast, Nenonen and Storbacka (2020) refer to the pandemic as a “shock” rather than a “crisis” and thus include potential positive outcomes. As such, they address a broader spectrum of situations than permitted by the term “crisis,” including situations in which companies discover that there are mainly positive outcomes and opportunities to exploit based on their current capabilities, rather than only focusing on negative outcomes of external events (e.g., crises).

Moreover, firms may experience “a crisis” differently in terms of

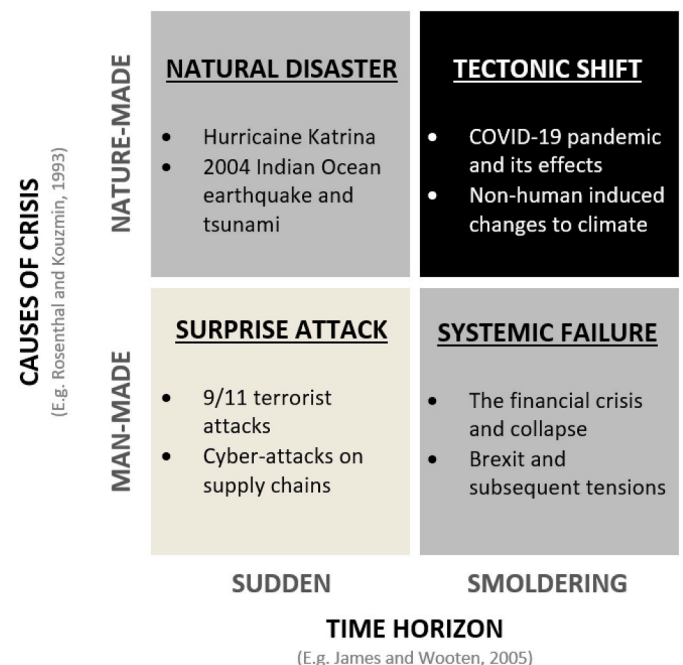


Fig. 1. Generic crisis typology.

various sub-crises as well as the impact and duration of the crisis phases (Pedersen et al., 2020; Ritter & Pedersen, 2020). Another difference among crises is the extent to which human lives are concerned. In contrast to financial crises, the direct threat the pandemic poses to human beings is unique and requires a new approach to managing business operations (e.g., Cortez & Johnston, 2020). While an understanding of such differences is important in the analysis of a given crisis, for the remainder of this paper, we discuss crisis management in a general way without linking it to a particular type of crisis. As such, more detailed arguments and empirical tests would be welcomed extensions of the arguments advanced here.

2.2. Crisis management as method theory

We contend that a crisis essentially represents a sub-category of market-shaping situations, as companies in trouble engage in reactive crisis management but their actions may simultaneously trigger proactive market-shaping behavior. Consequently, market shaping can be seen as a domain theory to which crisis management is added as a method theory. This study therefore follows the pattern of a “theory-synthesis” study, which “seeks to achieve conceptual integration across multiple theories or literature streams” with the aim of offering “a new or enhanced view of a concept or phenomenon by linking previously unconnected or incompatible pieces in a novel way” (Jaakkola, 2020, p. 21). Here, the phenomenon of interest is market-shaping opportunities during a crisis. As such, the domain theory to which we seek to contribute is market shaping.

The method theories are those of resilience and responsiveness. In other words, we consider definitions and arguments from resilience and responsiveness to explain opportunities for market shaping. Moreover, this theory-synthesis paper “represents a form of theorizing that emphasizes narrative reasoning that seeks to unveil ‘big picture’ patterns and connections rather than specific causal mechanisms” (Jaakkola, 2020, p. 21). The commonalities among resilience, responsiveness, and market shaping are two-fold. First, they are all comprised of discrete capabilities, which implies that routines and learning underlie all three concepts. Second, they are all relevant in a crisis, as they help withstand (resilience), adapt to (responsiveness), and form (market shaping) changes in the environment. However, they differ in that resilience and responsiveness are discussed as reactions to events, whereas market shaping proactively introduces changes to the market and the environment. In the following, we explain the two method theories before we integrate them with the domain theory.

2.3. Resilience in the risk-management literature

The literature on risk management focuses on assessing risk and mitigating its adverse effects (Covello & Mumpower, 1985). As noted by Covello and Mumpower (1985), epidemics have played an important role in the development of the academic field and the practice of risk management. The risk-management literature² has long suggested ways to withstand disturbances and to facilitate continued operations in the face of environmental change, or to recover within an acceptable period of time with acceptable costs and risks (Haimes, 2009).

The definition of resilience is extensively debated in the risk-management literature (e.g., Aven, 2011; Wied, Oehmen, & Welo, 2020). For instance, Wied et al. (2020) analyzed 251 definitions of resilience and found that research in this field is fragmented. Manyena (2006, p. 437) states that “resilience has been generally defined in two broad ways: as a desired outcome(s) or as a process leading to a desired

² While often described as a subdiscipline in finance, risk management is increasingly viewed as both a practical discipline and an academic field of study, as suggested by designated journals such as *Risk Analysis* and *Risk Management*.

outcome(s),” but also emphasizes that “the distinction may seem unnecessary.” Resilience is often applied as the antithesis of “vulnerability,” in which a system reacts adversely to disruptive events. Despite the diversity in definitions, resilience is generally acknowledged as referring to the capacity to withstand a disturbance or to recover after a disturbance has become manifest (Manyena, 2006; Sheffi & Rice, 2005). We adopt this view in our conceptualization in which we consider robustness (to withstand) and recovery (to rebound) as two dimensions of resilience.

2.4. Responsiveness in the strategic-management literature

The strategy discipline’s emphasis on responsiveness has much to offer to the field of crisis management, as this literature stream highlights how firm adaptation is positively related to firm performance in volatile environments. Consequently, it can provide a crisis-management option that highlights the strategic importance of adaptation in the face of a crisis. In terms of firms’ reconfigurations and adaptations in response to change, the literature on responsiveness stresses that strategic-response capabilities (Andersen & Bettis, 2015; Andersen, Denrell, & Bettis, 2007; Bettis & Hitt, 1995), adaptive decision-making (Volberda, 1996), and dynamic capabilities (Teece et al., 1997) are important drivers of organizational performance in changing environmental settings. While each construct entails idiosyncratic operationalizations, they all rest on the conceptual commonality that firms must be adaptive to their environments in order to maintain above-average performance.³ This focus is fundamentally different from resilience, as the strategic-management literature focuses on changing the organization to better fit a changing environment as opposed to withstanding changes through robustness and efficiently re-establishing operations through recovery.

The strategic-management literature generally addresses adaptation to changing environments using two concepts: ad hoc problem solving and dynamic capabilities. According to Winter (2003, p. 993), “ad hoc problem solving and the exercise of dynamic capabilities are two different ways to change.” Ad hoc problem solving occurs when an organization is disturbed and “pushed into ‘firefighting’ mode, a high-paced, contingent, opportunistic and perhaps creative search for satisfactory *alternative behaviors*” (Winter, 2003, p. 992, emphasis added). As such, it “is not routine; in particular, not highly patterned and not repetitive” (Winter, 2003, pp. 992–993). Therefore, ad hoc problem solving involves reacting to change with improvised, temporary, alternative behaviors. This concept has not attracted as much attention as its alternative strategic imperative: dynamic capabilities (for a recent review, see Schilke, Hu, & Helfat, 2018).

The strategic-management field has coalesced around the presumption that the key to obtaining and maintaining a competitive advantage lies in companies’ capabilities to dynamically respond to and evolve in changing environments through resource reconfigurations (Teece et al., 1997). According to Teece et al. (1997), dynamic capabilities entail the capacity to sense and seize opportunities in the environment, and to reconfigure the organization’s resource base to develop innovative responses to evolving conditions. “A firm’s ability to integrate, build, and reconfigure internal and external competences” (Teece et al., 1997, p. 516) and “the organizational and strategic routines by which firms achieve new resource configurations” (Eisenhardt & Martin, 2000, p. 1107) are generally assumed to have positive impacts on firm performance, especially for firms operating in “rapidly changing environments” (Teece et al., 1997, p. 516).

Dynamic capabilities are widely debated (e.g., Eisenhardt & Martin, 2000; Winter, 2003) and, as a result, the conceptual boundaries are

³ We acknowledge that the strategic-management literature is divided on the conceptual boundaries and relations of these constructs. We therefore refrain from discussing a taxonomy of their mutual relations.

unclear. They are predominantly regarded as responsive to exogenous change. Teece, Rospin, and Cox (2020) suggests that they may also change the environment and can, therefore, be proactive. Yet, there is general consensus in the literature that dynamic capabilities are predicated upon resource reconfigurations that can be implemented and, therefore, are lasting solutions to a new or changed situation. We include resource reconfiguration as a fourth dimension of an organization's reaction to a crisis. The difference between ad hoc problem solving and resource reconfigurations as a result of dynamic capabilities lies in the structure of the response: ad hoc problem solving is spontaneous and improvised, while reconfiguration is based on routines.

2.5. The paradox of reactive and unintentional market shaping

As suggested above, there is a paradoxical relationship between crisis management and market shaping. Crisis management is reactive in nature and does not explicitly seek to shape markets. In contrast, market shaping is proactive in nature and explicitly seeks to change markets. Therefore, the emergence of a crisis can introduce what we refer to as reactive and unintentional market shaping, whereby businesses unintentionally shape markets through their management of a crisis. Thus, crisis management is not intended to shape markets, but may end up doing so.

Unintentional market shaping is at odds with the mainstream market-shaping literature, which presumes that market shaping is intentional and proactive. In the remainder of the paper, we provide a coherent explanation for this anomalous phenomenon, thereby adding insights to the theory and practice of market shaping.

Moreover, in our discussion of managerial implications, we suggest that by understanding the market-shaping opportunities associated with crisis management, executives can intentionally engage in market shaping during a crisis. Doing so requires an awareness of the link between crisis management and market shaping, the paradox, and the deliberate use of a crisis and crisis management to form market-shaping strategies. In the following, we discuss how a deliberate approach to crisis-infused market shaping can be effectuated.

2.6. Four options for crisis management

The brief review of resilience and responsiveness above suggests that organizations facing a crisis have four options. Table 1 provides a composite taxonomy of the different constructs from the various literature streams. More specifically, the table summarizes crisis management as a construct that entails four second-order dimensions (which we detail in the following) that differ in terms of their definitions, alternative terms, where they originate from, and key studies. For instance, an organization may seek to “weather the storm” by securing ongoing operations or it may choose to quickly recover after a breakdown (resilience). Alternatively, it can spontaneously or systematically adapt its behavior and resources to the crisis-induced changes (responsiveness). As a result, four options co-exist during a crisis (i.e., robustness and recovery for resilience, and ad hoc problem solving and reconfiguration for responsiveness).

An organization can combine elements of resilience and responsiveness in a holistic crisis-management approach. Therefore, organizations have a portfolio of options at their disposal throughout a crisis, and an organization's set of decisions—as opposed to a single decision—comprises its crisis management. Thus, different approaches can deal with different parts of a business, address different phases in a crisis, and/or build different paths to increase the number of options available for later decisions. In sum, Table 1 depicts crisis management (the construct), which is comprised of resilience and responsiveness (first-order dimensions), which in turn reflect recovery and robustness (second-order dimensions for resilience) as well as ad hoc problem solving and reconfiguration (second-order dimensions for responsiveness). Correspondingly, Table 2 provides illustrative examples of crisis

management, investment allocations, and key performance indicators for the second-order dimensions—that is, it illustrates how these dimensions can be managed in practice.

In times of crisis, decisions must often be made very quickly. This “window of opportunity” is characterized by incomplete information (Ansoff, 1975, 1980). The choice of crisis-management options during a crisis results in an allocation of resources that locks the organization into a specific set of future opportunities and may preclude it from other opportunities. Therefore, we connect the four crisis-management options to forward-looking market shaping in order to understand the market-shaping potential of crisis management.

3. The market-shaping potential of crisis management

3.1. Market shaping

Markets have traditionally been regarded as a given, and marketing has been concerned with the appropriate action given a certain market situation. Marketing research (or “market sensing”; Day, 1994) has been viewed as a means to understand the environment on a continuous basis, as “a market changes day by day through the very fact that goods are bought and sold” (Alderson & Cox, 1948, p. 151). In this setting, strategy involves finding a fit between an externally given but dynamic market and the firm's capabilities.

Similarly, markets have been described as networks (Johanson & Mattsson, 1985) in which “there is no ‘invisible hand’ creating a situation of efficiency and health. Instead there are several ‘visible hands’ that try to create situations that are beneficial to themselves” (Håkanson, 1987, p. 89). Thus, markets are not fixed, predetermined, and stable institutions. Moreover, firms are not only “takers” of an environment but also “creators” of it, as they can drive markets instead of being driven by them (Jaworski, Kohli, & Sahay, 2000). In Kjellberg and Helgesson's (2007, p. 141) words, “we should study markets in the making, rather than markets ready-made.” Market shaping can be driven by an individual firm or by collective action (Jaworski, Kohli, & Sarin, 2020; Maciel & Fischer, 2020). Similarly, other important market actors, such as regulators and NGOs, are likely to engage in market shaping through regulation and lobbying activities. In fact, the market-shaping perspective can be extended into an ecosystem (Adner, 2017) and shareholder perspective in which all relevant actors have the potential to shape a market, especially during a crisis.

Given this dynamic, interactive understanding of markets, market shaping is:

A purposive process by a focal firm to (1) discover the value potential of linking intra- and inter-stakeholder resources in novel ways, (2) trigger changes in various market characteristics to enable the formations new resource linkages, and (3) mobilize relevant stakeholders to free up extant resources for new uses. (Nenonen et al., 2019, p. 619).

While Nenonen and Storbacka (2020) propose a process perspective on market shaping during a crisis, we consider changes in the shape of markets triggered by different crisis-management options. We thus assess the market-shaping potential of crisis management.

3.2. Crisis management and market shaping

While market shaping rests on the assumption of being able to shape one's environment, a crisis creates a certain set of novel circumstances that actors have to consider and react to. Etymologically, a crisis denotes the events that amount to a turning point or decisive moment due to the anticipated potential for negative effects (e.g., Pedersen et al., 2020). Therewith, the origin of crisis-management behaviors is inherently reactive—they emerge as the events unfold. Yet, although a crisis leads to reactions, those reactions can proactively influence markets in the

Table 1
A composite taxonomy of crisis management.

Construct	Crisis management			
First-order dimensions	Resilience		Responsiveness	
Second-order dimensions	Robustness	Recovery	Ad hoc problem solving	Reconfiguration
Main theoretical origin	Risk management		Strategic management	
Key references	Manyena (2006)	Sheffi and Rice (2005)	Winter (2003)	Teece et al. (1997)
Alternative terms and descriptions used	Absorb change and disturbance, absorb and accommodate future events, persistence, tolerate, resist, sustain, withstand	Bounce (backward or forward), rebound, return to equilibrium after displacement, resume, rebuild, repair	Improvise, firefight, fix urgent problems	Resourcefulness, resource fungibility, mutation, flexibility, adaption, innovation

Table 2
Illustrations of crisis management.

Construct	Crisis management			
First-order dimensions	Resilience		Responsiveness	
Second-order dimensions	Robustness	Recovery	Ad hoc problem solving	Reconfiguration
Crisis management during COVID-19 crisis (<i>illustrative</i>)	An organization securing production at normal levels despite restrictions because its production processes were compliant (e.g., through high levels of automation, single employee workstations, and remote monitoring)	An organization returning to normal operations within 12 h of public announcements of restrictions being lifted	An organization that gives autonomy to all units and sections to find local solutions of any kind to perform as well as possible	An organization that changes supplier-performed onsite maintenance work into an online, video-based customer training program so that customers can perform such services themselves
Potential investments focus (<i>illustrative</i>)	Investments in slack (e.g., extra personnel, additional server capacity) and stock (e.g., having a reserve of materials for at least six months)	Procedures and resources for recovery (e.g., emergency and rescue plans; training for production relocation; recovery equipment, such as emergency energy units)	Spontaneity and fast judgement training; allowing ad hoc appropriation of resources for different purposes (e.g., using new equipment and showroom equipment as a spare part base); alternatively, no investments and reliance on luck	Market learning (e.g., analyses, panels, relationships), R&D (e.g., engineers, labs, test sites), and flexibility (multipurpose resources that can be easily refitted to new processes)
Key performance indicators (<i>illustrative</i>)	Monitor size of slack resources before discontinuity hits	Estimate and, in case of a crisis, monitor time, cost, and risk of recovery process	Monitor number and effects of spontaneous fixes	Monitor efficiency (e.g., time and costs) and effectiveness (e.g., quality of new solution) of reconfiguration
Resultant market-shaping opportunities (<i>illustrative</i>)	<ul style="list-style-type: none"> Lobby for new supply chain standards (e.g., minimum acceptable robustness, such as 14 days stability; or maximum recovery times, such as reestablishing operations no more than 12 h after failure) Develop resilience across the ecosystem (e.g., identify the weakest link in a supply chain and improve that link to meet an agreed minimum) Price based on operational stability (resilience-based pricing) 		<ul style="list-style-type: none"> Define an expected level of ad hoc problem solving, including degrees of freedom for variations from normal operations Develop new solutions for crisis-affected segments and, thereby, make existing solutions obsolete 	

future because the object of the action is different: a crisis to react to and a market that can be shaped. While a crisis provides the malleability needed to shape markets (Nenonen & Storbacka, 2020), the market-shaping opportunities available to marketers partly depend on the options chosen by the firm during the crisis (i.e., responsiveness, resilience, or both). In other words, resilience and responsiveness can stipulate market shaping in intricate ways during a crisis. Nenonen and Storbacka (2020) outline the opportunity for market shaping and the process of shaping markets in relation to a crisis (for a suggestion of a seven-step, market-driving approach, see also Jaworski et al., 2020). We highlight that crisis management itself can affect the opportunities available for market shaping. By explicitly considering market shaping in a crisis context, we emphasize a sub-category of market shaping that has been largely overlooked in the literature.⁴

The four second-order dimensions of crisis management offer four opportunities for market shaping. As a crisis may highlight pre-crisis fragility in markets (e.g., the strong focus on lean and cost minimization prior to the COVID-19 pandemic), new standards for robustness, recovery, ad hoc problem solving, and reconfiguration can be

established in markets during and after a crisis through, for example, one market actor exhibiting behavior that stipulates expectations for future behavior (see illustrations in Table 2). These changes correspond to the notion that “market-shaping initiatives do not necessarily have their starting points in a technology or new product or process” (Nenonen et al., 2019, p. 619). Rather, more emphasis can be placed on, for instance, the risks associated with production processes, service-delivery process, and logistics, all of which will correspond to new expectations and new ways of working with a crisis. When triggered by a crisis, market shaping is more likely to appear on the “system level ... at which norms and regulations set the boundaries and rules for an entire market” (Kindström et al., 2018, p. 38).

Although some prior work has conflated the constructs of resilience and responsiveness, and treated them as similar phenomena (e.g., Sheffi & Rice, 2005; Teece et al., 2020), resilience and responsiveness are two distinct phenomena in a crisis setting (Ritter & Pedersen, 2020) with distinct implications for market shaping. While resilience aims to maintain an organization’s role, position, and function in its ecosystem, responsiveness helps the organization adapt to the new environment. The ways in which firms respond during a crisis (i.e., resilience and/or responsiveness) predetermine the potential set of market-shaping choices available to them. A resilient firm may shape the market in a

⁴ We are thankful to an anonymous reviewer for raising these points.

direction that is focused on holding onto and regaining the strengths and structures it had prior to the crisis. In contrast, a responsive firm may shape the market in a direction that is predisposed to spontaneous solutions and innovative ideas. We illustrate the market-shaping potential of crisis management by adopting the three elements of market shape from Nenonen et al. (2019) in connection with the four crisis-management options developed above (see Table 3). The examples support the idea that market shaping is possible in all suggested dimensions and in all four sub-dimensions of crisis management. For example, the risk-management literature highlights the importance of developing resilience (e.g., Aven, 2011; Haimes, 2009; Manyena, 2006; Sheffi & Rice, 2005; Wied et al., 2020), which can be used to redesign exchanges (e.g., offer resilient-capacity consulting and training), assess the robustness and recovery capabilities of (potential) exchange partners, and establish norms and standards for resilience as institutional, market-governing elements through regulation.

Table 3 explicates the crisis-management options relative to the triggering capability sets proposed by Nenonen et al. (2019), and suggests that the crisis-management options (i.e., resilience, robustness, ad hoc problem solving, and reconfiguration) may materialize in different forms depending on the triggering capabilities of market shaping (re-design exchange, re-configuring the network, and re-forming institutions).⁵ In other words, each of the four crisis-management options materialize through the three triggering capabilities of market shaping, which illustrates how crisis management may inform and result in market shaping. Ultimately, this depicts the paradox of unintended market shaping, and demonstrates that although crisis management may

Table 3
Changing market shapes triggered by crisis management.

Elements of market shaping crisis-management options	Re-design exchange	Re-configure the network	Re-form institutions
Robustness	Offering robustness (e.g., offering onsite storage to reduce supply disruptions for five days)	Including only partners that offer a given robustness level	Establishing new representations and norms for degrees of disturbance before failure is acceptable
Recovery	Offering recovery support after outage (e.g., re-installation and re-calibration services)	Including only partners that offer recovery support	Establishing new representations and norms for customers' downtime acceptance
Ad hoc problem solving	Offering improvisation as part of exchange (e.g., brainstorming session when crises emerge)	Allowing temporary shifts to emergency suppliers	Introducing levels and timeframes for suboptimal improvisation to handle problems
Reconfiguration	Redefining exchanges (e.g., training customers to service equipment instead of using supplier-provided service)	Implementing local supply options and global reconfiguration of supply chains	Introducing new representations and norms for flexibility, renewal, and innovation in a crisis

⁵ While aspects of this materialization may initially seem minor, they represent substantial changes in practice (e.g., changing norms), and they mirror the rationale of Nenonen, Storbacka, and Windahl (2019).

not be intended to shape markets, it may still do so.

As discussed above, the risk-management literature carries important implications for market-shaping opportunities, as the capacity to be resilient can be a source of heterogeneity among competing firms (Manyena, 2006), with the most capable organizations having an interest in shaping markets towards high resilience in order to utilize their advantages. Notably, the marketing discipline focuses on explaining why some firms outperform others in their markets. Part of the answer to this important question may be found in resilience during a crisis and in anticipated resilience before a potential crisis, which turns reactive resilience into proactive resilience-potential building. For instance, in the context of the COVID-19 pandemic, it is reasonable to assume that resilience will be a key element of value propositions in the future and that actors may unintentionally—or even intentionally—shape new standards in this regard.

Within the market-shaping context, responsiveness refers to firms adapting to turbulence during a crisis. For instance, universities are adapting to COVID-19 by engaging in online teaching (responsiveness), but they may proactively seek to make online teaching an integral element of their value propositions in the future, thereby modifying exchanges. In general, a responsive firm may develop new capabilities and offerings that can be leveraged in a purposefully shaped market (e.g., Ritter & Pedersen, 2020). Provided that such innovations are successful, crisis-born innovations may persist as the “new normal” in the future.

In addition to the proactive market shaping of suppliers, which is the main focus of the market-shaping literature, customers may form new expectations for exchanges, partners, and institutions (Harrison & Kjellberg, 2016) based on their experience of a crisis. Ulkuniemi, Araujo, and Tähtinen (2015) refer to this as “purchasing as market shaping.” Customers can establish market norms, especially when “the market exhibits a strong direct link between exchange and use” (Harrison & Kjellberg, 2016, p. 457), which becomes apparent with discontinued just-in-time delivery networks. Consequently, we expect market-shaping forces from both suppliers and customers in relation to robustness, recovery, ad hoc problem-solving, and resource reconfiguration.

4. Managerial implications

We have argued that a crisis can be a catalyzing event, as it provides firms with opportunities to shape their markets through their crisis management. In other words, market-shaping initiatives may emerge from the crisis-management activities effectuated during a crisis. A recent McKinsey study predicted that supply chains and market exchanges will, at least partially, transition from “just-in-time” to “just-in-case” (Sneader & Singhal, 2020). Moreover, data from the COVID-19 pandemic demonstrates that B2B companies are, in fact, undergoing changes in terms of how they communicate with customers and suppliers, how they manage their work, and even the offerings they have in the market (Cortez & Johnston, 2020; Ritter & Pedersen, 2020). Thus, crisis reactions can result in market shaping. This has several managerial implications.

First, executives need to recognize the market-shaping potential of crisis management—what is done in response to a crisis may have long-term impacts on the market's future functioning. The managerial challenge is to realize the future-oriented, market-shaping potential of the decisions made during times of operational turmoil. As decisions made early in a crisis determine the long-term strategic options, such “untimely” long-term thinking is necessary during the crisis (Pedersen et al., 2020) and can, in fact, be utilized in a proactive manner. With such an approach, executives can offset the initially reactive nature of crisis management by purposefully including a market-shaping perspective in their actions. Executives must consider more than just reactive implications in their crisis management (e.g., Manyena, 2006; Sheffi & Rice, 2005), as considering market-shaping opportunities is vital. For instance, Rapaccini, Saccani, Kowalkowski, Paiola, and Adrodegari

(2020) observe that short-term actions during a crisis to deliver services that customers can accept (i.e., ad hoc *problem solving*) can result in a new norm of creating decentralized stocks of resources that can be orchestrated on the basis of customer needs in the new normal, such as increasing stocks on the customer’s premises and promoting customers solving problems themselves (i.e., *reconfiguration*, *re-design exchange*, and *re-form institutions* in Fig. 2). In essence, managers must simultaneously concentrate on the crisis at hand and leverage the crisis to take advantage of novel opportunities (Pedersen, 2018).

Second, beyond their cognitive openness to engaging in market shaping and their readiness to do so, executives must analyze their own crisis-management options. For instance, how, and how successfully, did they apply the four options in dealing with a crisis? How proficient can they become in implementing the four options? Based on this self-assessment, the business potential of different avenues can be evaluated (for an example of how to assess resilience, see Table 5 in Rapaccini et al., 2020; see Sharma, Rangarajan, & Paesbrugge, 2020, for examples of how an adaptive sales force can create resilience). For instance, a company may excel at resilience and robustness, but may concurrently be below the industry average on ad hoc problem solving or reconfiguring its resource base.

Third, the four options are not only available to one’s own organization—competitors can also apply them. Therefore, firms need to monitor their competitors’ efforts to react to a crisis, and they need to understand the market-shaping potential of those actions. This will provide them with an estimation of market-shaping initiatives, which they must respond to by either preempting them or following competitors’ leads (Nenonen & Storbacka, 2020). For instance, a competitor may seek to provide more digital services in the wake of a crisis (e.g., Rapaccini et al., 2020; Sharma et al., 2020), at which point it is up to decision makers in one’s own organization to either preempt or follow that competitor in shaping the new market exchanges.

Fourth, as discussed above, customers may also initiate market shaping. Therefore, executives must monitor customers and their expectations for new exchanges and new standards that emerge from crisis-management initiatives. While the focus of customer expectations is predominantly aimed at suppliers, it can similarly revolve around general industry norms and standards. As with competitors, executives can choose to reject customers’ initiatives in order to control the market-shaping agenda, or follow their lead and react to their market-shaping initiatives.

We illustrate the relevant questions regarding the three actors of market shaping in Fig. 2, which can serve as a managerial guide for

considering the market-shaping potential of a crisis. Here, the emphasis is on companies’ own market-shaping potential, competitors’ market-shaping potential, and customers’ market-shaping potential. Taken together, decision makers can forecast: (i) the expected level and form of market shaping based on crisis management, and (ii) the expected position of the firm in the newly shaped market. Hence, the logic of Fig. 2 is in line with classic managerial discussions concerning market developments, strategy, and positioning, and demonstrates that the ongoing monitoring of market-shaping potential follows the rationale of both market learning and market orientation.

5. Opportunities for future research

As with any research, this paper highlights several potential avenues for future research. In the present paper, we follow Jaakkola (2020) in integrating resilience and responsiveness (method theories) with market shaping (domain theory) in order to contribute to the market-shaping literature. However, this approach could also be reversed by using crisis management as a domain theory and market shaping as a method theory. Such elaborations could highlight the potential contributions of market shaping to crisis management. By doing so, the interdisciplinary cross-fertilization between risk management, strategic management, and marketing can be advanced.

Moreover, the perspective presented in this paper is inherently conceptual and, thus, we need additional empirical studies to solidify the verisimilitude of the logic. While ample illustrative cases are available, several of which have been presented in this paper, more systematic empirical evidence is required to further advance the ideas expressed in this paper. Such evidence could allow for empirical comparisons of the market-shaping potential of different types of crises (as mentioned in Section 2.1 and illustrated in Fig. 1), the market-shaping success of firms pursuing a resilience or responsiveness approach during a crisis, and differences among industries.

Empirical research could also clarify the boundary conditions of market shaping in times of crisis, especially given different kinds of crises. More specifically, more research is needed to establish exactly how market-shaping behavior may differ according to the type of crisis. For example, the time dimension is essential for understanding a crisis but may also be important for understanding differences in market shaping. Simultaneously considering the time dimensions of a crisis and market shaping may prove to be an interesting avenue for future research.

In addition, as suggested by Nenonen and Storbacka (2020),

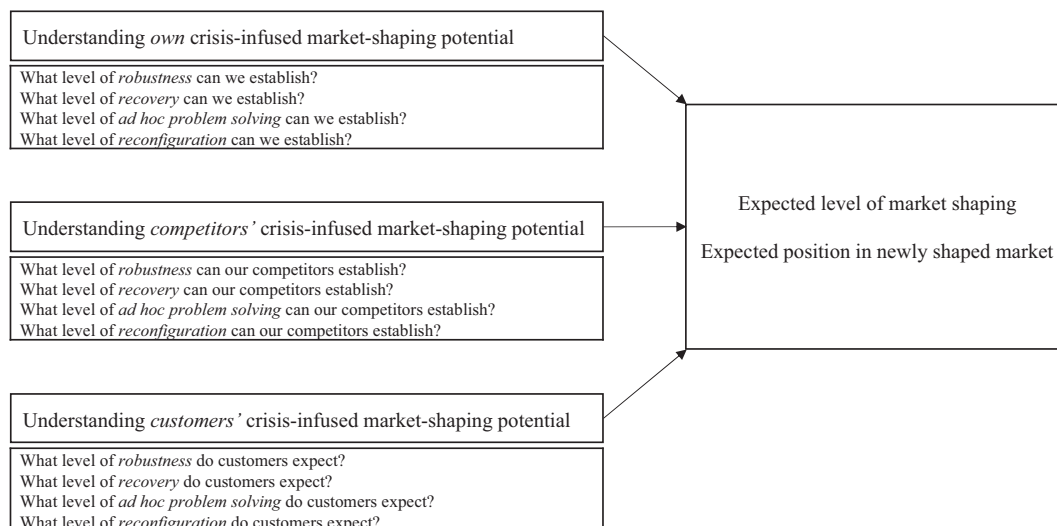


Fig. 2. Monitoring market shaping.

executives must decide whether to be leaders or supporters in market shaping. We suggest extending this idea to include active followers (i.e., those who become aware of shaping activities by actively engaging with the questions in Fig. 2) and passive followers (i.e., those surprised by newly shaped markets). Such an extension would be particularly relevant in relation to a crisis in which the market is deemed more dynamic and malleable (Nenonen & Storbacka, 2020), such that a stronger distinction can be made between those who actively follow and those who passively follow the shaping of a market. Relevant issues for consideration include whether there are situations in which it would be positive to be a passive follower, as well as the role of government intervention in terms of choosing crisis-management options and deciding to be market-shaping leaders, supporters, or followers. We lack a general understanding of which strategies should be chosen to ensure and improve upon corporate success.

We are in a similar situation with regard to active followers in an organization's wider ecosystem and network. In the literature, leaders are often assumed to be suppliers that shape markets. However, active following includes situations in which markets are shaped by actors other than competitors (e.g., customers, governments, or societies through norms and ethics). Are certain market shapers easier to follow? Can an organization actively choose to let other actors shape a market in a way that will be beneficial for the follower? Do different crisis-management options predispose firms to be either active or passive followers?

While our focus in this paper is on market shaping undertaken by suppliers facing a crisis, we believe that similar ideas are relevant for non-market strategies, which include firms' interactions with governments and society. In fact, some of the suggested activities already target non-market actors because they take a wider network and ecosystem view. Future research may therefore disentangle market and non-market strategies and analyze their interconnectedness.

Based on the considerations in this paper, firms may engage in proactive behavior *before* a crisis emerges in order to increase their preparedness (Pedersen et al., 2020). In other words, they can build capabilities for crisis handling prior to a crisis. In such a situation, the market-shaping potential of a crisis is preempted, as the market is shaped based on crisis management but that shaping occurs before the execution of such crisis management. While this perspective is valid, we have deliberately refrained from incorporating preparedness into our discussion in order to maintain parsimony. However, future studies should establish the role of preparedness in market shaping.

In summary, this paper contributes to our understanding of market shaping by integrating it with insights from crisis management. We derive a conceptual model of four crisis-management options, and we argue that these reactive options carry market-shaping potential. As such, we develop a novel overview of crisis-management dimensions that suggests opportunities for market shaping.

References

- Adner, R. (2017). Ecosystem as structure: An actionable construct for strategy. *Journal of Management*, 43(1), 39–58.
- Alderson, W., & Cox, R. (1948). Towards a theory of marketing. *Journal of Marketing*, 13(2), 137–152.
- Andersen, T. J., & Bettis, R. A. (2015). Exploring longitudinal risk-return relationships. *Strategic Management Journal*, 36(8), 1135–1145.
- Andersen, T. J., Denrell, J., & Bettis, R. A. (2007). Strategic responsiveness and Bowman's risk-return paradox. *Strategic Management Journal*, 28(4), 407–429.
- Ansoff, I. (1975). Managing strategic surprise by response to weak signals. *California Management Review*, 18(2), 21–33.
- Ansoff, I. (1980). Strategic issue management. *Strategic Management Journal*, 1(2), 131–148.
- Aven, T. (2011). On some recent definitions and analysis frameworks for risk, vulnerability, and resilience. *Risk Analysis*, 31(4), 515–522.
- Baker, J. J., & Nenonen, S. (2020). Collaborating to shape markets: Emergent collective market work. *Industrial Marketing Management*, 85, 240–253.
- Bettis, R. A., & Hitt, M. A. (1995). The new competitive landscape. *Strategic Management Journal*, 16(S1), 7–19.
- Cortez, R. M., & Johnston, W. J. (2020). The coronavirus crisis in B2B settings: Crisis uniqueness and managerial implications based on social exchange theory. *Industrial Marketing Management*, 88, 125–135.
- Covello, V. T., & Mumpower, J. (1985). Risk analysis and risk management: An historical perspective. *Risk Analysis*, 5(2), 103–120.
- Day, G. (1994). The capabilities of market-driven organizations. *Journal of Marketing*, 58(October), 37–52.
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10/11), 1105–1121.
- Haimes, Y. Y. (2009). On the definition of resilience in systems. *Risk Analysis*, 29(4), 498–501.
- Håkansson, H. (1987). *Industrial technological development: A network approach*. London: Croom Helm.
- Harrison, D., & Kjellberg, H. (2016). How users shape markets. *Marketing Theory*, 16(4), 445–468.
- Jaakkola, E. (2020). Designing conceptual articles: Four approaches. *AMS Review*, 10(1), 18–26.
- James, E. H., & Wooten, L. P. (2005). Leadership as (un)usual: How to display competence in times of crisis. *Organizational Dynamics*, 34(2), 141–152.
- 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.
- Johanson, J., & Mattsson, L.-G. (1985). Marketing investments and market investments in industrial networks. *International Journal of Research in Marketing*, 3(2), 185–195.
- Kindström, D., Ottosson, M., & Carlborg, P. (2018). Unraveling firm-level activities for shaping markets. *Industrial Marketing Management*, 68, 36–45.
- Kjellberg, H., & Helgesson, C.-F. (2007). On the nature of markets and their practices. *Marketing Theory*, 7(2), 137–162.
- Kumar, N., Scheer, L., & Kotler, P. (2000). From market driven to market driving. *European Management Journal*, 18(2), 129–142.
- Maciel, A. F., & Fischer, E. (2020). Collaborative market driving: How peer firms can develop markets through collective action. *Journal of Marketing*, 84(5), 41–59.
- Manyena, S. B. (2006). The concept of resilience revisited. *Disasters*, 30(4), 433–450.
- Nenonen, S., & Storbacka, K. (2020). Don't adapt, shape! Use the crisis to shape your minimum viable system – And the wider market. *Industrial Marketing Management*, 88, 265–271.
- 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(4), 617–639.
- Pedersen, C. L. (2018). Managing the distraction-focus paradox. *MIT Sloan Management Review*, 59(4), 72–75.
- 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, 314–322.
- Peters, L. D., Nenonen, S., Polese, F., Frow, P., & Payne, A. (2020). Viability mechanisms in market systems: Prerequisites for market shaping. *Journal of Business & Industrial Marketing*, 35(9), 1402–1412.
- Rapaccini, M., Saccani, N., Kowalkowski, C., Paiola, M., & Adrodegari, F. (2020). Navigating disruptive crises through service-led growth: The impact of COVID-19 on Italian manufacturing firms. *Industrial Marketing Management*, 88, 225–237.
- Ritter, T., & Pedersen, C. L. (2020). Analyzing the impact of the coronavirus crisis on business models. *Industrial Marketing Management*, 88, 214–224.
- Rosenthal, U., & Kouzmin, A. (1993). Globalizing an agenda for contingencies and crisis management: An editorial statement. *Journal of Contingencies & Crisis Management*, 1(1), 1–12.
- Schilke, O., Hu, S., & Helfat, C. E. (2018). Quo vadis, dynamic capabilities? A content-analytic review of the current state of knowledge and recommendations for future research. *Academy of Management Annals*, 12(1), 390–439.
- Sharma, A., Rangarajan, D., & Paesbrugge, B. (2020). Increasing resilience by creating an adaptive salesforce. *Industrial Marketing Management*, 88, 238–246.
- Sheffi, Y., & Rice, J. B. J. (2005). A supply chain view of the resilient enterprise. *MIT Sloan Management Review*, 47(1), 41–48.
- Sneader, K., & Singhal, S. (2020). From thinking about the next normal to making it work: What to stop, start, and accelerate. *McKinsey Digital Article*, 15 (May 2020).
- Swedberg, R. (2012). Theorizing in sociology and social science: Turning to the context of discovery. *Theory and Society*, 41(1), 1–40.
- Teece, D. J., Pisano, G., Shuen, A., & David Teece, M. J. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(18), 509–533.
- Teece, D. J., Raspin, P. G., & Cox, D. R. (2020). Plotting strategy in a dynamic world. *MIT Sloan Management Review*, 08 September.
- Ulkunieni, P., Araujo, L., & Tähtinen, J. (2015). Purchasing as market-shaping: The case of component-based software engineering. *Industrial Marketing Management*, 44, 54–62.
- Volberda, H. W. (1996). Toward the flexible form: How to remain vital in hypercompetitive environments. *Organization Science*, 7(4), 359–374.
- Wied, M., Oehmen, J., & Welo, T. (2020). Conceptualizing resilience in engineering systems: An analysis of the literature. *Systems Engineering*, 23(1), 3–13.
- Winter, S. G. (2003). Understanding dynamic capabilities. *Strategic Management Journal*, 24(10), 991–995.