Lancaster University Management School:
Author Accepted Manuscript
REF2021: published in compliance with the 3-month Open Access requirement

Please cite this paper as:

Market-scanning and Market-shaping: Why are firms blindsided by market-shaping acts?

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Journal of Business and Industrial Marketing

ACCEPTED FOR PUBLICATION | May 24, 2020
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Market-scanning and market-shaping: Why are firms blindsided by market-shaping acts?

Abstract

Purpose: This paper investigates two seminal market-scanning frameworks – the Five-Forces analysis and PESTEL environmental scanning tool – to assess their readiness for anticipating market-shaping acts.

Design: Drawing on the market-shaping literature that conceptualizes markets as complex adaptive systems, this conceptual paper interrogates the underlying assumptions and ‘blind spots’ in two seminal market-scanning frameworks. The paper showcases three illustrative vignettes in which non-industry actors catalyzed market change in ways that these market-scanning frameworks would not be able to anticipate.

Findings: We find marketing strategists can be ‘blindsided’ as seminal market-scanning frameworks have either too narrow an interpretation of market change, or are too broad to anticipate specific types of market-shaping acts. The assumptions about markets that underpin these market-scanning frameworks contribute to incumbents being slow to realize market-shaping acts are taking place.

Contributions: We extend market-scanning to include a type of managerial myopia that fails to register the socially embedded, systemic nature of complex contemporary markets. Furthermore, the paper provides an ‘actors-agendas-outcomes’ scanning framework that offers awareness of market-shaping acts.

Originality: This paper is the first to consider market-scanning frameworks from a market-shaping perspective.
1 Introduction

Market-shaping is an empirical phenomenon in which one or several actors attempt to bring about market change by proactively transforming or shaping their business landscape instead of reacting to it (Gavetti, Helfat, & Marengo, 2017; Hagel et al., 2008; Nenonen, Storbecka, & Windahl, 2019b). As the literature on market-shaping grows, we learn more about multiple types of shaping strategies, for example in the steel (Kindström, Ottosson, Carlborg, 2018), wine (Baker & Nenonen, 2020; Humphreys & Carpenter, 2018), retail gasoline (Azimont & Araujo, 2007), and new circus (Baker et al., 2019) markets. However, while extant studies focus on shaping strategies deployed by shaping firms (e.g., Gavetti et al., 2017), we know little about how incumbent firms learn about (or fail to notice) market-shaping acts. For example, while Uber disrupted the taxi industry, Airbnb shaped tourism and Netflix contributed to transforming home entertainment, little is known about the (lack of) reactions by non-shaping incumbents such as taxi companies, hotels, and TV networks.

In the literature on strategic planning, essential activities include ‘situational awareness’ (Foley & Fahy, 2004) and ‘market scanning’ (Day, 1992). For Day (1992, p. 323), “strategic planning is about keeping the business in step with the anticipated environment, and marketing has traditionally served as the boundary function between the firm and its customer, channel, and competitor environment.” For strategic planning to work, managers should regularly scan markets, search for environmental changes, and react promptly. Hence, any successful market-scanning framework must anticipate disruptions in the market before they affect the firm.

However, examples abound of incumbent multinational corporations that failed to react to market transformations, including Nokia (smartphones), Kodak (digital cameras), and Olivetti (typewriters). The question is, if the first step of strategic planning is scanning the market for potential disruptions, how is it that so many incumbents seem to be ‘blindsided’ – unable to detect significant market-shaping acts? In response, this study interrogates two seminal, market-scanning frameworks that managers use to sense, scan, and learn about their external environment: the Five-Forces of Industry analysis (Porter, 1989) and the PESTEL tool (Aguilar, 1967; Peteraf & Bergen, 2003). These strategic tools were chosen for two key reasons. First, they remain seminal frameworks widely taught in business schools today (Carter, Clegg, &
Second, both frameworks are amongst the most frequently utilized by practitioners, whether as standalone tools or as key informants to the identification of opportunities and threats in a SWOT analysis (Afonina, 2015; Clark, 1997; Frost, 2003; Glaister, Dincer, Tatoglu, & Demirbag, 2009; O’Brien, 2011; Stenfors et al., 2007; Tassabehji & Isherwood, 2014).

Hence, in this study we explore (1) the underlying assumptions about markets that underpin these two frameworks, and (2) why these frameworks fail to enable managers to anticipate market-shaping acts. To do so, this conceptual study follows Jaakkola (2020, p.5) by undertaking ‘theory adaptation’ and “problematizing an existing theory or concept and resolving identified dilemmas by introducing a new theoretical lens.” Specifically, we detail the differences between the assumptions that underpin these seminal market-scanning frameworks (existing theory) and the market-shaping concept (the new theoretical lens) regarding the sources of market change. In so doing, this paper provides a new perspective (MacInnis, 2011) on extant market-scanning theory through the more contemporary market-shaping literature.

Generally, this paper contributes to the strategic marketing literature by explaining why traditional market-scanning frameworks (Aguilar, 1967; Porter, 1989) are ill-equipped to anticipate market change that results from market-shaping by third parties. Indeed, market-scanning frameworks guide managers to anticipate and adapt to external forces, as markets are assumed to be beyond managers’ control (Choo & Auster, 1993; Peteraf & Bergen, 2003). In contrast, market-shaping proposes a more nuanced understanding of markets (Mele, Pels, & Storbacka, 2015), in which markets themselves can be the object of innovation (Kjellberg, Azimont, & Reid, 2015; Mason, Friesl, & Ford, 2017). Indeed, managers can intentionally shape their competitive environment (Mason & Spring, 2011) and drive or resist change (e.g., Diaz Ruiz & Kowalkowski, 2014; Nenonen et al., 2014; Rosa & Spanjol, 2005). We conclude, the Five-Forces and PEST frameworks fail to recognize the socially-embedded, systemic nature of contemporary markets (Holmqvist & Diaz Ruiz, 2017), thus slow the reactions of incumbents to market-shaping acts. Nevertheless, this study provides a scanning framework – ‘actors-agendas-outcomes’ – that managers could utilize to develop an awareness of market shaping.
The paper proceeds in three parts. First, we interrogate the assumptions and premises of the two seminal market-scanning frameworks (Aguilar, 1967; Porter, 1989), and review the market-shaping literature to identify the mechanisms with which firms shape their external environment. Second, we examine the theoretical boundaries of the market-scanning frameworks through three illustrative vignettes that each represent an episode of market-shaping. We theorize if managers had applied the market-scanning frameworks without the benefit of hindsight, would they have been able to identify the market-shaping acts? Finally, the paper offers a discussion regarding the underlying assumptions of the market-scanning frameworks, and how to improve upon them.

2 Market-scanning in the strategic marketing literature

The strategic marketing literature has a sustained history of developing tools and frameworks for analyzing the external environment (Pettigrew, 1992), including environmental-scanning (Aguilar, 1967; Choo & Auster, 1993; Peteraf & Bergen, 2003; Veflen Olsen & Sallis, 2006), market-sensing (Foley & Fahy, 2004; Mason, 2012), and market intelligence (Diaz Ruiz & Holmlund, 2017; Makadok & Barney, 2001). One recurrent assumption is that marketing strategists learn about their environment through a process of accumulation. One classic example is how Kohli & Jaworski (1990) call for incremental collection of customer intelligence to predict changes in consumer preferences so managers can meet the changing demand. However, we know that the external environment is complex and dynamic, and information is sometimes limited or ambiguous. Managers must interpret environmental information according to their worldview, which often requires simplifications (cf. Diaz Ruiz & Holmlund, 2017; Mason & Harris, 2005; Press, Arnould, Murray & Strand, 2014).

Indeed, an emerging research stream shows managerial frameworks are representational (Diaz Ruiz & Kjellberg, 2020; Harrison & Kjellberg, 2010), which means that they involve simplifications and abstractions that hide as much as they reveal (Diaz Ruiz & Kowalkowski, 2014). This stream argues that managers learn about their environment through mental models, which guide action by reducing the interpretative flexibility for what market information means and how it should be used (Diaz Ruiz & Holmlund, 2017). By extension, market-scanning frameworks reduce interpretative flexibility, foregrounding certain elements of the market while obscuring or omitting others. Hence, market-scanning frameworks are underpinned by
assumptions of what markets are and how they work. Analyzing these underlying assumptions is essential for discovering where blind spots might occur.

2.1 Two seminal market-scanning frameworks

In this section, we interrogate the representational assumptions of two of the most seminal, widely used (Glaister et al., 2009; O’Brien, 2011) market-scanning frameworks – Five-Forces analysis (Porter, 1989; 2008) and environmental scanning (Aguilar, 1967; Peteraf & Bergen, 2003).

_Porter’s Five-Forces analysis._ When Michael Porter (1989; 2008) published the Five-Forces framework, he propelled scanning to the forefront of strategic planning. For Porter, the attractiveness of a market is the result of competitive rivalries, including the bargaining power of suppliers, customers, the emergence of substitute products, and the threat of new entrants. The framework compares the potential profitability of industries, explaining industry attractiveness through the intensity of competition and relative bargaining power of other participants. More specifically, industry profitability depends upon three elements: (a) bargaining power of customers and suppliers; (b) the costs of fending off substitutes increasing transaction costs; and (c) potential entrants that may erode competitive advantage. Hence, competitive forces shape the attractiveness of a market in terms of financial performance. Specifically, industries with low transaction costs are more attractive.

We highlight three blind spots in the Five-Forces framework: an overemphasis on immediacy, unclear market categories, and a unit of analysis that focuses on industry rather than markets or focal firms. First, market attractiveness refers to immediate profitability in a local, slow-moving, or even static environment. However, rapid technological advances are disrupting global, multi-industry markets. Second, creating a precise definition of an industry is challenging. Firms can straddle multiple markets, making it difficult to cluster firms into an industry with clear boundaries. By extension, the framework fails to recognize disruptions that have the potential to affect adjacent industries. In the literature, we know that markets have multiple, overlapping interpretations of where to place their boundaries (Doganova & Laurent, 2019; Kjellberg & Helgesson, 2006). Indeed, market researchers use multiple meanings of markets (Diaz Ruiz, 2013), such as industries, product categories, countries, groups of customers, and sales.
territories. The third blind spot is that the Five-Forces framework addresses ‘industries,’ not markets. The framework equips managers to assess the likely profitability of specific industries to make an informed decision as to which offers more attractive possibilities for future expansion. Hence, the framework does not consider a firm’s capabilities and does not explain those firms that are highly profitable despite existing within classically defined ‘unprofitable industries.’

**Aguilar’s environmental scanning.** Aguilar (1967, p.1) defines environmental scanning as “scanning for information about events and relationships in a company’s outside environment, the knowledge of which would assist top management in its task of charting the company’s future course of action.” The environment is “the totality of physical and social factors that are taken directly into consideration in the decision-making behavior of individuals in the organization.” (Duncan 1972, p. 314). Hence, the ‘environment’ in this framework is not identical to the market (Peteraf & Bergen, 2003).

The scanning framework in Aguilar is the ‘ETPS’: economic, technical, political, and social. Aguilar argues that firms must scan these sectors to identify the forces that may affect strategy. Over the years, researchers refined the number and types of sectors (Peteraf & Bergen, 2003; Veflen Olsen & Sallis, 2006). For instance, Daft et al. (1988, p. 137-38) proposed the following six sectors. Customers include companies or individuals that purchase the products or services. Competitors include the companies and products that companies make that substitute for the offerings of the focal firm. The technological sector improves production efficiency. The regulatory sector includes policies and norms at all levels of government. Economic sectors include micro- and macro-indicators such as inflation, trade balance, and others that may affect the firm. The sociocultural sector affects the behavior and demographics of the overall population. Textbooks often develop the environmental scanning framework through the ‘PEST’ or ‘PESTEL’ acronyms, which calls for managers to scan the macro-environmental for political, economic, social, technological, environmental, and legal factors.

The blind spot of environmental scanning emerges from its deceptive simplicity and sweeping generality. Even though environmental scanning frameworks discuss a broad range of sectors that can influence strategic planning, the lists lack specificity. Advising managers to scan
everything is only slightly more useful than advising them to scan nothing. The world is complex and full of interesting information that may potentially affect the firm, but not all information is either relevant or actionable. A second blind spot is that strategic planning requires managers to anticipate disruption, and yet, the list does not explain what catalyzes disruption. While a list of sectors is a starting point in reminding managers that other sectors exist beyond immediate competition, a list does not offer guidelines for what to include and what to ignore. Consequently, environmental scanning is suitable to explain changes in hindsight, in other words, to explain why past disruption affected a firm. Whereas management educators use the PESTEL framework in class because it explains a managerial case neatly, the framework cannot anticipate disruption.

Table 1 reviews the two seminal market-scanning frameworks, identifying their blind spots based on underlying assumptions of each framework. In the section that follows, we introduce the notion of the ‘market-shaping act’ and explore whether these seminal frameworks are enough to identify such acts.

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Table 1: Representational emphasis of the seminal market-scanning frameworks

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3 What are market-shaping acts?

In this paper, we are interested in why market-scanning frameworks have difficulty detecting market-shaping activities. Therefore, we now introduce market-shaping as acts in which actors attempt to transform the business landscape to their benefit. We start by discussing the characteristics of markets. As opposed to neo-classical economics, contemporary market-shaping literature argues markets are “complex adaptive socio-technical-material systems, consisting of institutions, actors, practices, and discourses that organize particular economized exchanges” (Nenonen et al., 2019a, p.252). This literature highlights markets are comprised of multiple, heterogeneous actors who can affect institutionalized elements such as norms, exchanges, and
the representations that constitute the ‘doings’ of markets (Kjellberg & Helgesson, 2006; 2007), including the devices and materiality that enable market action by constraining alternatives (Mason et al., 2017, Mason et al., 2015, Doganova & Karnøe, 2015). As actors can influence what markets ‘become’ through their practices (Araujo, 2007; Geiger, Kjellberg, & Spencer, 2012; Holmqvist & Diaz Ruiz, 2017; Nenonen et al., 2019b), markets are ‘plastic’ – capable of both taking and retaining form (Nenonen et al., 2014). New market configurations might manifest from changes to objects of exchange or the practices and resources of market actors, or changes to the number or type of market actors, or to market boundaries (Kjellberg & Helgesson, 2007; Nenonen et al., 2019a). We consider the purposive and effortful actions of actors to bring about some form of change as ‘market-shaping acts.’

While the market-shaping literature includes many studies that focus on micro-level practices (e.g., Araujo, 2007; Kjellberg & Helgesson, 2006), it also explores the interconnected nature of the practices that hold together what is often referred to as ‘meso-level’ (e.g., industry or sector), as well as ‘macro-level’ (e.g., a particular society or community). Additionally, “the ability to retain form allows markets to give form to other entities by, for example, affecting the shape of a particular exchange object, the mode of a specific economic exchange or the characteristics of an exchange agent” (Nenonen et al., 2014, p.272). If marketing managers are to move beyond the development of strategies that plan, place, and time ‘market entry’ and ‘market exit’ and the use of ‘market measurement,’ ‘segmentation,’ and ‘targeting’ to shape their market action, they need to develop more nuanced, richer conceptualizations of what their market is and how it works in practice.

The market-shaping literature has predominantly examined single case studies to explore the role of market actors in shaping markets but has also adopted systemic perspectives. For example, in the legalization of casino gambling in the USA, Humphreys (2010) learns that market emergence occurs through a process of legitimation – a search for cultural-cognitive, normative, and regulatory legitimacy by embedded market actors. While in the US wine market, social processes drive the construction of relationships with numerous actors both within and beyond the ‘value chain’ of producers (Humphreys & Carpenter, 2018), which enables the ‘shaping’ of preferences of consumers, critics, retailers, and producers.
From a firm perspective, Kindström et al. (2018) argue firms must engage in three important sets of activities: building legitimacy and confidence within the market system, in their market offerings, and with users. These activities include firms developing expertise in salespeople, ensuring those salespeople understand customer needs, and ensuring technologies that comprise an offering are perceived as reliable and appropriate. Additionally, a firm’s ability to shape a market can be dependent on its position within a network and strength of its business model, which represents how that firm’s activities connect to and generate value for that network. Thus, a collective of market actors can shape markets by influencing who gets to be part of the business network and who does not (Baker & Nenonen, 2020; Maciel & Fischer, 2020; Storbacka & Nenonen, 2011).

Beyond the role of firms in market-shaping, interactions between firms and customers also shape markets. For example, the development of a new product category – the ‘minivan’ – emerged via the convergence of cognitive classifications between producers and customers (Rosa et al., 1999). Producers and consumers can also shape markets through antagonism, as Giesler (2008) found in the study of how consumers and record companies challenged the practice of peer-sharing of music over the internet, with the firms seeing sharing music as piracy and consumers perceiving themselves as freedom fighters.

While the relevance of customers in shaping markets is well-established, several contributions recognize that multiple actors, embedded within an array of cultural and institutional settings, come together in markets (Geiger et al., 2012) for both economic and social value creation. Baker et al. (2019) explore the roles of different actor groups in both disrupting the market for traditional American circus and creating the market for new circus. Processes of institutionalization and deinstitutionalization are important because belief systems, meanings, and practices change. In sum, the literature demonstrates new types and forms of increasingly borderless and complex markets are emerging around the world, thereby disrupting incumbent conceptualizations of industries and product categories (Mason et al., 2017; Mele et al., 2015).

In this study, we provide three illustrative ‘mini-cases,’ or vignettes, for comparison, that explore both the process of market-shaping and its outcomes. To do so, we utilize Nenonen et al.’s (2019a) composite index of market change that identifies six categories in which change can
occur in markets (Table 2): product and price, customer and use, channels, supply-side networks, representations, and norms. By using this index, we can analyze the representations produced by market-scanning frameworks to explore why firm actors may not be able to identify changes in market practices before broader disruption unfolds.

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Table 2: Areas of change in markets according to the market-shaping literature (Adapted from Nenonen et al., 2019a)

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To illustrate the representations generated by traditional market-scanning frameworks of the market environment, we provide three illustrative vignettes that involve non-industry firms, social activists, and an offshore government regulator. The vignettes are discussed in more detail next.

4 The market-shaping vignettes

The main criterion for selecting the vignettes was that they reflect markets as dynamic, adaptive systems, (re)shaped beyond the view of incumbent firms through a network of actors. Specifically, the vignettes are assembled from media reports illustrating market disruption through disruptive technology, social groups, and regulators. One illustrative case of online video-streaming demonstrates the powerful force of technology in destabilizing incumbent markets and shaping new markets. The case of free-range eggs in New Zealand shows the importance of social activism in shaping a category to represent animal welfare and ethical consumption. Finally, a study of the Australian recycling market illustrates how offshore regulations change a local market. The vignettes showcase the process of destabilizing and (re)shaping that unfolds through time as practices change, leading to market change (Araujo, 2007). We first compare the three cases or ‘acts’ by drawing out the outcomes of market-shaping practices (Table 3), then, we highlight the blind spots revealed in the two traditional market-scanning frameworks in each case.
4.1 Vignette 1: Disruption in the Video-on-Demand Market

This vignette shows how a start-up used streaming technology ‘video-on-demand’ to shape the TV broadcasting market (Allen-Robertson, 2013), becoming both a competitor and distributor for mainstream producers. Traditional broadcasting networks were once the predominant distributor of video content (Vollmer, 2018). Today, internet-based video-streaming platforms are scaling-up (Dwyer, Shim, Lee, & Hutchinson, 2018) and drastically impacting ‘linear’ television networks and cable providers. For example, in the UK in 2018, there was a 15% drop in 16-to-24-year-olds watching traditional television, while those under-25 watch half the traditional television they did in 2010 (Benson, 2019). YouTube (and its celebrity ‘YouTubers’) have proved formidable challengers to previously dominant linear television in young people’s lives.

Netflix became the largest and most well-known of the so-called OTT (‘over-the-top’) internet-based video-streaming services. Founded in 1997 as a DVD postal distribution business, Netflix began online-streaming in 2007. It now boasts over 125 million subscribers worldwide and, in 2017, enjoyed 43% revenue growth to over $3.7bn (Usborne, 2018). Streaming existed before Netflix, but how firms like YouTube and Netflix use the technology is shaping cultural practices. For example, ‘bingeing’ occurs when viewers watch full TV series in a single session, something that could not occur with weekly serials, while ‘cord-cutters’ are canceling cable subscriptions for streaming services (Gimpel, 2015). Netflix has also blurred industry awards and competitions. When Netflix started making original content, the best an artist could hope for was a ‘Webby’ award. Later, Netflix’s original content garnered nominations at the Emmy (TV) awards (Setoodeh, 2017), then the Academy Awards and ‘indie’ festivals (Fennessey, 2017). To
qualify for consideration at theatrical movie awards, Netflix offers minimal releases of its most prestigious movies in cinemas – a practice that got it banned from Cannes (Setoodeh, 2017; Sims, 2018).

Video-streaming has also impacted movie producers as Hollywood studios now largely ignore smaller independent movies, favoring instead branded box-office hits. The number of independent production companies has reduced, although ironically, video-streaming platforms are now the primary destination for such content (Fennessey, 2017). Due to the need for high-definition digital content from video-streaming services, changes to ancillary service providers has occurred (e.g., make-up and costume practices) with a boom for equipment and digital-post-production providers (Coleman, 2017). Even story-tellers have responded to binge-watching practices by writing longer stories over multiple episodes and dispensing with end-of-episode cliffhangers of yesteryear (Perez, 2017).

Online-streaming has redefined not just entertainment but also media and telecommunications generally (Gimpel, 2015) by bundling new and existing technologies, both software and hardware (including browsers, algorithms, compression software, computers, smart-TVs, tablets, and smartphones). Previously clear market boundaries have blurred (Harrison & Kjellberg, 2010), which has driven – and is driven by – a myriad of new technologies, social practices, and expectations – few of which would have been identifiable through the strategic marketing lens.

A Five-Forces analysis of video entertainment: For Porter (1989), the primary source of competition are firms within the same industry; hence, scanning tools observe early movements of industry competitors. However, as in Netflix, recent examples such as Airbnb, Uber, and Amazon show that outsiders can disrupt multiple markets by mobilizing technology in ways that legacy firms cannot foresee. In the case of Netflix, disruption simultaneously impacted the ‘video rental,’ ‘TV broadcasting,’ and ‘movie’ industries. Further, Porter’s analysis focuses on rivalries and bargaining power, but it is insufficient to explain Netflix since it is simultaneously an ally, a competitor, and a distributor for both Hollywood and TV producers. Netflix maintains a complicated yet symbiotic relationship with Hollywood (and other producers), reliant on existing productions from studios and networks to fill out its content (Spangler, 2018). Traditional production companies struggle to realize revenue from previously lucrative
retransmission fees; however, streaming services need content and pay for it (Gimpel, 2015). Licensed content makes up as much as 80% of Netflix’s internet traffic (Usborne, 2018).

Porter’s analysis could not anticipate Netflix because the company does not fit neatly into the five categories of the framework, nor does the framework recognize disruptors that breakdown incumbent industry structures and definitions. Netflix spent a combined $18bn on original content in three years to 2017 (Setoodeh, 2017), with numerous A-list movie-stars drawn to the creative freedom and exposure of online-streaming (Conlan, 2018). This investment means that Hollywood benefits from ‘Netflix-distributor,’ but competes with ‘Netflix-content-creator.’ Whereas Netflix’s internet traffic is simultaneously a source of revenue and leverage in Hollywood, Netflix’s original content creation is a threat.

**PESTEL analysis of video-on-demand:** Some could argue that because the PESTEL environmental-scanning tool includes the category “technology,” then it should have been possible to anticipate how streaming technology could disrupt video-rentals and movie theaters. However, the applications of the streaming technology were not apparent at the time, as they require the bundling of multiple interconnected technologies, none of which have self-evident business applications. From the dissemination of telecom-network infrastructure, innovations to software compression technologies, to consumer electronics and display monitors, the rapid confluence of multiple technologies were sweeping and transformative. Furthermore, while streaming did transform entertainment’s delivery mode, its success was also dependent on how Netflix operationalized it into its business model, challenging the incumbents’ inflexible business models that contributed to structural upheaval in the traditional entertainment industry.

### 4.2 Vignette 2: Social Activist Groups Push for Free-Range Eggs

A social activist group – Royal New Zealand Society for the Prevention of Cruelty Against Animals (RNZSPCA) – lobbied government, farmers, and consumers to shape a new market category for ‘free-range eggs’ in NZ. In contrast to the strategic marketing literature that suggests core changes should be led by competitors or by customer demand, this vignette illustrates the power of an activist group to mobilize market change.
New Zealanders are one of the largest consumers of chicken eggs per capita in the world, averaging 224 eggs a year each (Kilgallon, 2013). Through the latter part of the last century, NZ government authorities regulated caged egg-production primarily for food-safety (Kilgallon, 2013). However, social concerns led to NZ’s Animal Welfare Act (1999), which specified animals kept for food production must be able to display ‘natural behavior patterns’ within their kept conditions. However, the Act allowed for a ‘phased change’ in producer practices. At the time of the Act’s introduction, a government-appointed National Animal Welfare Advisory Committee (NAWAC) was to hear submissions on possible changes to egg-production practices, and develop recommendations for the Ministry of Agriculture (Morris, 2006). The Egg Producers Federation (EPF), representing the battery-cage producers resisted vigorously. Subsequently, labeling regulations remained poorly defined, effectively making it almost impossible for consumers to distinguish between welfare-friendly eggs and battery-hen eggs (Phare, 2009).

Led by the RNZSPCA, several animal welfare groups began to engage in public relations campaigns (RNZSPCA, 2005), intending to bring about both immediate changes to how chickens were kept, and to egg carton labeling. In 2002, EPF spent more than $NZ500,000 opposing the RNZSPCA’s demands, lobbying the government to slow down change, and reassuring the public through PR campaigns that all egg production was legitimate (Morris, 2006). Public reception to the activists was initially muted, with only a modest increase in demand for free-range eggs of about 1% per annum through most of the early 2000s (Nichol, 2017). Nevertheless, the sustained efforts of the activist brought about a growing public awareness of cruel practices, and by the end of the decade, a new category of ‘free-range eggs’ was becoming established and resistance to battery-farmed eggs growing (Gunther, 2015).

Between 2009 and 2012, the value of free-range sales grew an average of 14% per annum, as opposed to 2.1% for caged eggs (Rubanowski, 2011; 2012).

Post-2012, other animal rights groups increased their activities, with SAFE (Save Animals from Exploitation) actively campaigning against battery-hens (e.g., SAFE, 2012). In 2016, SAFE targeted one of NZ’s two major supermarket chains, demanding it move to sell only ‘cage-free eggs’ (Harris, 2016; SAFE, 2017). The parent supermarket chain in Australia had earlier committed to ‘going free-range,’ and the activists realized this could potentially influence the NZ
subsidiary. SAFE’s initiatives included a social media campaign asking the public to make their views known to the supermarket, protests outside retailers, and enrolling the help of NZ celebrities (Miller, 2016). Initially, the supermarket resisted, arguing the egg industry needed substantial infrastructural change to satisfy projected demand (Miller, 2016). However, in 2017 the supermarket announced it would only sell cage-free eggs by 2025. In response, its supplier, the largest free-range egg producer in the country, committed to an annual growth target of 30% to 2025 (Nichol, 2017). The supermarket claimed the policy change was entirely due to a 50% increase in customer demand for free-range and barn-raised eggs in the previous two years alone. The supermarket’s primary competitor was quick to follow, announcing it too would transition to free-range eggs by mid-2027 (Stuff, 2017). Consumer-driven change superseded the EPF’s argument that the change would drive many farmers to financial ruin (Clayton, 2017) and make eggs too expensive for consumers (Newshub, 2017). By 2017, nearly three-quarters of New Zealanders were buying free-range eggs, sometimes with 28% buying them exclusively (Consumer, 2017).

Numerous food manufacturers also felt consumer and activist pressure. In 2015, multi-national McDonald’s announced it would stop using caged-hen eggs in NZ from mid-2016 in response to the volume of customer inquiries (Anthony, 2015; NZ Business Magazine, 2016). Wendy’s, Burger King, and Subway were quick to follow as were other more local brands (SAFE, 2018; The Register, 2017).

Five-Forces analysis of the egg industry: The Five-Forces analysis focuses on specific actors: suppliers, customers, and new competitors. In the free-range vignette, we find that social activist groups are non-industry actors that transform the market by shaping the meanings of the category to include animal welfare. Furthermore, in a Five-Forces analysis, industry attractiveness reflects the profitability that emerges when incumbents do not have to deal with increasing transaction costs. However, social activists strive for change to the methods of production without using pricing bargaining power. Their strategy for influencing the market includes pressuring retailers to elevate their PR credentials by acting for animal welfare. Therefore, Porter’s Five-Forces could not foresee market-shaping acts that activists initiate.
PESTEL analysis of egg production: The environmental scanning model has a ‘socio-cultural’ sector, which means that, in principle, managers should foresee how animal welfare is gaining importance in society. However, the framework says nothing about the catalysts that bring about social change, and therefore, the framework assumes that consumer values change organically, predictably, and gradually. However, the free-range vignette shows that animal welfare activism is performative because it drives market change by changing meanings – a change that impacted producers, distributors, retailers, food manufacturers, and consumers. Activist groups undermine previously institutionalized assumptions, beliefs, and practices (Humphreys, 2010) by emphasizing a distinction between caged and free birds. Despite the resistance of producers and the industry lobby-group, the market shifted to reflect a shift in ethical beliefs. Therefore, this vignette shows that the environmental scanning framework cannot account for conflict between sectors. For instance, it says nothing about what happens if the economic sector opposes socio-cultural trends, or vice-versa. Additionally, this vignette shows how social activists build social change by enlisting coalitions – first, other activist groups, then retailers and fast-food producers – to act in a coordinated and sustained way to bring about market change.

4.3 Vignette 3: An Offshore Regulator shapes the Australian Recycling Market

In this vignette, we describe how an offshore regulator produced unexpected consequences for an overseas market. When the Chinese Government introduced regulations in 2018 to drastically improve the quality of imported recyclables, Australian recyclers had to create a whole new market (Towie, 2019). In 2017, to reduce contamination and growing waste volumes (Nogrady, 2018), the Chinese Government notified the World Trade Organization (WTO) of changes to the regulatory standards for imported recyclable paper and plastic (APCO, 2018). This brought an abrupt halt to the Australian recycling market as exporters struggled to comply with the new Chinese regulations (Towie, 2019).

The Australian recycling market had developed at the same time as other developed countries, in response to an environmental policy declaration by the UN in 1992 that called for financial and technological investments in developing recycling markets globally (Gandy, 2014). The policy declaration stabilized market practices, specified how recycling and other adjacent markets (e.g.,
general waste disposal) would operate, and shaped the subsequent actions of critical market actors like regulators (Kjellberg & Olson, 2017).

As the Australian recycling market emerged, China became the leading importer, processing more than half the world’s recyclable paper and plastic (Nogrady, 2018). This global supply chain required originating countries to comply with Chinese regulatory standards when developing domestic recycling facilities to ensure contaminants exported to China were kept to a minimum (Gandy, 2014). By 2018, Australia was exporting more than one million metric tons of recyclable materials to China annually (Towie, 2019). However, when the Chinese Government unexpectedly notified the WTO of its new standards, the market collapsed (Nogrady, 2018). Australian firms, which had designed their facilities to earlier Chinese standards, had to halt their exports immediately. The price of recyclable paper collapsed from $124 per ton to $0 overnight (Towie, 2019).

As the Australian recycling industry collapsed, unintended consequences occurred not only for Australian recycling exporters but also for the broader business ecosystem (Holmqvist & Diaz Ruiz, 2017). Realizing the perilous state of the recycling market, the Australian central government introduced a new policy to re-regulate and shape the domestic Australian market (Topsfield, 2018). The Australian policy includes new requirements for packaging (of 30% recycled material and 70% compostable material) to encourage the domestic use of recyclables over the following ten years (Topsfield, 2018). In parallel, local supermarket chains now accept single-use packaging for recycling and are using the Australasian Recycling Label to help educate households (Topsfield, 2018).

*Five-Forces analysis of the Australian recycling industry:* The Five-Forces framework is all about bargaining power, and yet the bargaining power is about pricing power and transaction costs in the immediate industry. The limitation of the framework emerges when deciding where are the boundaries of the focal industry. Including an offshore regulator is a stretch as it is neither part of the immediate environment nor fits into the categories of relevant actors.

*PESTEL analysis of the Australian recycling market:* While Aguilar’s (1967) framework and the PESTEL model include political and regulatory sectors, the emergence of vast global supply
chains means that recommending managers scan (all potential) political and regulatory environments is unrealistic. If the PESTEL framework is used to analyze the Australian plastic-recycling industry, a fair reading would include only the likely regulatory actions of the Australian government. In a highly globalized environment in which the effects of an offshore regulator can shape industries on the opposite side of the planet, the P and L of the PESTEL framework are much too general to be practical.

5 Discussion

The three vignettes included in this study illustrate how key market actors can catalyze a series of unfolding events that significantly reshape markets. By applying the Five-Forces and PESTEL market-scanning frameworks to these three specific acts, we have shown these frameworks have limitations in anticipating market-shaping acts, discussed next.

5.1 Market-shaping activities produce blind spots

Both the Five-Forces and PESTEL frameworks emphasize environmental constraints as external forces that firms cannot control; hence the external environment is represented as sweeping, inevitable, impersonal, and essentialist. Instead of impersonal ‘forces,’ market-shaping conceptualizes change agents – actors with agendas seeking specific outcomes. Therefore, shaping acts are concrete performances initiated and sustained by focal actors aiming to advance their agenda. As depicted in Figure 1, when it comes to anticipating market-shaping comprehensive taxonomies of sectors, such as PESTEL, are too general to be useful, and the Five-Forces analysis does not consider non-competitive forces while industry boundaries are also inconclusive. Hence, these two seminal market-scanning frameworks are designed to represent specific aspects of market change, but not all. This study has shown that each market-scanning framework can represent particular foci well, but also that each one has blind spots that can slip by unnoticed.
5.2 *Actors-agenda-outcomes framework*

To reduce blind spots created by market-scanning frameworks, strategists should scan for current and potential concerted efforts by market actors to bring about market change. These efforts comprise actors, equipped with shaping agendas, building coalitions, and enlisting networks of actors, to drive market change, from an initial state, into a desirable new or shaped state. ‘Shaping agendas’ are roadmaps designed to elicit change and bring redefined market configurations into practice (c.f. Diaz Ruiz & Kowalkowski, 2014). The illustrative vignettes in this study highlight concerted market-shaping efforts by interdependent coalitions enlisting heterogeneous actors. The market-shapers did not act alone but rather performed market-shaping practices that enrolled and mobilized other actors. Sometimes these actors worked with purpose and coordination (as with the animal welfare groups), and sometimes with less deliberate effort (the Chinese regulators did not intend to paralyze the Australian recycling export market). In this regard, while the Nenonen et al. (2019a) framework offers a useful heuristic device to identify fundamental forms and places of market change, it remains in the marketing-management tradition with a firm-centric conceptualization. Hence, the framework does not fully account for the dynamic shaping practices reported in the vignettes featured in this study.

In response, we extend Nenonen et al. (2019a) by showing how marketing strategists can represent dynamic market practices in their market-scanning. Figure 2 provides an ‘actors-agendas-outcomes’ framework of factors marketing strategists should include in their environmental scanning processes. Since market-shaping is not about exogenous forces but about endogenous acts that are deliberate and purposeful, market-scanning must foreground (1) interactions between collectives of heterogeneous market actors, (2) the market-shaping goals and agendas of these actors and the technologies they might harness, and 3) the intended (and potential unintended) outcomes of these agendas. Such foci and areas of inquiry stand to enable
managers to capture not only crucial moments of transformation in markets, but also to understand who catalyze such transformations.

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Figure 2: Actors-agendas-outcomes framework

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5.3 Transformative market practices

The vignettes reveal several market-shaping practices that could be seen as acts or purposeful performances by change agents to bring about market transformations that work in their interest (Mason et al., 2017). We identified that categories change the meaning. For example, in the first vignette, terms such as ‘binge-watching’ and ‘cord-cutters’ were mobilized as part of a distinctive ‘video-on-demand’ market discourse. This language and their associated practices weave together to fabricate a new and distinct market configuration, shaped by the collective and entangled actions of Netflix, media coverage, and consumer conversation (cf., Mason et al., 2017). Similarly, we identified concerning and contesting practices in action as animal-welfare activists enrolled other interested activist groups, consumers, and ultimately supermarkets in their drive for market change. In this regard, identifying a broader range of market actors that can – or potentially could – shape markets, and identifying the practices they perform, is likely to enable marketing strategists to notice the market change, or the potential for market change, at an earlier stage. We argue this requires strategic marketing to develop new research skills, and opportunities to mine big data for traces of market action, thereby creating and mapping new visualizations of market action.

5.4 Shaping strategies and outcomes

Table 3 summarizes some of the fundamental changes in each vignette, drawing out the similarities in market-shaping practices and the resultant changes in market configurations.
Shaping strategies mobilized or transformed a host of devices to produce intended outcomes. For example, market actors could have lobbied the Australian government for legislation to avert risk in the recycling market and to intervene before the market became wholly dependent on China’s recycling policies. Similarly, in the ‘video-on-demand’ market, identifying changing infrastructural technologies could have raised questions about the urgent need for change by traditional TV operators. As markets are shaped, market representations change (e.g., terminology, media depictions, and awards events) along with norms associated with the use, practices, and expectations of consumers, firms, media, and other commentators. Indeed, the shaping strategies employed aimed to affect and change both the object of exchange and the underlying representations (MacKenzie, 2017).

Some of the changes included technological innovations. However, technological innovation alone is insufficient to explain market-shaping. For example, while the ‘video-on-demand’ market relies on optic fiber, cable TV already existed before. Nothing in the cable, as such, drove a modification to the DVD-rental model, which operated well alongside the TV model and, arguably, targeted a different market. Hence, technological innovation alone is insufficient to shape a market; instead, technology requires a business model. This has important implications for how managers think of markets and the types of intervention they might afford. In all three cases, it was the cost of technologies and the impacts on pricing that concerned some of the targets of market-shaping action. For example, the conventional egg producers did not want to invest in open barns and fields, automated chicken runs, and higher veterinary bills; and Australian recyclers struggled to assemble the equipment and investments required to comply with new recycling standards in the export market.

The conceptualization of markets as complex adaptive systems (Nenonen et al., 2019a) requires not just an expanded view of the number of heterogeneous actors that managers need to take into account but additionally argues that managers need to be sensitized to other factors. These factors include the identification of patterned market-shaping practices and the devices, which are used by dynamic market actors to change or re-form markets through revising socio-technical arrangements.
6 Conclusion

The purpose of this inquiry was to identify whether existing market-scanning frameworks can anticipate market-shaping acts. We conclude by briefly outlining the theoretical contribution and managerial implications of this paper.

6.1 Theoretical contribution

By foregrounding agents of market change, this paper makes three key contributions. First, it explains that market-scanning frameworks have blind spots that can omit market-shaping acts. In the context of markets seen as complex systems that can be deliberately shaped, marketing strategists often miss opportunities for market intervention as critical action goes unnoticed. The blind spots created by market-scanning frameworks can leave strategists blindsided because the frameworks assume market change occurs through impersonal sweeping forces.

Second, this study adds nuance to what managers should look for when they scan markets. Specifically, to reduce blind spots created by market-scanning frameworks, strategists should scan for the purposive efforts of market actors to bring about change. Market-scanning must recognize interactions between heterogeneous market actors, those actors’ market-shaping agendas, and the intended outcomes of these agendas (Figure 2). Such a shift in managerial focus will enable managers to anticipate market-shaping acts.

Third, this paper shows that most market-scanning frameworks are so general as to be useful only in hindsight; hence, they are self-defeating in their very purpose of anticipating market change. When attempting to register market-shaping acts, taxonomies of sectors are too general to be useful, while ‘industry’ analysis struggles to provide clear, well-defined boundaries for the very focus of analysis – the industry. Hence, while some aspects of market change can be anticipated through these seminal frameworks, many cannot.

In sum, this research takes the first tentative steps in addressing the paucity of attention in the contemporary strategic marketing literature (e.g., Varadarajan, 2010; 2015) to deliberate, market-shaping action. We shift understanding away from conceptualizations of markets as fixed and exogenous, comprising particular product categories or geographic locales in need of ‘entry’ and
“exit” strategies (Hunt, 2015; Varadarajan, 2015). Instead, we attempt to increase understanding of markets as complex adaptive systems shaped by collective strategic actions. In so doing, we extend nascent understandings of market-shaping activity driven by the firm (e.g., Humphreys & Carpenter, 2018) or customers (e.g., Martin & Schouten, 2014), by highlighting the roles of non-industry firms, social activists, and offshore regulators equipped with shaping agendas and devices.

6.2 Managerial implications

This paper also carries implications for managers. As disruption of incumbent industries and product categories accelerates, the managerial skills and concepts needed to anticipate rapid change within and across markets far exceed the conventional business toolboxes inherited by strategists (Callon, 2010; Kindström et al., 2018). The theories, tools, and devices marketing managers or consultants bring to their work (e.g., branding strategy frameworks, consumer behavior models, or market segmentation tools) play an essential role in representing who can bring about change in markets (Diaz Ruiz, 2013; Mason et al., 2015). When it comes to using market-scanning frameworks, managers should be aware that each framework has blind spots that can fail to identify market-shaping acts. The three illustrative cases in this paper demonstrate the need for managers to be aware of shaping acts by means of scanning for shaping agendas and concerted coalitions that aim to drive market change. In response, we provide a framework (Figure 2) for environmental scanning that integrates actors, their agendas, and the potential intended and unintended consequences of such actions.

Kjellberg et al. (2015, p.6) summarize market innovation as “altering the way in which business is done.” Moreover, Storbacka and Nenonen (2011, p.263) argue “successful market scripting [shaping] requires ‘marketing’ to be extended beyond traditional functional marketing.” Indeed, authors adopting a focus on market-shaping strategies delivered by firms assert new management practices will be required to engage in broad, boundary-spanning activities, with an emphasis on cross-functional cooperation within the firm (Kindström et al., 2018; Nenonen et al., 2019b). Although market-shaping strategies would seem to be sometimes relatively slow to realize, they can be overwhelming once they have gained momentum, especially if managers are ‘blindsided.’
7 References


Miller, C. (2016, March 6), “Stars say it's time to put chicken before the egg”, *NZ Herald*, retrieved from https://www.nzherald.co.nz


Figure 3: Foci and blind spots of market-scanning frameworks
Figure 4: Actors-agendas-outcomes framework

**Actors**
What sets of heterogeneous actors including firms, consumers, governments, regulators, activists, and other interested third-parties might orchestrate efforts to bring about market change?

**Agendas**
What are the goals that shaping actors aim to achieve? What are the drivers motivating their desires for market change? What are the technologies shapers can integrate, bundle or harness to shape the market?

**Outcomes**
What are the outcomes shapers intend in terms of product & price, use, channels, networks, representations, and norms that will become the new normal? What are the potential unintended consequences of shapers’ actions?
Table 1: Representational emphasis of the foundational market-scanning frameworks

<table>
<thead>
<tr>
<th>Framework</th>
<th>Representational emphasis</th>
<th>Blindspots</th>
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<tbody>
<tr>
<td>Porter’s Five Forces analysis</td>
<td>Rivalries in industry: (a) bargaining power of customers and suppliers; (b) the costs of fending off substitutes affects transaction costs (c) competition complicates retaining competitive advantages.</td>
<td>Analysis at industry-level competition. Focuses on price-setting mechanisms and transaction costs. Offers unclear industry boundaries and market categories.</td>
</tr>
<tr>
<td>Aguilar’s environmental scanning</td>
<td>Lists of environmental factors. ETPS: <em>Economic, technical, political,</em> and <em>social.</em> PESTEL: <em>political, economic, social, technological, environmental,</em> and <em>legal</em></td>
<td>Provides a comprehensive list of sectors but does not delve into the dynamics of market change and is overly simplistic and general.</td>
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</tbody>
</table>
Table 2: Areas of change in markets according to the market-shaping literature (Adapted from Nenonen et al., 2019a)

<table>
<thead>
<tr>
<th>Category of market change</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>Products &amp; price</td>
<td>New products/services or new bundles of products and services, changes to pricing structures or overall pricing in a particular industry</td>
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<tr>
<td>Customers &amp; use</td>
<td>Emerging customer demands or new types of customers; technological infrastructures creating new access for customers</td>
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<td>Channels</td>
<td>Novel or different channels opening up or used by competitors</td>
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<td>Supply-side network</td>
<td>Changing numbers or types of competitors or suppliers</td>
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<tr>
<td>Market representations</td>
<td>Changes in terminology or media representations of the industry, or to key industry events or awards</td>
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<tr>
<td>Market norms</td>
<td>Includes industry standards or government regulations</td>
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### Table 4: Market-shaping acts

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<tbody>
<tr>
<td><strong>Actors</strong></td>
<td><strong>Products &amp; price</strong></td>
<td>Non-Industry entrepreneurs: Entrepreneurs used disruptive technologies such as online-streaming to disrupt the TV network market</td>
<td>Social Activist Groups: Animal rights activists campaigned for animal welfare and shaped a new market category for ‘free-range eggs’</td>
<td>Offshore Regulators: Chinese government regulated recycling standards for paper and plastic, affecting the Australian recycling export market</td>
</tr>
<tr>
<td><strong>Customers &amp; use</strong></td>
<td><strong>Video-on-demand using subscription business models</strong></td>
<td>The product category now means animal welfare</td>
<td><strong>Industry standards shape the object of exchange</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Channels</strong></td>
<td><strong>New consumption practices such as ‘binge-watching’</strong></td>
<td>Distinguish between two types of physically indistinguishable products: caged and free-range</td>
<td><strong>Reframing the global supply chain for recycling plastics</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Supply-side network</strong></td>
<td><strong>New roles for content-creators, producers and distributors</strong></td>
<td>Retailers use animal-welfare to report on social responsibility</td>
<td><strong>Local regulations on packaging material to replace demand</strong></td>
<td></td>
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<tr>
<td><strong>New publishers of content-on-demand (e.g., YouTube)</strong></td>
<td><strong>Farms reinvent their free-range operations</strong></td>
<td></td>
<td><strong>Public education on separating materials</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Representations</strong></td>
<td><strong>New labels (e.g., ‘bingeing,’ ‘YouTubers,’ ‘cord-cutters’)</strong></td>
<td>Distinguishing otherwise indistinguishable products</td>
<td><strong>Purchasing standards led to changes in packaging standards</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Norms</strong></td>
<td><strong>New regulations for illegal sharing, and contestations for bandwidth allocation (i.e., internet neutrality).</strong></td>
<td>Codification of legally binding product categories</td>
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