

**Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets** 

Pinar Ozcan and Kerem Gurses

The Oxford Handbook of Entrepreneurship and Collaboration

*Edited by Jeffrey J. Reuer, Sharon F. Matusik, and Jessica Jones*

Print Publication Date: Nov 2019

Subject: Business and Management, Entrepreneurship, Finance and Economics

Online Publication Date: Aug 2019 DOI: 10.1093/oxfordhb/9780190633899.013.23

## **Abstract and Keywords**

Extant work has identified many aspects of market formation including the mechanisms and processes associated with the origins of new markets and the trajectories of market emergence. However, the critical role of interfirm alliances in the formation of new markets still remains unexplored. This chapter brings forward interfirm alliances as a critical tool for firms to fuel the formation of new markets, which are often characterized by high levels of demand, supply, and regulatory uncertainty. To take a systematic look at the role of alliances in market formation, the chapter first describes the different alliance forms under the general categories of dyadic and multipartner alliances. Within these categories, the chapter discusses the potential impact of the respective alliance type on reducing different levels of uncertainty and catalyzing market emergence. It also provides an extensive discussion of the challenges that firms typically face within each type of alliance with regards to market formation. The chapter concludes with directions for future research in exploring alliances as tools for market formation.

Keywords: new markets, market formation, interfirm collaboration, alliances, uncertainty

**(p. 289)** IN the past two decades, scholars have explored the formation of new markets<sup>1</sup> theoretically (e.g., Aldrich & Fiol, 1994; Rao, Morrill, & Zald, 2000) and empirically (e.g., Haveman, Rao, & Paruchuri, 2007; Hiatt, Sine, & Tolbert, 2009; Kaplan & Tripsas, 2008; Lounsbury, Ventresca, & Hirsch, 2003; Malerba, Nelson, Orsenigo, & Winter, 1999; Schneiberg, King, & Smith, 2008; Ozcan & Santos, 2015; Sine & Lee, 2009) to uncover the mechanisms and processes associated with their origins and trajectories. Although many aspects of market formation have been identified so far, the critical role of interfirm alliances in the formation of new markets remains unexplored. In this chapter, we explore how alliances can help firms fuel the critical process of market formation and what potential roadblocks might arise in the process.

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

Market formation involves the creation of commercial viability for the new industry. Economics-based studies depict market emergence as the interplay of new technology and unsatisfied demand (Horii, 2012) and suggest that it is a self-reinforcing process where sales take off after critical mass is achieved (Agarwal & Bayus, 2002; Klepper, 1997). In addition to this economic explanation, sociologists have provided their own explanations of market emergence as a process of negotiating an economically viable position for the emerging industry in the wider socio-economic and institutional context (Burr, 2006; Leblebici, Salancik, Copay, & King 1991). According to this lens, customers' interpretations of potential uses, utility, and legitimacy of the product are determined by institutional and cultural factors (Khaire, 2014; Lounsbury et al., 2003; Munir & Phillips, 2005), leading to organizations working not only to illustrate the viability of the new technology in a new market (Phaal, O'Sullivan, Routley, Ford, & Probert, 2011) but also to institutionalize new patterns of interactions between different actors (Leblebici et al., 1991).

Nascent markets are characterized by a lack of clarity on which products/technology will prevail (Anderson & Zeithaml, 1984, Porter, 1980) and which distribution channels will be suitable, leading to a general uncertainty about the eventual direction of the market (Klepper & Graddy, 1990). An early distinction about different uncertainty types derives from Abernathy and Clark (1985), where they differentiate between two key types: demand uncertainty and supply uncertainty. The first type, demand uncertainty, arises from the perception that consumer preferences are not easy to predict in nascent markets (Aldrich & Fiol, 1994; Benner & Tripsas, 2012; Atuahene-Gima & Li, 2004; Jaworski & Kohli, 1993). This can be due to the unpredictable cognitive recognition of the value of a new product or service (Hargadon & Douglas, 2001; Rao, 1994; Rosa, Porac, Runser-Spanjol, & Saxon, 1999), as a result of rapid changes in consumer preferences or other reasons producers are unable to estimate the level of demand (Tripsas, 2008). Demand uncertainty is known to be alleviated when producers can engage in product experimentation (Tushman & Rosenkopf, 1992) or market research, develop a technological frame (Kaplan & Tripsas, 2008), construct narratives (Lounsbury & Glynn, 2001), create collective producer identities (Kennedy, 2008; Navis & Glynn, 2010), and build stable relationships with consumers (Fligstein & Dauter, 2007; Weber, Heinze, & DeSoucey, 2008).

Supply uncertainty is a second primary type of uncertainty, which exists when there is a dearth of knowledge or capabilities of firms to secure the needed inputs, capital, partners, and other critical resources to effectively develop and deliver the product to market. Supply uncertainty is more pronounced when there is a lack of producers and suppliers of a new product or service or when the existing techniques to produce are perceived to be unpredictable (Dixit & Pindyck, 1994; McGrath, 1997; Anderson & Tushman, 1990, Ozcan, 2018). Firms can reduce supply uncertainty by developing supply-side role structures, investing in research and development (R&D), building venture skills and production knowledge, strengthening supplier relationships and joint ventures, and developing industry standards and complementary technologies (Van de Ven, 1993).

## Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets

---

We deliberate a third type of uncertainty, which we call regulatory uncertainty. Regulatory uncertainty emerges when new market formation requires a defined institutional space to govern the production, distribution, and consumption of associated artifacts (Dosi, 1982; Rosenberg, 1982; Van de Ven and Garud, 1994). Especially disruptive technologies (e.g., in communications) may not allow regulators to define such an institutional space fast, because their pace of development may outpace existing legislation and industry norms. Thus, regulatory uncertainty typically arises when new market formation is accompanied by disruptive technology in regulated markets (Ozcan and Gurses, 2018). Extant work, particularly in corporate political strategy, shows that to reduce regulatory uncertainty, firms may try to be active also in the political arena, by using corporate political strategies such as lobbying and by building supportive constituencies to influence regulators (De Figuerdo & Tiller, 2001; Gurses & Ozcan, 2015; Schuler, 1996).

**(p. 291)** The various forms of uncertainty associated with new markets demand significant resource deployment and distinct contributions, which typically goes beyond the ability and resources of any one actor (Klein, 1977; Tushman & Anderson, 1986). We summarize these different forms of uncertainty, associating them with previous studies in Table 14.1 Alliances can improve firms' strategic position in nascent markets in a variety of ways. First, alliances can provide financial resources that enable firms to share costs and risks with each other as they invest to reduce uncertainty in various ways (Miner, Amburgey, & Stearns, 1990; Ohmae, 1989; Van de Ven & Polley, 1992). In addition, alliances can help firms reduce *demand uncertainty* by letting firms pool resources in market research and create narratives and collective identities (Gurses & Ozcan, 2015). By cooperating with

**(p. 292)** an important potential customer or a competitor, firms can signal that the market will become established (Eisenhardt & Schoonhoven, 1996; Ozcan & Eisenhardt, 2009; Navis & Glynn, 2010). Firms can also collaborate collectively to reduce demand uncertainty, as in the case of US microbreweries that jointly establish a producer identity and product category through collaborations within the Association of Brewers and the Institute of Brewing Studies (Carroll & Swaminathan, 2000; McKendrick & Carroll, 2001).

## Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets

Table 14.1 Types of Market Uncertainty

	<b>Demand Uncertainty</b>	<b>Supply Uncertainty</b>	<b>Regulatory Uncertainty</b>
<b>Description</b>	Perception that consumer preferences are not easy to predict in nascent markets	Lack of knowledge or capabilities of firms to secure needed inputs, capital, and partners to effectively develop and deliver the product to market	When disruptive new technologies do not have a defined institutional space to be regulated
<b>How alliances (and which types) can help reduce the uncertainty</b>	By establishing collective producer identities and by cooperating with prominent partners to signal that the market will become established	Pooling resources in research and development, collaborating to enhance compatibility between various products within a value chain, mobilizing actors to support a common technology standard, jointly investing in complementary technologies	Through trade associations and social movements

## Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets

Key studies	Carroll and Swaminathan (2000), Gurses and Ozcan (2015), Eisenhardt and Schoonhoven (1996), Navis and Glynn (2010), Ozcan and Eisenhardt (2009), Ozcan, Zachariadis, and Dinckol (2019), and Navis and Glynn (2010)	Powell, White, Koput, and Owen-Smith (2005), David and Greenstein (1990), Garud, Jain, and Kumaraswamy (2002), and Adner and Kapoor (2010)	Esparza, Walker, and Rossman (2014), Ingram and Rao, 2004, Gurses and Ozcan (2015), Ozcan and Gurses (2018), Sine and Lee (2009), and Uzunca, Rigtering, and Ozcan (2018)
-------------	---	--	---

Alliances can also help firms reduce *supply uncertainty* by pooling resources in R&D (Powell, White, Koput, & Owen-Smith, 2005), collaborating to enhance compatibility between various products within a value chain (David & Greenstein, 1990), mobilizing actors to support a common technology standard (Garud, Jain, & Kumaraswamy, 2002), or jointly investing in complementary technologies (Adner & Kapoor, 2010). For example, Navis and Glynn (2010) describe how the emergence of the satellite radio market was characterized by supply-side uncertainty and how key players formed partnerships to secure investment and develop technologies such as broadcasting satellites and receivers.

Finally, alliances can reduce *regulatory uncertainty* through firms' joint efforts to legitimate a new market. For instance, Esparza, Walker, and Rossman (2014) showed how firms collaborated through trade associations to reduce regulatory uncertainty and build the cognitive and sociopolitical legitimacy of the nascent gourmet food truck market when challenged by incumbent firms and government. On the other hand, Uzunca, Rigtering, and Ozcan (2018) observed how UK sharing economy platforms (e.g., Airbnb) used collaborative projects with state actors (e.g., municipalities, fire stations, the health department) to alleviate regulatory uncertainty surrounding the nascent sharing economy field. Finally, firms may use less formal but perhaps even more powerful forms of collaboration such as social movements to reduce regulatory uncertainty by pressuring regulators toward regulatory change in favor of the nascent market via public support (Sine & Lee, 2009).

As summarized previously, the extant literature suggests that alliances can help firms fuel market formation in various ways. However, it is still quite unclear which types of alliances help in what ways, and what roadblocks might arise in the process. To explore

## Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets

---

these issues, we first review the different alliance forms under the general categories of dyadic and multipartner alliances. Within these categories, we discuss the potential impact and challenges of each form for market formation. Finally, we conclude with a summary and directions for future research in exploring alliances as tools for market formation.

### Alliance Forms and Their Role in Market Formation

Before delving into various forms of alliances, it is helpful to start with a definition. In his seminal paper, Gulati (1998) defines alliances as “arrangements between firms involving the exchange, sharing, or co-development of products, technologies or services” (p. 293). Resource dependence theory suggests that firms cooperate with other firms to reduce uncertainty and resource constraints (Pfeffer & Salancik, 1978); thus, they form alliances when they have resource needs that can be fulfilled by another firm or set of firms. Especially in new markets, environmental factors such as demand uncertainty increase the firm’s dependence on outside resources (Eisenhardt & Schoonhoven, 1996; Dickson & Weaver, 1997). In addition, supply uncertainty may dictate firms’ access to R&D resources they do not possess through alliances (Powell et al., 2005). Therefore, resource dependency is a key motivation for firms to form alliances in such markets. Although researchers in the social embeddedness tradition have demonstrated that a firm’s social network is a primary determinant of which alliances will be formed (Uzzi, 1997; Gulati & Gargiulo, 1999), we argue that social embeddedness and previous network ties may play less of a role in alliance formation in new markets, because the high uncertainty and turbulent environments associated with new markets may force firms to rule out those social considerations in order to survive in these environments.

In terms of forms of alliances, joint ventures, licensing alliances, joint R&D programs, joint marketing programs, and partial equity investments are typically counted as *dyadic alliances* (Kale & Singh, 2009). Although alliances and buyer-supplier relationships were traditionally considered as two distinct forms of direct interfirm ties (Koka & Prescott, 2008), this separation has become fuzzier over time as buyer-supplier relationships are known to be developed not only for economic reasons but also for tacit knowledge and access to external resources, such as in the famous example of Toyota’s supplier network (Clark & Fujimoto, 1991; Dyer & Nobeoka, 2000; Helper, 1991).

Toyota’s supplier network is also important as an example of how alliances that go beyond dyadic relationships and include a wide array of firms have become critical in today’s business landscape (Contractor & Lorange, 2002; Gulati, 1998; Wassmer, 2010). In many key industries, such as computer hardware and software, telecommunications, electronics, pharmaceuticals, and air transportation, firms are engaged in multiple simultaneous strategic alliances (Anand & Khanna, 2000; Gulati, 1998; W. H. Hoffmann, 2005, 2007; Lavie, 2006, 2007; Lavie & Miller, 2008; Ozcan & Eisenhardt, 2009; Parise & Casher, 2003). As stated previously, traditional alliance research has predominantly focused on

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

dyadic alliances (Wassmer, 2010), but multifirm alliances, in both the formal (e.g., supplier or R&D networks) and informal sense (e.g., industry-wide collective action), have gained quite a lot of traction recently, particularly when it comes to market formation, as explained later in this chapter.

To examine the impact of alliances on market formation, we thus use a classification of alliances in terms of the number of firms in collaboration and differentiate between *dyadic* and *multipartner alliances*, as detailed next.

### **Dyadic Alliances and Market Formation**

Although alliances between two firms are typically formed for firm-level benefits, such alliances can have a significant catalyzing effect on market formation, particularly when (p. 294) they involve large and resourceful firms. As mentioned earlier, nascent markets demand significant resource deployment in the development and legitimation of new products and services as well as the establishment of buyer-supplier relationships to reduce various kinds of uncertainty (Klein, 1977; Tushman & Anderson, 1986). Although large firms are known to often delay entry into nascent markets for this very reason of high uncertainty (Ingersoll & Ross, 1992; Miller & Folta, 2002; Ozcan, 2018), the early involvement of established and resource-rich firms in nascent markets can help catalyze the market in various ways, such as in the case of NutraSweet in the artificial sweetener market or Netflix in the online streaming media market (Lee, Struben, & Bingham, 2017). The involvement of large firms in market formation often occurs through dyadic alliances, either with other large firms or with small and innovative firms (see Table 14.2, for a detailed description of dyadic alliances and their role in market formation), as detailed next.

## Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets

Table 14.2 Types of Dyadic Alliances and Their Role in Market Formation

De- scrip- tion	Types of Dyadic Alliances		
	Small-Small Firm Dyadic Alliances	Large-Small Firm Dyadic Al- liances	Large-Large Firm Dyadic Al- liances
How they can contribute to market formation	Typically not enough to fuel market formation as small firms do not have sufficient resources and legitimacy	Partnering with large firms can function as important proxies for quality for small firms, and large firms may benefit from niche technological expertise of small firms	When the new market requires complementary resources from different kinds of large firms or large firms from different industries
Potential complications		Large firms not allocating sufficient resources to a nascent market; cultural differences creating difficulties in communication/coordination (Ozcan, 2018)	Difficulty in reaching an agreement due to diverging plans for the new market (Lee, Struben, & Bingham, 2017) and beliefs about relative bargaining power (Ozcan & Santos, 2015)

### Large-Small Firm Alliances

Extant literature shows that there is an increasing number of entrepreneurial activities in nascent markets (Mezias & Kuperman, 2001; Sine & Lee, 2009). At the same time, firms established during the early days of a new market often lack resources and legitimacy to develop and sell their products as technological, organizational, and financial resources are scattered and asymmetrically distributed, prompting organizations to collaborate (Powell et al., 2005). Recent studies have shown that an effective way to mitigate these external and internal risks is for entrepreneurial firms to partner with large and resourceful firms (Baum, Calabrese, & Silverman, 2000; Stuart, Hoang, & Hybels, 1999). When

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

small firms face high demand uncertainty in nascent markets, they can use their affiliations with already established and large companies as a signal of quality to attract customers (Stuart et al., 1999; Ozcan & Eisenhardt, 2009), as those established companies are perceived to have strong partner evaluation and management skills. Similarly, key audiences may use these affiliations to decide if the product category as a whole is feasible and appropriate on a normative basis (Faulkner, 1983; Podolny, 1994).

For large firms, collaborating with smaller counterparts with technological expertise has also been shown to be valuable for reducing technological uncertainty during market formation. For example, in biotechnology, incumbent pharmaceutical firms productively entered the field by acquiring expertise from new biotechnology firms (Zucker & Darby, 1997; Powell et al., 2005). Similarly, Ozcan and Eisenhardt (2009) show that the nascent market of mobile games was jumpstarted when an entrepreneurial mobile game publisher convinced the largest mobile network operator in the United States to codevelop, test, and launch a gaming platform in the early 2000s.

Recently, qualitative studies have started to uncover the pitfalls in these alliances between large and small alliances. Ozcan (2018) observes, for instance, that large firms may enter a nascent market via alliances but not allocate sufficient resources to jumpstart the market due to the lack of visibility of the market within their larger product/market portfolio. In addition, cultural differences between large corporate firms and start-ups may be a potential problem in terms of collaboration, leading to delays and dissolutions, which can be detrimental for market formation. In their paper on the collaboration between financial technology start-ups and established banks in the United Kingdom, for instance, Ozcan, Zachariadis, and Dinckol (2019) identify how banks' security-focused culture and procedures led to lengthy testing times, causing the financial technology start-ups to run out of funds before their products could go online.

### **Large-Large Firm Alliances**

This type of alliance can be critical for market formation, particularly when the market requires complementary resources from different kinds of large firms to reduce demand uncertainty (Gnyawali & Park, 2011; Lavie & Singh, 2012), such as in the case of mobile payments, where banks and mobile operators were interdependent on each other's legitimacy and resources to commercialize this new service (Ozcan & Santos, 2015). Another common form of alliance between large organizations is collaborative industry–university projects to develop new technologies (Powell et al., 2005), particularly in high-tech fields such as biotechnology and nanotechnology, where established corporations ally with other large organizations such as universities, venture capitalists, federal funding agencies, professional associations, and economic development agencies (Meyer, Gaba, & Colwell, 2005). These collaborative engagements are effective ways to jumpstart new markets by reducing supply (technology) uncertainty and legitimizing the new technologies to attract investors (Spencer, Murtha, & Lenway, 2005; Vasudeva, 2009).

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

(p. 296) However, market formation is not that straightforward when dyadic ties consist of firms with relatively equal resource positions. These firms may not be in accordance to contribute to the development of the market architecture or may not come to an agreement on what the new market should be, or, if they do agree, their opinions may differ on how to form the market. For instance, we observe that market formation may be stalled by gridlock when there is competition between large organizations with respect to establishing a standard (Farrell & Klemperer, 2007). In a similar vein, Ozcan and Santos (2015) show how large firms wishing to establish the mobile payment market had difficulty in reaching agreement on the market architecture due to their prior dominance in their respective industries, which led to diverging beliefs about their relative bargaining power in the collaboration.

We note that dyadic alliances between small firms are often not powerful enough to fuel market formation. First, small firms' capabilities are typically very niche (Hambrick, McMillan, & Day, 1982), which can limit the extent to which they can complement their partners' capabilities to facilitate market formation. In addition, smaller firms are less likely to have abundant resources (human, physical, and financial; Sharfman, Wolf, Chase, & Tansik, 1988; Wincent, Anokhin, Örtqvist, & Autio, 2010), which can be constraining for collaboration and market formation. Thus, we expect dyadic alliances between small firms to be less likely to help form new markets. However, small firms often form and participate in alliance networks, such as in the study of Canadian biotechnology start-ups (Baum et al, 2000), which we elaborate on later in the chapter within our discussion of how alliance networks fuel market formation.

### **Alliance Networks and Market Formation**

An increasingly common form of alliances is alliance networks. Jones, Hesterly, Fladmoe-Lindquist, and Borgatti (1998, p. 914) define alliance networks as "sets of autonomous firms that collaborate with one another based on implicit or explicit contracts in order to create certain products or services." An alliance network is a general term for collections of firms in collaboration where a given firm is connected to many, but not necessarily all, other firms (Das & Teng, 2002). There are several subgroups in every alliance network. A common subgroup is an alliance constellation. A constellation is an alliance network where each firm is directly connected to the rest of the firms (Gomes-Casseres, 1996; Das & Teng, 2002). The Star Alliance formed by United Airlines, Lufthansa, and a number of other airlines is an example of such a constellation. Another common subgroup is a central network (i.e., ego-network or alliance portfolio), where only one firm stands in the center with dyadic ties to all other members. It is important to note that in every alliance network, there are as many alliance portfolios as there are network members, as by definition, every firm that has more than one alliance partner has an alliance portfolio. We scrutinize the role of both types of alliance networks in market creation. In Figure 14.1 we illustrate these distinctions,<sup>2</sup> and in Table 14.3 we describe the role of each multipartner type in market formation. (p. 297)

# Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets

---

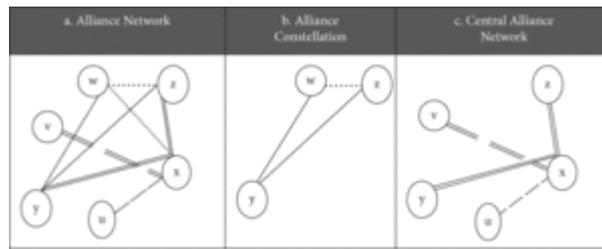


Figure 14.1 Illustration of alliance networks and subgroups.

## Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets

Table 14.3 Types of Multipartner Alliances and Their Role in Market Formation

Description	Types of Multipartner Alliances				
	Alliance Constellations	Standard-Setting Consortia	Trade Associations	Platforms	Social Movements
How they can contribute to market formation	Firms can use alliances as probes to experiment with components of an emerging technology and for hedging bets to reduce supply (technological) uncertainty (e.g., Gomes-Casseres, 2001)	Often central to the establishment of the technological basis and compatibilities that are required for network effects to kick in (Katz & Shapiro, 1986; Rice & Galvin, 2006)	Can give firms political voice and raise awareness of the new market among the public (e.g., Gurses & Ozcan, 2015)	By establishing a business model and set of relationships that are mutually beneficial for platform participants and subsequently creating momentum and network effects (e.g., Gawer & Cusumano, 2014)	Can establish cognitive legitimacy, i.e., identifying the population with the nascent market (Frank, Hironaka, & Schofer, 2000; Gurses & Ozcan, 2015) and pressure political authorities for favorable regulation (Bonchek & Shepsle, 1996; Hillman & Hitt, 1999; Ingram & Rao, 2004; Lee, 2009)

## Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets

Potential complications

Complexity of the alliances may impede individual alliances to manage alliance relationships and delay market emergence

Divergent views among consortium members or competition between different consortia may delay market emergence

Politics and divergent views among association members and dominance by large members can delay/negatively affect market formation

Chicken-and-egg problem, particularly difficult to overcome in regulated and data-sensitive settings

Initiators are often small firms without resources and skills to organize at wide scale; they may encounter resistance from incumbents in industries the new market threatens

## Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets

---

*Alliance constellations* are often formed as a response to high uncertainty, which is typical when a new technology fuels the emergence of a new market (Gomes-Casseres, 1994). For example, in his analysis of the emerging personal digital assistant (PDA) market, Gomes-Casseres (2001) notes that the creation of PDAs required a combination of technologies from several different industries. Firms responded by using alliances as probes to experiment with components of the emerging technology, forming alliances for multiple competing technologies to hedge their bets and reduce supply (technological) uncertainty.

In this sense, a form of alliance constellation that is of particular importance for nascent markets is *standard-setting consortia*. Studies show that standard-setting consortia may help countervail supply (technological) uncertainties (Rosenkopf & Tushman, 1998), such as in the case of the 3G market in Japan where interfirm agreement on interface standards helped fuel market emergence (Funk, 2012). These standard-setting consortia are also central to the establishment of the technological basis (Rice & Galvin, 2006) and compatibilities, which are required for network effects to kick in (Katz & Shapiro, 1986). Research shows that such multiplayer collaborations around competence-enhancing innovations in an emerging market are typically led by large and established firms (Klepper & Simons, 2000), whereas in coalitions that emerge around disruptive innovations, new entrants tend to play a more significant role (Christensen, 1993; Gustafsson et al., 2016; Tushman & Anderson, 1986).

Though useful for market formation, standard-setting consortia are often highly political settings where firms struggle for dominance, as demonstrated by the battle between Betamax and VHS (Cusumano, Mylonadis, & Rosenbloom, 1992). In their paper tracing the development and demise of the Symbian (multipartner) alliance network, Tee and Ozcan (2019) show how alliance partners' divergent views on the final smartphone product (e.g., touchscreen, keyboard, or stylus pen), which were driven by demand uncertainty, created tensions in collaboration, which in turn led one partner to dominate the alliance and others to quit, delaying the standard-setting process for smartphones significantly in the process.

(p. 298) (p. 299) As another form of multipartner, industry-level network, *trade associations* are also important, particularly as a political medium, in nascent markets where firms lack cognitive and sociopolitical legitimacy (Esparza et al., 2014). As Sine, Haveman, and Tolbert (2005, p. 200) describe, "Firms that use new production or distribution technologies are especially risky because various stakeholders are unfamiliar with new technologies and thus are likely to be skeptical of or even hostile toward them." Trade associations can help develop a political voice (Akard, 1992; Aldrich and Fiol, 1994) and identify solutions to shared regulatory, market, and practical problems that are crucial to the sustained existence of a nascent market (Sine et al., 2005). Most important, they can reduce regulatory and demand uncertainty through their political and public awareness activities (Ireland, Hitt, & Vaidyanath, 2002). For instance, in their paper comparing the emergence of sharing economy platforms across three countries, Uzunca et al. (2018) show how the activities of the Sharing Economy Trade Association (SEUK) were crucial in re-

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

ducing regulatory uncertainty by lobbying and achieving favorable laws for sharing platforms in the United Kingdom. The authors also note that the public relations activities carried out by the trade association helped citizens get familiar with sharing platforms and thus reduced demand uncertainty. On the flipside, trade associations from adjacent industries whose resources a new market threatens can use these trade associations to block the emergence of a new market. Ingram and Inman (1996) show, for example, how hotel owners around Niagara Falls managed to pass regulation that prevented new entry, which would threaten their growth and prosperity. Similarly, the lawsuits of hotel and taxi associations against the likes of Uber and Airbnb and the consequent banning of these services in different countries are good examples of how incumbent trade associations can block new market emergence.

Just like standard-setting consortia, trade associations can be highly political settings where firms struggle for dominance and influence. Depending on their size and position in the industry, trade association members can have divergent interests and agendas (van Wijk et al., 2013). In their paper on the UK sharing economy, Ozcan, Gurses, and Mohlmann (2018) observe that the agendas and proposed activities of the larger (e.g., global) association members benefited the smaller members but also created difficulties for the smaller members to keep up and have real influence on the development of the new market.

As a final type of alliance network that is relevant for market formation, we discuss platforms. Extant research discusses how firms can orchestrate a new market and gain power in it by bringing together other firms around a “platform” (Gawer & Cusumano, 2002). Studies show that platforms, which can be seen as multiplayer collaborations, are typically formed by developing a core value proposition or infrastructure in the form of a product, service, or technology on which a large number of firms can build complementary products, services, or technologies, thus creating a loosely assembled business ecosystem for innovation (Baldwin & Clark, 2000; Baldwin & Woodard, 2009; Gawer, 2009, 2014).

Platforms can enhance interactions that create value among consumers (demand side) and external producers (supply side) and produce a multisided market (p. 300) (Rochet & Tirole, 2003). They deliver two key functions: (a) They bring together the know-how from different firms, thus reducing supply uncertainty, and (b) they link customers with these suppliers, which are trying to adapt the platform to changing customer needs, effectively reducing demand uncertainty. Firms such as Apple, Google, Microsoft, Linux, and, more recently, Airbnb and Uber have been using these two principles to build successful digital platforms and take advantage of an entire ecosystem of suppliers and users to create new markets.

Platform leaders typically need to do more than just exert technical efforts and make design and architecture decisions to form new markets. For new markets to emerge around their platforms, platform leaders must also strive to establish a business model and set of relationships that are mutually beneficial for platform participants. In the platform literature, this is known as the “chicken-and-egg problem,” where the platform leader needs to

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

cultivate one side of the platform (e.g., consumers) to attract the other side (e.g., suppliers; Gawer & Cusumano, 2014). If successful, this leads to a momentum and subsequently to network effects between the platform and its complementary products or services, which can often erect a barrier to entry for potential platform competitors and allow new markets to develop around only this platform (Cennamo and Santalo, 2013; McIntyre and Srinivasan, 2017; Rietveld and Eggers, 2018). For instance, Apple has been instrumental in developing new markets, such as MP3 players (iPod), tablets (iPad), and smartphones (iPhone) due to its strong platform leadership. Nokia, on the other hand, failed to start the smartphone market with its Symbian platform because it didn't focus on developing relationships with potential platform partners and instead focused solely on the technical features of the platform itself (West and Wood, 2014). A recent study by Ozcan, Zachariadis, and Dinckol (2019) also showed that the chicken-and-egg problem is particularly difficult to overcome in regulated and data-sensitive industries such as banking.

### **Collective Action and Market Formation**

Finally, firms may also collaborate to employ political strategies to form the market. The political sociology of markets developed by Fligstein (1990, 1996, 2001), in particular, stresses the importance of defining governance rules that encapsulate a "conception of corporate control" (Fligstein, 1990) to make the construction of markets feasible. According to this view of "markets as politics," not only the relationships across firms but also their formal relations with the state and regulators as well as other powerful macro actors such as labor unions, professional associations, or trade associations are crucial for understanding how markets emerge (Fligstein, 1996). Scholars like ourselves, who embrace this political view of markets, argue that collective political action is central to the formation of new markets (Lounsbury et al., 2003; Sine & Lee, 2009; Weber et al., 2008, Gurses & Ozcan, 2015; Ozcan & Gurses, 2018).

The collective action of firms and associated community-building activities are instrumental to the development of new markets (Gustafsson et al., 2016; Hargrave & Van De Ven, 2006; Mezas & Kuperman, 2001). In addition to the political activities of more formal collaborations such as standards consortia and trade associations discussed earlier, collective mobilizing efforts can also include *social movements* (Haveman & Rao, 1997; Lounsbury et al., 2003; Rao, 2009; Schneiberg et al., 2008; Sine & Lee, 2009; Swaminathan & Wade, 2001). Social movements can be defined as an action system of mobilized networks of groups and organizations that try to achieve social change by using collective protest (see Sine & David, 2010, for a review). A common form of collective action at this level is to organize public campaigns that aim to establish cognitive legitimacy, that is, identifying the population with the nascent market (Frank, Hironaka, & Schofer, 2000; Gurses & Ozcan, 2015), and to pressure the political authorities for favorable regulation (Bonchek & Shepsle, 1996; Hillman & Hitt, 1999; Ingram & Rao, 2004; Lee, 2009).

Social movements can help the formation of new markets in several ways (Sine & Lee, 2009). First, they can help gather public support to pressure regulators and legislators, thus reducing regulatory uncertainty and paving the way for the new market to emerge

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

(A. J. Hoffman, 1997; Schneiberg & Bartley, 2001; Schneiberg & Soule, 2005; Zald, Morrill, & Rao, 2005). Second, they can embed their values into the regulatory structure, creating supportive contexts for new types of entrepreneurial activity and generating initial resources for the nascent market, thus reducing supply uncertainty (Sine & Lee, 2009). Finally, they can serve as a valuable mobilizing structure “through which people mobilize and engage in collective action,” which can help with demand uncertainty (McAdam, McCarthy, & Zald, 1996, p. 3). For instance, Sine and Lee (2009) find that the wind power social movement led to a positive evaluation and final cognitive legitimacy of wind technology, which created more entrepreneurial opportunities and helped fuel the growth of this nascent market. In the case of cable pay TV, Gurses and Ozcan (2015) observe that entrepreneurial firms engaged in “social movement-like” collective action to construct regulative legitimacy for this nascent market.

Although collective action and social movements can be a good way to raise the legitimacy and visibility of a new market, firms that engage in them may face significant difficulties that may hinder the development of the new market. First, with the exception of cases like “Astroturfing,”<sup>3</sup> initiators of social movements are often small and diffused firms that typically do not have the resources or skills to organize at a wide scale (Lounsbury et al., 2003). In addition, they may encounter significant resistance from incumbents in industries that they threaten (Gurses & Ozcan, 2015; Ozcan & Gurses, 2018), who typically have the power to influence regulators. Finally, an important contextual factor is whether the products and services that are being promoted through the social movement are important enough for consumers to be activated about them (Ozcan & Gurses, 2018). Overall, we argue that interfirm collaborations for the purpose of collective action are an important yet understudied type of alliance that can fuel market formation, particularly regarding the contextual factors that affect their success in reducing regulatory, supply, and demand uncertainty. In the next and final section of this chapter, we provide concluding remarks and avenues for future research.

### **(p. 302) Conclusion**

Alliances have proved to be an important strategic device and an essential part of firm strategy in many key industries such as computers, telecommunications, electronics, pharmaceuticals, and airlines (Wassmer, 2010). Alliances can increase firm performance through access to new knowledge and resources (Powell et al., 1996; Khanna, Gulati, & Nohria, 1998; Stuart et al., 1999), lower transaction costs through economies of scale and scope (Williamson, 1985; Pisano, 1990), and higher legitimacy (Baum & Oliver, 1991; Stuart, 1998; Baum et al., 2000). Benefits from alliances can be particularly crucial for firms with limited resources and in highly dynamic and uncertain environments such as nascent markets because firms need a diverse and changing set of resources to prosper (Baum et al., 2000; Eisenhardt & Schoonhoven, 1996; Gulati & Higgins, 2003).

In this chapter, we argue that alliances are a critical tool for firms to fuel the formation of new markets, which are often characterized by high levels of uncertainty of various types.

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

Studies show that firms can use alliances to fuel new markets by pooling R&D resources to reduce supply uncertainty (Powell et al., 2005), creating cognitive categories and collective identities to reduce demand uncertainty (Ozcan & Gurses, 2018; Kennedy, 2008; Navis & Glynn, 2010), and, finally, collectively pressuring regulators and other politically important stakeholders to reduce regulatory uncertainty (Esparza et al., 2014; Gurses & Ozcan, 2015; Sine & Lee, 2009).

To take a systematic look, we examined alliances in terms of dyadic versus multipartner alliances and showed that cases of market formation through dyadic alliances is less common compared to multipartner alliances, simply due to the sheer amount of resources and effort needed to overcome the demand, supply, and regulatory legitimacy that characterize nascent markets. Dyadic alliances that fuel market formation typically involve large firms that can provide the nascent market with the necessary legitimacy and resources through collaboration with universities, other large firms, or small and innovative firms. In many cases, however, it is multipartner alliances that play a key role in market formation. These may take the form of standard-setting consortia, which help to reach an agreement on interfaces and standards between multiple players (Funk, 2012); trade associations, which protect the rights and interests of the new market members, particularly against incumbents from adjacent industries (Ozcan & Gurses, 2018); or platforms, which create mutually beneficial collaborative relationships between players with diverse roles and resources that are useful in the nascent market (Gawer, 2009).

Although the studies we reviewed in this chapter begin to paint a picture of market emergence through the lens of alliances, they have significant shortcomings. First, market formation is a phenomenon that has not been researched extensively, primarily due to the necessity of observing a multiplicity of actors longitudinally to create a realistic account of the process. In addition, the nonemergence of potential new markets is often neglected by researchers due to the small number of real-time data collection efforts (Ozcan & Santos, 2015). Finally, current studies of market formation are typically single (p. 303) case studies that cannot compare and contrast the role of the context of the phenomenon (Lee et al., 2017). We argue that contextual factors matter greatly for the power of various types of alliances to fuel market formation. For instance, for small-large alliances, it is important that the new market in question is of strategic importance for the large firm; otherwise, it may not commit enough resources to develop the market, causing the small partner to run out of money while waiting for the market to take off. For alliances between large firms, another critical factor is the power position of these firms within their own industry and their previous history of collaboration, as monopolistic players from different industries may face cognitive inertia in switching to a collaborative mode in a new market. For the case of standard-setting consortia, we argue that when demand uncertainty is high, standard setting can be difficult due to a high level of disagreements between allied firms in deciding on the appropriate standard.

Another critical contextual factor that is understudied is the level of regulation in the industry. Recent work (e.g., Ozcan, Zachariadis, & Dinckol, 2019) shows that uncertainties regarding regulatory categorization of new players can affect large firms' willingness to

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

work with them due to unclear legal liabilities. In addition, the close relationship between incumbents and regulators that is present in many regulated industries (e.g., “revolving doors”<sup>4</sup>; Eckert, 1981) can make it more difficult for firms to start a new market through collective action if the new market threatens the resource stream of incumbents in adjacent industries. Future researchers should explore the role of these and other contextual (e.g., economic, institutional, geographic) factors to further advance our understanding of the best strategies and configurations to manage alliances to catalyze market emergence. Embedded multiple case studies where the formation of a global market is examined at the country or regional level can be a good approach in looking at the role of alliances and the moderating effect of contextual factors on market formation (e.g., Ozcan & Santos, 2015).

More broadly, future studies should also explore when alliances matter for market formation and when they do not. Conceptual efforts such as that by Lee et al. (2017) are good steps in further exploring the relationship between alliances and market formation, paving the way for empirical work in the area. Exploring the role of alliances in market formation has the potential to provide critical insights into strategy and entrepreneurship (e.g., which alliances small vs. large firms can form to fuel market formation) and into macro-level phenomena such as what fuels/prevents the emergence of new markets and how existing industries are in turn transformed through the emergence of these new markets.

## **References**

- Abernathy, W., & Clark, M. (1985). Innovation: Mapping the winds of creative destruction. *Research Policy*, *14*(1), 3–22.
- Adner, R., & Kapoor, R. (2010). Value creation in innovation ecosystems: How the structure of technological interdependence affects firm performance in new technology generations. *Strategic Management Journal*, *31*(3), 306–333.
- Agarwal, R., & Bayus, B. L. (2002). The market evolution and sales takeoff of product innovations. *Management Science*, *48*(8), 1024–1041.
- Akard, P. J. (1992). Corporate mobilization and political power: The transformation of US economic policy in the 1970s. *American Sociological Review*, *57*(5) 597–615.
- Aldrich, H., & Fiol, C. M. (1994). Fools rush in? The institutional context of industry creation. *Academy of Management Review*, *19*, 645–670.
- Anand, B. N., & Khanna, T. (2000). Do firms learn to create value? The case of alliances. *Strategic Management Journal*, *21*, 295–315.
- Anderson, C., & Zeithaml, C. P. (1984, March). Stage of the product life cycle, business strategy and business performance. *Academy of Management Journal*, *27*, 5–24.

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

Anderson, P., & Tushman, M. L. (1990). Technological discontinuities and dominant designs: A cyclical model of technological change. *Administrative Science Quarterly*, *35*, 604–633.

Atuahene-Gima, K., & Li, H. (2004). Strategic decision comprehensiveness and new product development outcomes in new technology ventures. *Academy of Management Journal*, *47*, 583–597.

Baldwin, C. Y., & Clark, K. B. (2000). *Design rules: The power of modularity* (Vol. 1). Cambridge, MA: MIT Press.

Baldwin, C. Y., & Woodard, J. J. (2009). The architecture of platforms: A united view. In A. Gawer (Ed.), *Platforms, markets and innovation* (pp. 19–44). Cheltenham, UK: Edward Elgar.

Baum, J., & Oliver, C. (1991). Institutional linkages and organizational mortality. *Administrative Science Quarterly*, *36*, 187–218.

**(p. 305)** Baum, J. A. C., Calabrese, T., & Silverman, B. S. (2000). Don't go it alone: Alliance network composition and start-ups' performance in Canadian biotechnology. *Strategic Management Journal*, *21*, 267–294.

Benner, M. J., & Tripsas, M. (2012). The influence of prior industry affiliation on framing in nascent industries: The evolution of digital cameras. *Strategic Management Journal*, *33*, 277–302.

Bonchek, M. S. & Shepsle, K. A. (1996). *Analyzing politics: Rationality, behavior and institutions*. New York, NY: W. W. Norton.

Burr, T. (2006). Building community, legitimating consumption—Creating the US bicycle market. *Socio-Economic Review*, *4*, 417–446.

Carroll, G. R., & Swaminathan, A. (2000). Why the microbrewery movement? Organizational dynamics of resource partitioning in the U.S. brewing industry. *American Journal of Sociology*, *106*, 715–762.

Cennamo, C., & Santalo, J. (2013). Platform competition: Strategic trade-offs in platform markets. *Strategic management journal*, *34*(11), 1331–1350.

Christensen, C. M. (1993). The rigid disk drive industry: A history of commercial and technological turbulence. *Business History Review*, *67*(4), 531–588.

Clark, K. B., & Fujimoto, T. (1991). *Product development performance: Strategy, organization, and management in the world auto industry*. Watertown, MA: Harvard Business School Press Books.

Contractor, F. J., & Lorange, P. (2002). *Cooperative strategies and alliances*. Oxford, UK: Pergamon.

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

- Cusumano, M. A., Mylonadis, Y., & Rosenbloom, R. S. (1992). Strategic maneuvering and mass-market dynamics: The triumph of VHS over Beta. *Business History Review*, 66(1), 51-94.
- Das, T. K., & Teng, B. S. (2002). Alliance constellations: A social exchange perspective. *Academy of Management Review*, 27, 445-456.
- David, P. A., & Greenstein, S. (1990). The economics of compatibility standards: An introduction to recent research. *Economics of Innovation and New Technology*, 1, 3-42.
- De Figueiredo, J. M., & Tiller, E. H. (2001). The structure and conduct of corporate lobbying: how firms lobby the Federal Communications Commission. *Journal of Economics & Management Strategy*, 10(1), 91-122.
- Dickson, P. H., & Weaver, K. M. (1997). Environmental determinants and individual-level moderators of alliance use. *Academy of Management Journal*, 40(2), 404-425.
- Dixit, A., & Pindyck, R. (1994). *Investment under uncertainty*. Princeton, NJ: Princeton University Press.
- Dosi, G. (1982). Technological paradigms and technological trajectories. *Research Policy*, 11, 147-162.
- Dyer, J. H., & Nobeoka, K. (2000). Creating and managing a high-performance knowledge-sharing network: The Toyota case. *Strategic Management Journal*, 21, 345-367.
- Eckert, R. D. (1981). The life cycle of regulatory commissioners. *Journal of Law and Economics*, 24, 113-120.
- Eisenhardt, K. M., & Schoonhoven, C. B. (1996). Resource based view of strategic alliance formation: Strategic and social effects in entrepreneurial firms. *Organization Science*, 7, 136-150.
- Esparza, N., Walker, E. T., & Rossman, G. (2014). Trade associations and the legitimation of entrepreneurial movements: Collective action in the emerging gourmet food truck industry. *Nonprofit and Voluntary Sector Quarterly*, 43(2 Suppl.), 143S-162S.
- (p. 306) Farrell, J., & Klemperer, P. (2007). Coordination and lock-in: Competition with switching costs and network effects. *Handbook of Industrial Organization*, 3, 1967-2072.
- Faulkner, R. R. (1983). *Music on demand*. New Brunswick, New Jersey: Transaction Publishers.
- Fligstein, N. (1990). *The transformation of corporate control*. Boston, MA: Harvard University Press.
- Fligstein, N. (1996). Markets as politics: A political cultural approach to market institutions. *American Sociological Review*, 61, 656-673.

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

Fligstein, N. (2001). *The architecture of markets: An economic sociology of capitalist societies*. Princeton, NJ: Princeton University Press.

Fligstein, N., & Dauter, L. (2007). The sociology of markets. *Annual Review of Sociology*, 33, 105–128.

Frank, D., Hironaka, A., & Schofer, E. (2000). The nation state and the natural environment over the twentieth century. *American Sociological Review*, 65, 96–116.

Funk, J. L. (2012). Multiple standards and critical masses, and the formation of new industries. *European Journal of Innovation Management*, 15, 4–26.

Garud, R., Jain, S., & Kumaraswamy, A. (2002). Institutional entrepreneurship in the sponsorship of common technological standards: The case of Sun Microsystems and Java. *Academy of Management Journal*, 45(1), 196–214.

Gawer, A. (2009). *Platforms, markets and innovation*. Northampton, MA: Edward Elgar Publishing.

Gawer, A., & Cusumano, M. A. (2002). *Platform leadership: How Intel, Microsoft, and Cisco drive industry innovation* (Vol. 5, pp. 29–30). Boston, MA: Harvard Business School Press.

Gawer, A. (2014). Bridging differing perspectives on technological platforms: Toward an integrative framework. *Research policy*, 43(7), 1239–1249.

Gawer, A., & Cusumano, M. A. (2014). Industry platforms and ecosystem innovation. *Journal of Product Innovation Management*, 31(3), 417–433.

Gnyawali, D. R., & Park, B. J. R. (2011). Co-opetition between giants: Collaboration with competitors for technological innovation. *Research Policy*, 40(5), 650–663.

Gomes-Casseres, B. (1994, July–August). Group versus group: How alliance networks compete. *Harvard Business Review*, 62–74.

Gomes-Casseres, B. (1996). *The alliance revolution: The new shape of business rivalry*. Cambridge, MA: Harvard University Press.

Gomes-Casseres, B. (2001). The logic of alliance fads: Why collective competition spreads. In M. P. Koza & A. Y. Lewin (Eds.). *Strategic alliances and firm adaptation: A co-evolution perspective*. Armonk, NY: M. E. Sharpe.

Gulati, R. (1998). Alliances and networks. *Strategic Management Journal*, 19, 293–318.

Gulati, R., & Higgins, M. C. (2003). Which ties matter when? The contingent effects of inter-organizational partnerships on IPO success. *Strategic Management Journal*, 24, 127–144.

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

Gulati, R., & Gargiulo, M. (1999). Where do interorganizational networks come from? *American Journal of Sociology*, *104*(5), 1439–1493.

Gurses, K., & Ozcan, P. (2015). Entrepreneurship in regulated markets: Framing contests and collective action to introduce pay TV in the US. *Academy of Management Journal*, *58*(6), 1709–1739.

Gurses, K., Yakis, B., & Ozcan, P. (2018). *Who owns the airwaves? How disruptive communication technologies enter established markets through public interest framing*. Manuscript in preparation.

(p. 307) Gustafsson, R., Jääskeläinen, M., Maula, M., & Uotila, J. (2016). Emergence of industries: A review and future directions. *International Journal of Management Reviews*, *18*(1), 28–50.

Hambrick, D. C., McMillan, I., & Day, D. L. (1982). Strategic attributes and performance in the BCG Matrix: A PIMS-based analysis of industrial product businesses. *Academy of Management Journal*, *25*(3), 510–531.

Hargadon, A., & Douglas, Y. (2001). When innovations meet institutions: Edison and the design of the electric light. *Administrative Science Quarterly*, *46*, 476–501.

Hargrave, T. J., & Van De Ven, A. H. (2006). A collective action model of institutional innovation. *Academy of Management Review*, *31*, 864–888.

Haveman, H. A., & Rao, H. (1997). Structuring a theory of moral sentiments: Institutional and organizational coevolution in the early thrift industry. *American Journal of Sociology*, *102*, 1606–1651.

Haveman, H., Rao, H., & Paruchuri, S. (2007). The winds of change: The progressive movement and the bureaucratization of thrift. *American Sociological Review*, *72*, 117–143.

Helper, S. (1991). How much has really changed between U.S. automakers and their suppliers? *Sloan Management Review*, *32*(4), 15–28.

Hoffman, A. J. (1997). *From heresy to dogma: An institutional history of corporate environmentalism*. Redwood City, CA: Stanford University Press.

Hoffmann, W. H. (2005). How to manage a portfolio of alliances. *Long Range Planning*, *38*, 121–143.

Hoffmann, W. H. (2007). Strategies for managing a portfolio of alliances. *Strategic Management Journal*, *28*, 827–856.

Horii, R. (2012). Wants and past knowledge: Growth cycles with emerging industries. *Journal of Economic Dynamics and Control*, *36*, 220–238.

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

Hiatt, S. R., Sine, W. D., & Tolbert, P. S. (2009). From Pabst to Pepsi: The deinstitutionalization of social practices and the creation of entrepreneurial opportunities. *Administrative Science Quarterly*, 54(4), 635–667.

Hillman, A., & Hitt, M. (1999). Corporate political strategy formulation: A model of approach, participation and strategy decisions. *Academy of Management Review*, 24, 825–842.

Howard, P. N. (2005). *New media campaigns and the managed citizen*. New York, NY: Cambridge University Press.

Ingersoll, J. E., Jr., & Ross, S. A. (1992). Waiting to invest: Investment and uncertainty. *Journal of Business*, 65(1) 1–29.

Ingram, P., & Inman, C. (1996). Institutions, intergroup competition, and the evolution of hotel populations around Niagara Falls. *Administrative Science Quarterly*, 629–658.

Ingram, P., & Rao, H. (2004). Store wars: The enactment and repeal of anti-chain-store legislation in America. *American Journal of Sociology*, 110(2), 446–487.

Ireland, R. D., Hitt, M. A., & Vaidyanath, D. (2002). Alliance management as a source of competitive advantage. *Journal of management*, 28(3), 413–446.

Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: Antecedents and consequences. *Journal of Marketing*, 57, 53–70.

Jones, C., Hesterly, W. S., Fladmoe-Lindquist, K., & Borgatti, S. P. (1998). Professional service constellations: How strategies and capabilities influence collaborative stability and change. *Organization Science*, 9(3), 396–410.

Kale, P., & Singh, H. (2009). Managing strategic alliances: What do we know now, and where do we go from here? *Academy of Management Perspectives*, 45–62.

(p. 308) Kaplan, S., & Tripsas, M. (2008). Thinking about technology: Applying a cognitive lens to technical change. *Research Policy*, 37(5), 790–805.

Katz, M. L. & Shapiro, C. (1986). Technology adoption in the presence of network externalities. *Journal of Political Economy*, 94, 822–841.

Kennedy, M. T. (2008). Getting counted: Markets, media, and reality. *American Sociological Review*, 73, 270–295.

Khair, M. (2014). Fashioning an industry: Socio-cognitive processes in the construction of worth of a new industry. *Organization Studies*, 35, 41–74.

Khanna, T., Gulati, R., & Nohria, N. (1998). The dynamics of learning alliances: Competition, cooperation, and relative scope. *Strategic Management Journal*, 193–210.

Klein, B. (1977). *Dynamic economics*. Cambridge, MA: Harvard University Press.

---

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

Klepper, S. (1997). Entry, exit, growth, and innovation over the product life cycle. *American Economic Review*, 86(3), 562-583.

Klepper, S., & Graddy, E. (1990). The evolution of new industries and the determinants of market structure. *Rand Journal of Economics*, 21, 27-44.

Klepper, S., & Simons, K. L. (2000). Dominance by birthright: Entry of prior radio producers and competitive ramifications in the U.S. television receiver industry. *Strategic Management Journal*, 21, 997-1016.

Koka, B. R., & Prescott, J. E. (2008). Designing alliance networks: The influence of network position, environmental change, and strategy on firm performance. *Strategic Management Journal*, 29, 639-661.

Lavie, D. (2006). The competitive advantage of interconnected firms: An extension of the resource-based view of the firm. *Academy of Management Review*, 31, 638-658.

Lavie, D. (2007). Alliance portfolios and firm performance: A study of value creation and appropriation in the U.S. software industry. *Strategic Management Journal*, 28, 1187-1212.

Lavie, D., & Miller, S. R. (2008). Alliance portfolio internationalization and firm performance. *Organization Science*, 19, 623-646.

Lavie, D., & Singh, H. (2012). The evolution of alliance portfolios: the case of Unisys. *Industrial and Corporate Change*, 21(3), 763-809.

Leblebici, H., Salancik, G. R., Copay, A., & King, T. (1991). Institutional change and the transformation of interorganizational fields: An organizational history of the US radio broadcasting industry. *Administrative Science Quarterly*, 36(3) 333-363.

Lee, B. H. (2009). The infrastructure of collective action and policy content diffusion in the organic food industry. *Academy of Management Journal*, 52(6), 1247-1269.

Lee, B. H., Struben, J., & Bingham, C. (2017). Collective action and market formation: An integrative framework. *Strategic Management Journal* 39(1), 242-266.

Lounsbury, M., & Glynn, M. A. (2001). Cultural entrepreneurship: Stories, legitimacy, and the acquisition of resources. *Strategic Management Journal*, 22, 545-564.

Lounsbury, M., Ventresca, M., & Hirsch, P. (2003). Social movements, field frames and industry emergence: A cultural-political perspective on U.S. recycling. *Socio-Economic Review*, 1, 71-104.

Malerba, F., Nelson, R., Orsenigo, L., & Winter, S. (1999). History-friendly models of industry evolution: The computer industry. *Industrial and Corporate Change*, 8(1), 3-40.

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

McAdam, D., McCarthy, J. D., & Zald, M. N. (Eds.). (1996). *Comparative perspectives on social movements: Political opportunities, mobilizing structures, and cultural framings*. Cambridge: Cambridge University Press.

McGrath, R. G. (1997). A real options logic for initiating technology positioning investments. *Academy of Management Review*, 22, 974–996.

(p. 309) McIntyre, D. P., & Srinivasan, A. (2017). Networks, platforms, and strategy: Emerging views and next steps. *Strategic Management Journal*, 38(1), 141–160.

McKendrick, D., & Carroll, G. (2001). On the genesis of organizational forms: Evidence from the market for disk arrays. *Organization Science*, 12, 661–682.

Meyer, A. D., Gaba, V. & Colwell, K. A. (2005). Organizing far from equilibrium: Nonlinear change in organizational fields. *Organization Science*, 16, 456–473.

Mezias, S. J., & Kuperman, J. C. (2001). The community dynamics of entrepreneurship: the birth of the American film industry, 1895–1929. *Journal of Business Venturing*, 16(3), 209–233.

Miller, K. D., & Folta, T. B. (2002). Option value and entry timing. *Strategic Management Journal*, 23(7), 655–665.

Miner, A. S., Amburgey, T. L., & Stearns, T. M. (1990). Interorganizational linkages and population dynamics: Buffering and transformational shields. *Administrative Science Quarterly* 35(4), 689–713.

Munir, K. A., & Phillips, N. (2005). The birth of the “Kodak moment”: Institutional entrepreneurship and the adoption of new technologies. *Organization Studies*, 26, 1665–1687.

Navis, C., & Glynn, M. A. (2010). How new market categories emerge: Temporal dynamics of legitimacy, identity, and entrepreneurship in satellite radio, 1990–2005. *Administrative Science Quarterly*, 55, 439–471.

Ohmae, K. (1989). The global logic of strategic alliances. *Harvard Business Review*, 67(2), 143–154.

Ozcan, P. (2018). Growing with the market: How changing conditions during market growth affect formation and evolution of interfirm ties. *Strategic Management Journal*, 39(2), 295–328.

Ozcan, P., & Eisenhardt, K. (2009). Origin of alliance portfolios: Entrepreneurs, network strategies, and firm performance. *Academy of Management Journal*, 52(2), 246–279.

Ozcan, P., & Gurses, K. (2018). Playing cat and mouse: Contests over regulatory categorization of dietary supplements in the U.S. *Academy of Management Journal*, 61(5), 1789–1820.

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

Ozcan, P., Gurses, K., & Mohlmann, M. (2018). Category kings and commoners: Within and cross-category spill-overs in the sharing economy. *Research in the Sociology of Organisations, forthcoming*.

Ozcan, P., & Santos, F. M. (2015). The market that never was: Turf wars and failed alliances in mobile payments. *Strategic Management Journal, 36*(10), 1486–1512.

Ozcan, P., Zachariadis, M., & Dinckol, D. (2019). “Platformification” of banking: Strategy and challenges of incumbent banks and fintechs in response to regulatory change in the UK. Manuscript submitted for publication.

Parise, S., & Casher, A. (2003). Alliance portfolios: Designing and managing your network of business-partner relationships. *Academy of Management Executive, 17*(4), 25–39.

Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. Redwood City, CA: Stanford University Press.

Phaal, R., O’Sullivan, E., Routley, M., Ford, S. & Probert, D. (2011). A framework for mapping industrial emergence. *Technological Forecasting and Social Change, 78*, 217–230.

Pisano, G. P. (1990). The R&D boundaries of the firm: An empirical analysis. *Administrative Science Quarterly, 35*, 153–176.

Podolny, J. (1994). Market uncertainty and the social character of economic exchange. *Administrative Science Quarterly, 39*, 458–483.

Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. New York, NY: Free Press.

**(p. 310)** Powell, W. W., Koput, K. W., & Smith-Doerr, L. (1996). Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative science quarterly, 41*(1) 116–145.

Powell, W. W., White, D. R., Koput, K. W., & Owen-Smith, J. (2005). Network dynamics and field evolution: The growth of inter-organizational collaboration in the life sciences. *American Journal of Sociology, 110*, 1132–1205.

Rao, H. (1994). The social construction of reputation-certification contests, legitimation, and the survival of organizations in the American automobile industry: 1895–1912. *Strategic Management Journal, 15*(1), 29–44.

Rao, H., Morrill, C., & Zald, M. N. (2000). Power plays: Social movements, collective action and new organizational forms. *Research in Organizational Behavior, 22*, 239–282.

Rao, H. (2009). *Market rebels: How activists make or break radical innovations*. Princeton University Press.

Rice, J., & Galvin, P. (2006). Alliance patterns during industry life cycle emergence: The case of Ericsson and Nokia. *Technovation, 26*, 384–395.

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

- Rietveld, J., & Eggers, J. P. (2018). Demand heterogeneity in platform markets: Implications for complementors. *Organization Science*, 29(2), 304–322.
- Rochet, J.-C., & Tirole, J. (2003). Platform competition in two-sided markets. *Journal of the European Economic Association*, 1(4), 990–1029.
- Rosa, J., Porac, J., Runser-Spanjol, J., & Saxon, M. (1999). Sociocognitive dynamics in a product market. *Journal of Marketing*, 63, 64–77.
- Rosenberg, N. (1982). *Inside the black box*. Cambridge, UK: Cambridge University Press.
- Rosenkopf, L., & Tushman, M. L. (1998). The coevolution of community networks and technology: Lessons from the flight simulation industry. *Industrial and Corporate Change*, 7(2), 311–346.
- Schneiberg, M., & Bartley, T. (2001). Regulating American industries: Markets, politics, and the institutional determinants of fire insurance regulation. *American Journal of Sociology*, 107, 101–146.
- Schneiberg, M., King, M., & Smith, T. (2008). Social movements and organizational form: Cooperative alternatives to corporations in the American insurance, dairy and grain industries. *American Sociological Review*, 73, 635–667.
- Schneiberg, M., & Soule, S. (2005). Institutionalization as a contested, multi-level process: Politics, social movements and rate regulation in American fire insurance. In G. Davis, D. McAdam, W.R. Scott, & M. Zald (Eds.), *Social movements and organizations* (pp. 122–160). Cambridge, UK: Cambridge University Press.
- Schuler, D. A. (1996). Corporate political strategy and foreign competition: The case of the steel industry. *Academy of Management Journal*, 39(3), 720–737.
- Sharfman, M. P., Wolf, G., Chase, R. B., & Tansik, D. A. (1988). Antecedents of organizational slack. *Academy of Management Review*, 13(4), 601–614.
- Sine, W., Haveman, H., & Tolbert, P. (2005). Risky business? Entrepreneurship in the new independent power sector. *Administrative Science Quarterly*, 50, 200–232.
- Sine, W. D., & David, R. J. (2010). Institutions and entrepreneurship. In W. Sine & R. David (Eds.), *Research in the sociology of work* (pp. 1–26). Bingley, UK: Emerald Group Publishing.
- Sine, W. D., & Lee, B. H. (2009). Tilting at windmills? The environmental movement and the emergence of the U.S. wind energy sector. *Administrative Science Quarterly*, 54(1), 123–155.
- Spencer, J. W., Murtha, T. P., & Lenway, S. A. (2005). How governments matter to new industry creation. *Academy of Management Review*, 20, 321–337.

## Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets

---

(p. 311) Stuart, T. E. (1998). Network positions and propensities to collaborate: An investigation of strategic alliance formation in a high technology industry. *Administrative Science Quarterly*, 43(3), 668–698.

Stuart, T. E., Hoang, H., & Hybels, R. C. (1999). Inter-organizational endorsements and the performance of entrepreneurial ventures. *Administrative Science Quarterly*, 44, 315–349.

Swaminathan, A., & Wade, J. B. (2001). Social movement theory and the evolution of new organizational forms. In C. B. Schoonhoven & E. Romanelli (Eds.), *The entrepreneurship dynamic: Origins of entrepreneurship and the evolution of industries* (pp. 286–313). Stanford, CA: Stanford University Press.

Tee, R., & Ozcan, P. (2019). *The dark side of flexibility: How product module boundaries affect the evolution of collaborative ventures* (Working Paper), unpublished manuscript.

Tripsas, M. (2008). Customer preference discontinuities: A trigger for radical technological change. *Managerial and Decision Economics*, 29(2–3), 79–97.

Tushman, M. L., & Anderson, P. (1986). Technological discontinuities and organizational environments. *Administrative Science Quarterly*, 31(3), 439–465.

Tushman, M. L., & Rosenkopf, L. (1992). Organizational determinants of technological change: Toward a sociology of technological evolution. *Research in Organizational Behavior*, 14, 311–347.

Uzunca, B., Rigtering, J. C., & Ozcan, P. (2018). Sharing and shaping: A cross-country comparison of how sharing economy firms shape their institutional environment to gain legitimacy. *Academy of Management Discoveries*, 4(3), 248–272.

Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42(1), 35–67.

Van de Ven, A. H., & Polley, D. (1992). Learning while innovating. *Organization Science*, 3(1), 92–116.

Van de Ven, A. H. (1993). The emergence of an industrial infrastructure for technological innovation. *Journal of Comparative Economics*, 17, 338–365.

Van de Ven, A., & Garud, R. (1994). The coevolution of technical and institutional events in the development of an innovation. In J. Baum & J. Singh (Eds.), *Evolutionary dynamics of organizations* (pp. 425–443). Oxford, UK: Oxford University Press.

Van Wijk, J., Stam, W., Elfring, T., Zietsma, C., & Den Hond, F. (2013). Activists and incumbents structuring change: The interplay of agency, culture, and networks in field evolution. *Academy of Management Journal*, 56(2), 358–386.

## Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets

---

Vasudeva, G. (2009). How national institutions influence technology policies and firms' knowledge building strategies: A study of fuel cell innovation across industrialized countries. *Research Policy*, 38, 1248–1259.

Wassmer, U. (2010). Alliance portfolios: A review and research agenda. *Journal of Management*, 36(1), 141–171.

Weber, K., Heinze, K. L., & DeSoucey, M. (2008). Forage for thought: Mobilizing codes in the movement for grass-fed meat and dairy products. *Administrative Science Quarterly*, 53, 529–567.

West, J., & Wood, D. (2014). *Evolving an open ecosystem: The rise and fall of the Symbian platform*. In Collaboration and competition in business ecosystems (pp. 27–67). Emerald Group Publishing Limited.

Williamson, O. (1985). *The economic institutions of capitalism*. New York, NY: Free Press.

(p. 312) Wincent, J., Anokhin, S., Örtqvist, D., & Autio, E. (2010). Quality meets structure: Generalized reciprocity and firm-level advantage in strategic networks. *Journal of Management Studies*, 47(4), 597–624.

Zald, M. N., Morrill, C., & Rao, H. (2005). The impact of social movements on organizations. In Davis, G., McAdam, D., Scott, W., & Zald, M. (Eds.) *Social Movements and Organization Theory*, 253–279. Cambridge: Cambridge University Press.

Zucker, L. G., & Darby, M. R. (1997). Present at the biotechnological revolution: Transformation of technological identity for a large incumbent pharmaceutical firm. *Research Policy*, 26(4–5), 429–446.

### Notes:

(1.) We define a market as a structured context for exchange (Fligstein, 2001) in which resources are mobilized and organized by a set of producers to deliver a particular offer tailored to the needs and desires of a set of customers. We can thus speak of the automobile market that addresses the need for mobility or the wireless payment market that addresses users' desire to make fast and secure transactions with their phones. This perspective conceives markets as a type of institution that introduces stability and regularity into the behaviors of economic agents rather than just a trading place (Fligstein, 2001). According to this view, a market is different from an industry, although these two concepts are often used interchangeably in the literature. We can define industries as a collection of firms that provide products or services with vertical (i.e., value chain) or horizontal (i.e., complements or substitutes) links to each other (Porter, 1980). A market can materialize at the convergence of industries, and firms that make up an industry can establish different markets.

(2.) Different types of lines denote different types of alliances including joint ventures, R&D alliances, buyer–supplier relationships, licensing agreements, and so forth.

## **Collaborative Market Making: The Critical Role of Dyadic and Multipartner Alliances in the Formation of New Markets**

---

(3.) Astroturfing is the practice of masking the (typically corporate) sponsors of a message or movement to make it appear as though it originates from and is supported by grassroots participants (Howard, 2005).

(4.) That is, individuals passing between roles at legislators or regulators and the private organizations affected by the legislation and regulation.

**Pinar Ozcan**

Warwick Business School

**Kerem Gurses**

Luiss University