

Structural marketing: using organizational structure to achieve marketing objectives

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Abstract Academics and business practitioners increasingly recognize the importance of organizational structure in marketing. Yet research examining the effects of different organizational structure design elements on marketing outcomes remains fragmented and scarce. Accordingly, this article seeks to synthesize and extend understanding of how firms use their organizational structural elements to achieve marketing objectives, and to offer a new perspective of *structural marketing*. In support of this research goal, a cross-disciplinary review of organizational structure, its types, and its characteristics, in combination with theories relevant to the field of marketing, informs an assessment of empirical findings from marketing literature. This synthesis introduces the concept of structural marketing; the article offers both theoretical tenets and testable propositions in support of an initial framework for using organizational structure design elements as strategic marketing variables. Illustrative business cases reinforce these tenets, conceptual arguments, and managerial insights.

Keywords Organizational structure · Structural marketing · Customer-centric structure · Innovation · Relationship marketing

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Academics and business practitioners highlight the importance of organizational structure in marketing (Homburg et al. 2000; Olson et al. 2005). According to a survey of U.S. managers, the number of firms with structures organized around distinct customer groups will soon exceed 50%, as more firms attempt to increase their customer centricity and thereby improve their performance (Day 2006). However, no research really examines the impact of an organization's structural design (e.g., customer-centric structures, teams, centralization) on marketing outcomes. Thus the Marketing Science Institute (2010, p. 5; 2012) has designated "organizational structure" as a top research priority over its last two biannual reports, raising the question, "How do organizational structure and marketing capabilities influence business performance?"

The goal of this article is to synthesize academic research and business practice to provide a foundation for using organizational structure as a tool to achieve marketing objectives and to offer a new perspective of structural marketing. With this approach, we highlight structural design features that constitute important strategic marketing variables. Researchers use organizational design theory (Galbraith et al. 2002) to investigate the effects of many different organizational design elements on performance. For example, empirical research in marketing tests the effectiveness of leadership and culture (Homburg and Pflesser 2000), metrics and incentives (Kirca et al. 2005), and systems and processes (Kumar et al. 2008). Surprisingly, there has been scarce research on the effects of organizational structure on *marketing* outcomes, despite emerging interest in the role of structure. For example, the number of articles published in major marketing journals and containing the phrase "organizational structure" in their abstracts doubled in the 2000s compared to the previous decade (1990s), and it is on track to double again in the 2010s. Thus, now is an opportune time to synthesize recent marketing research on organizational structure while also linking it to the vast body of related management

literature and emerging business practices, in order to offer new theoretical perspectives for future research.

Therefore, we investigate the effect of organizational structure on marketing outcomes in three sequential steps. First, we review extensive literature from management, organizational psychology, and sociology regarding the effect of structural design elements on performance and the underlying theoretical explanations for these linkages. Second, after distilling five decades of wide-ranging research on structural types, characteristics, and theories relevant for marketing, we narrow our focus to empirical research in marketing journals. Accordingly, we synthesize the findings of more than 40 marketing studies pertaining to the effects of organizational structure on specific marketing outcomes (e.g., market orientation, innovation) or as a moderator of the strategy–performance linkage. These two sections provide a concise summary of current knowledge on the role of structure in marketing. Third, we use this foundation to derive tenets and associated propositions for using organizational structure to achieve marketing objectives and advance research in this domain. Our marketing-centric theorizing about the effects of structural design offers a useful focus on marketing-relevant problems and variables (marketing mix, customer relationships), rather than leaving it as a peripheral concern. To define this emerging area, we use the term *structural marketing*, which refers to the firm's use of structural design elements as marketing tools to achieve marketing objectives. Empirical tests of these tenets are beyond the scope of this article, but we illustrate each tenet using business cases and suggest multiple related research opportunities.

We contribute to the marketing literature in three ways. First, we show that organizational structure is important for achieving *marketing* objectives. The impact of structural design is not restricted to market orientation or interfunctional relationships; it also spans more diverse marketing outcomes, including customer relationships, innovation, and marketing mix effectiveness. To understand these effects, we suggest new research directions and propositions to capture the theoretical essence of how structural design elements influence specific marketing outcomes. The business cases richly describe these phenomena from a managerial perspective. Thus this article contains concise, theoretical, illustrative explanations for why structural design elements matter for marketing.

Second, we highlight some structural elements that have been generally ignored by marketing through identifying the major types (e.g., multidivisional, team structures) and characteristics (e.g., centralization, modularity) of organizational structure, which then constitute the structural building blocks for organizations. Most marketing studies focus instead on a limited set of structural characteristics and types, failing to consider the broader set of structural design elements and their advantages. More than 85% of the marketing articles we reviewed that examine structural types address team structures

only and disregard other types, such as a customer-centric structures—a surprising gap, considering that many *Fortune* 500 firms (e.g., American Express, Qwest Communication) have restructured around distinct customer groups. Furthermore, more than 60% of the articles we reviewed focus on only two of the many characteristics of organizational structure—centralization or formalization. Thus, we extend understanding of several largely ignored structural elements.

Third, we propose contextual factors that may leverage the effect of organizational structure on marketing outcomes, which can clarify equivocal findings from extant marketing research. Approximately 60% of marketing studies never consider how the impact of structure could vary by contingent factors, so they often produce conflicting findings. For example, depending on the study, formalization has negative, insignificant, or even positive effects on market orientation (e.g., Auh and Menguc 2007; Kirca et al. 2005). Among the limited set of articles that address contextual factors, the main focus is on factors internal to the firm, such as innovation capability or new product concept experience (e.g., Olson et al. 2005), rather than any external or environmental factors. We provide several tenets and propositions in an effort to describe the environments (e.g., market dynamism, service industry) in which particular structures are more or less effective for driving marketing outcomes.

Theoretical conceptualization of organizational structure

Theoretical research on organizational structure began with Alfred Chandler's (1962) description of the importance of aligning structure with a firm's strategy to attain superior performance, which ultimately led to advances in management, marketing, sociology, and psychology. In the early years of the organizational literature, organizations were thought to consist of self-contained units and to have the chain of command that depicts management hierarchy. However, as firms sought modular organizational forms that allowed rapid and ongoing adaptation, scholars started to view organizational structure as "less structured" (Bunderson and Boumgarden 2009). Such changes in perspective have led the definition of structure to focus on three interrelated aspects: (1) the design of units, divisions, departments, teams, and networks that group individuals; (2) the reporting relationship among organizational entities; and (3) the coordination mechanisms that integrate units' activities and resources (Huber 1991; Moorman et al. 1993; Olson et al. 1995).

We begin our discussion with the review of different building blocks of organizational structure types and characteristics of structure, which have been widely studied in marketing. The *types of structure* (e.g., functional, multidivisional, team) describe the underlying approach for grouping employees in an organizational entity (Habib and Victor 1991). The

characteristics of organizational structure (e.g., centralization, formalization) are used to explain more behavioral aspects, such as how a unit relates to another, or how activities are coordinated across units (Walton 2005). Both structure types and characteristics define the design of an organization's structure and its unique performance profile. Determining a firm's structural type is often the first macro-structural design decision facing senior managers (e.g., grouping theme of the divisions and units), whereas each characteristic describes "the division of work and authority and the processes by which these divisions are controlled and coordinated" (DeWitt 1993, p. 32). Our review of the literature reveals that most organizational structures can be described by major types and characteristics, as we summarize in Table 1.

Types of organizational structure

In the early years of the organizational literature, firms had structures with clear boundaries between units, such as functional and multidivisional structures. In a *functional structure*, activities and workers are organized into separate units responsible for particular functions (R&D, sales, operations) or areas of expertise (Habib and Victor 1991). As a result, this structure enhances efficiency and the ability to develop specialized, distinctive firm capabilities, but it also creates coordination issues and conflicts across the functions (Workman et al. 1998). In a *multidivisional structure*, the firm is subdivided into smaller, separate divisions, performing a variety of functions. Each unit is more focused and stand-alone, so divisional structures tend to be more responsive and able to adapt to market changes than functional structures. However, this structure duplicates administrative, management, and staff activities, and it inherently entails inefficient use of functional resources, loss of economies of scale, and higher costs (Gulati 2007). Generally, scholars identify different multidivisional structures (e.g., product-centric, geographical, and customer-centric), but recently attention is shifting to *customer-centric structures* as many *Fortune* 500 firms, such as IBM and Cisco, have shifted their structure to align their divisions with their key customer groups.

Because these structures have clearly defined boundaries and limit coordination across functional and divisional silos, firms are advocating new forms of structure that support cross-silo cooperation, have fluid internal and external boundaries, and flatten vertical hierarchies. Such structures with flexible boundaries include matrix, team, and network structures. *Matrix structure*¹ refers to the structural form with activities aligned along two or more lines of authority, using functional and divisional chains of command simultaneously in the same

part of the firm (dual reporting lines) (Griffin and Hauser 1996). This structure facilitates cross-functional cooperation, decision making, and flexibility in operations in order to meet changing demands, but this "two-boss" system can create power struggles and task confusion (Aaker 2008).

Team structure places separate functions or processes into groups according to one overall objective (Griffin and Hauser 1996). A team structure breaks down departmental and functional barriers, develops generalist skills, improves decision-making speed, and supports greater learning across the organization (Grant 1996b; Nonaka and Takeuchi 1995). Yet the complexities it creates also result in conflicting employee loyalties and requires more time for meetings and coordination, making team structure more appropriate for interdependent tasks (Cohen and Bailey 1997). Marketing researchers typically study project teams (Barczak 1995) and work teams (Emery and Fredendall 2002), but more sophisticated and modular forms of team structures, such as ambidextrous and hypertext structures, are emerging to better balance the exploration and exploitation of organization's knowledge (Child and McGrath 2001). *Ambidextrous structure* consists of two independent project teams: "emerging business units" that are flexible and adaptive for exploration purposes, and "existing business units" that are more formal and work to exploit existing capabilities (O'Reilly and Tushman 2004). Similarly, in a *hypertext structure*, which is the "dynamic synthesis" of autonomous self-organizing teams for innovative activities and hierarchical structure for routine tasks, employees continuously change between the two types of structure and use different knowledge to find balance between exploration and exploitation (Nonaka and Takeuchi 1995).

Recently, increasing attention has been paid to more informal and intangible types of structure, such as *network structure*—a cluster of "task- or skill-specialized economic entities" (autonomous units, subsidiaries, and independent firms) whose activities are coordinated by contracts or relational norms instead of a hierarchical chain of command (Achrol 1997; Achrol and Kotler 1999). As social interactions among people and units cannot be described with simply dyads or triads, scholars use social network constructs such as centrality and density to understand the complex nature of exchange (Rowley 1997; Tsai and Ghoshal 1998). Network structure leverages the resources of other network members, increases flexibility, transfers knowledge, and reinforces informal communication. Yet it incurs high coordination costs, and its ability to guarantee quality requires partners to operate in good faith (Ahuja and Carley 1998).

Our review of structure types uncovers several implications for marketing. First, as a growing number of firms are evolving toward a customer-centric structure to better collect front-line information and get closer to customers, it is becoming more critical to understand how to shift successfully from traditional structures to new organizational forms. This trend

¹ A matrix structure is distinctive from a hybrid structure. Hybrid structures feature a combination of any structural forms whereas a matrix structure combines functional and multidivisional structures.

Table 1 Organizational structure types and characteristics

Constructs	Definitions	Common Aliases	Representative Papers
Types of Organizational Structure			
Functional structure	An organizational structure in which work and workers are organized into separate units responsible for particular business functions or areas of expertise	U-form, mechanistic structure	Habib and Victor (1991); Workman et al. (1998)
Multidivisional structure	An organizational structure in which support functions are placed in self-contained divisions	M-form	Day (2006); Gulati (2007); Habib and Victor (1991); Workman et al. (1998)
Product-centric structure	An organizational structure that is organized around product or service groups	Product-focused structure	Day (2006); Habib and Victor (1991); Homburg et al. (2000); Shah et al. (2006)
Geographical structure	An organizational structure that is organized around geographic locations	Geography-focused structure	Habib and Victor (1991); Homburg et al. (2000)
Customer-centric structure	An organizational structure that is organized around customer groups	Customer-driven structure, customer-focused structure	Day (2006); Homburg et al. (2000); Shah et al. (2006)
Matrix structure	Organizational designs that organize activities along two or more lines of authority and reporting relationships	Horizontal overlays, XM-form structure, X-form structure	Aaker (2008); Griffin and Hauser (1996); Habib and Victor (1991)
Team structure	Organizational designs that place separate functions or processes into groups, according to one overall objective	Collocated structure	Cohen and Bailey (1997); Grant (1996b); Griffin and Hauser (1996); Nonaka and Takeuchi (1995)
Work teams	Team structure in which units are responsible for providing products and services, and their memberships are well-defined and stable	Work group	Cohen and Bailey (1997); Emery and Fredendall (2002)
Project teams	Team structure in which groups of people work together on a project task within a temporary time frame	Temporary teams	Cohen and Bailey (1997); Griffin and Hauser (1996)
Ambidextrous structure	Two project teams that are structurally independent: “emerging business units” that are flexible and adaptive for exploration, and “existing business units” that are more formal and work to exploit existing capabilities	Structural separation, loosely coupled organization, plural form, dual organizational structure	Child and McGrath (2001); Homburg et al. (2000); O’Reilly and Tushman (2004)
Hypertext structure	The combination of the autonomous self-organizing teams that are flexible enough to support innovative activities and hierarchical organizational structure that is designed for routine tasks and to ensure efficient operations	Parallel structures, dualistic structures, collateral organization	Child and McGrath (2001); Grant (1996b); Homburg et al. (2000); Nonaka and Takeuchi (1995)
Network structure	A cluster of task- or skill-specialized economic entities (autonomous units, divisions, subsidiaries, and independent firms) whose activities are coordinated by contracts or relational norms	Virtual structure, latent organization	Achrol (1997); Achrol and Kotler (1999); Ahuja and Carley (1998); Rowley (1997); Tsai and Ghoshal (1998)

Table 1 (continued)

Constructs	Definitions	Common Aliases	Representative Papers
Characteristics of Organizational Structure			
Centralization	The extent to which the authority to make decisions and take action resides in the upper levels of the organizational hierarchy	Vertical division of labor, participation, span of control, locus of authority, worker/ supervisory ratio, number of direct supervisors, hierarchy of authority, hierarchy of control, number of vertical levels, tall structure	Jaworski and Kohli (1993); Kabadayi et al. (2007); Matsuno et al. (2002); Menon et al. (1999); Olson et al. (2005); Pelham and Wilson (1996); Troy et al. (2001)
Formalization	The degree to which rules govern decisions, roles, norms, procedures, and communications	Standardization, job codification, job specificity, rules and procedures	Grant (1996b); Jaworski and Kohli (1993); Kabadayi et al. (2007); Olson et al. (2005); Troy et al. (2001)
Specialization	The extent to which jobs in the organization require narrowly defined skills or expertise	Horizontal division of labor, functional diversification, structural differentiation, number of functions, number of job title, departmentalization	Barclay (1991); Jaworski and Kohli (1993); Kabadayi et al. (2007); Olson et al. (2005); Troy et al. (2001)
Interdependence	The degree to which workflows within the firm require cooperation among groups	Structural linkage	Huber (1991); Sethi (2000b); Vorhies and Morgan (2003)
Integration	The extent to which different organizational units, departments, or partners tightly coordinate their activities	Level of interunit integration, cross-functional integration, lateral links	Ayers et al. (1997); Germain et al. (1994); Im and Nakata (2008); Troy et al. (2008)
Modularity	The extent to which a firm constantly hives off business into manageable units and assemble them to work together	Organizational fluidity, structural insularity, structural flux, relentless reorganization, continuous morphing	Day (2011); Eisenhardt and Brown (1999); Grant (1996a); Schreyögg and Sydow (2010)

Firms often use hybrid structure (i.e., organizational design that simultaneously uses many different types of organizational structure). Although structures can be classified into these “pure” types, virtually all organizations contain some combinations

requires more research on the dynamic effects of restructuring as firms move to more market-driven structures. For example, researchers could address key questions such as “how long after restructuring does it take to pay off?” or “how can managers minimize the resistance to new structures?” Second, horizontal or market-driven structures in themselves are not sufficient to develop marketing capabilities and provide superior customer value; rather, structure needs to be supported by other organizational design elements such as systems, processes, and metrics to lead to a competitive advantage. For example, the advancement of information technology and network systems in the firm enables units to quickly communicate independent of structure (Day 1999). Third, scholars have typically studied one level of structure at a time (e.g., marketing group, sales team, corporate). Since firms consist of multiple layers of structures, it is important to study how structures at different levels interact, and identify the best configuration of structure layers (e.g., combining divisional structure at the corporate level with the team structure at the marketing organization level).

Characteristics of organizational structure

Identifying unique characteristics of structure is critical for understanding the nuanced or micro-structural effects of an organizational design. We review six major structure characteristics: centralization, formalization, specialization, interdependence, integration, and modularity. *Centralization* is the extent to which the authority to make decisions and take action resides in the upper bounds of the hierarchy (Jaworski and Kohli 1993). Delegating authority to high-level personnel can be beneficial in less turbulent markets, but it impedes innovation, intra-organizational knowledge-sharing, decision-making efficiency, and knowledge performance (Menon et al. 1999). *Formalization* refers to the degree to which rules govern decisions, roles, norms, procedures, and communications (Troy et al. 2001). The use of rules is a way to prescribe appropriate behaviors, address routine problems, and easily transform tacit knowledge into explicit knowledge (Grant 1996b), but it can damage performance in dynamic markets, as strict controls prevent employees from

maneuvering quickly to adapt to market changes (Kabadayi et al. 2007). *Specialization*, or the extent to which jobs in the organization require narrowly defined skills or expertise (Olson et al. 2005), allows organizations to assign tasks to people best equipped to handle them. Dividing activities into specialized roles enhances the firm's knowledge base and promotes cross-fertilization of ideas and innovativeness, but it accentuates differences between groups, and increases conflict between departments (Barclay 1991).

Workflows within the firm often require cooperation among groups, referred to as *interdependence*, which determines the need for collective action, integration, and information exchange (Vorhies and Morgan 2003). High interdependence not only forms collaborative attitude between members, but also increases willingness to share information and diffuse knowledge across different functional areas (Huber 1991; Sethi 2000b). Yet a continuous need for mutual adjustments reduces flexibility to make autonomous decisions and impairs group performance when relationship conflicts occur (Duffy et al. 2000). Interdependence often results from *integration*, which refers to the extent to which different organizational units, departments, or partners tightly coordinate their activities (Germain et al. 1994). Cross-unit integration reduces conflict between functional areas (Ayers et al. 1997) and enhances perceived product superiority (Im and Nakata 2008), but it also reduces flexibility for configuring activities and requires more time and effort to resolve complexity (Troy et al. 2008).

As hypercompetition and changing customer requirements result in more dynamic and turbulent markets, the ideal structure needs to be more agile and malleable rather than rigid and bureaucratic² (Schreyögg and Sydow 2010). A new stream of research stresses modularity (i.e., structural insularity)—the importance of constantly dividing business into manageable units and re-assembling them to work together (Day 2011; Grant 1996a). Modularity allows firms to readily improvise their structure based on their observations and experiences in the market. The modular organization can keep communication efficient across units, leverage its market learning, build marketing capabilities, and facilitate information gathering and processing (Huber 1991). Modularity in structure often leads firms to initiate *business unit reconfiguration* (i.e., patching, divisional charter change), which refers to “the addition of units to the firm, deletion of units from the firm, and recombination of units within the firm” to constantly align to changing market opportunities (Eisenhardt and Brown 1999; Karim 2006, p. 799).

A review of the characteristics of organizational structure suggests a number of implications for marketing. First, the majority of literature portrays highly-integrated modular

structures as solutions to all marketing issues, and guides managers to move away from formal hierarchical structures and increase decision-making autonomy. This advice may be imprecise as adopting highly decentralized structure can sometimes impede the sharing of market information across units and establishment of clear strategic vision (Aaker 2008; Day 2011). Second, structural characteristics are typically depicted as having a linear effect, but there is a need for exploring alternative patterns (e.g., curvilinear, quadratic) (Sethi 2000a). As characteristics often co-vary in the firm (e.g., specialization, formalization, centralization), it is also important to consider their composite effects as well. Third, while researchers investigate the characteristics of structure more frequently than the types, the theoretical and empirical interrelationships between characteristics and types are often ignored.

As such, to improve the understanding of the links between structural types and characteristics, we describe how five types of structures are mapped onto the six characteristics of structure in Table 2 (Achrol and Kotler 1999; DeWitt 1993). This is a general, rather than a definitive, illustration of how the degree of characteristics varies across types and how each structural type often leads to a distinctive pattern of structural characteristics. For example, high levels of centralization, formalization, and specialization are dominant characteristics of a functional structure while high modularity is a dominant theme of network structures. Overall, recognizing which characteristics are more likely to appear in an organization of a certain structural type provides insight into how organizational entities are influenced when making macro-level structural changes and what “corrective” adjustment may be necessary.

Theories used to understand the effects of organizational structure

A variety of theories seek to explain the underlying mechanism of how organizational structure influences its performance. Of the many theories, we focus on the four most prevalent ones in marketing research: contingency, configuration, control, and resource-based theories.

Contingency theory The connection between structure and situational factors (i.e., contingent factors), including environmental instability, technology, and strategy, is described by contingency theory (Chandler 1962; Olson et al. 1995). It claims that there is no best way to “structure” an organization; instead the optimal organizational form depends on the myriad of a firm's internal and external contingencies. This theory typically postulates a bivariate “if-then” relationship. For example, if a firm is striving to have a greater number of new product ideas, then a more specialized or centralized structure may be its best course of action, as these structures help organize the flow of market information (Troy et al. 2001).

² We are thankful to the review team for its suggestion to include modular organizational structure.

Table 2 Linkage between types and characteristics of organizational structure

Types of Organizational Structure	Characteristics of Organizational Structure					
	Centralization	Formalization	Specialization	Interdependence	Integration	Modularity
Functional Structure	High	High	High	Low	Low	Low
Multidivisional Structure	Moderate	Moderate	Moderate	Low	Low	Low
Matrix Structure	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Team Structure	Low	Low	Low	High	High	High
Network Structure	Low	Low	High	High	High	High

However, contingency theory has several limitations. First, it is too static in nature to apply to environments where firms change frequently and rapidly. Thus, structure that is appropriate under one set of conditions quickly becomes obsolete when these conditions change. Second, this theory fails to deal with multiple organizational conditions or goals simultaneously (e.g., improving customer satisfaction, while insuring marketing efficiency). Third, contingency theory does not capture factors that affect organizational structure, such as *how well* different structures are implemented in different settings (Donaldson 2001). Contingency theory thus suffers from its reductionist nature, where a core of organizational variables is studied at length, and others are completely ignored (Meyer et al. 1993).

Configuration theory Some researchers view configuration theory as an extension of contingency theory. Configuration theory overcomes some of the deficiencies of contingency theory by consolidating broad patterns from contingency theory’s fragmented findings and grounding them in a richer, more multivariate description. It asserts that the elements of a social entity take their meaning from the whole and should not be interpreted in isolation; the elements interact with each other, and it is those interactions that impact firm performance (Meyer et al. 1993). This theory seeks to generate typologies and taxonomies that refer to “sets of different configurations that collectively exhaust a large fraction of the target population of organizations [or other social units] under consideration” and thus models organizational fit as proximity to an ideal profile (Miller et al. 1984, p. 12). For example, Vorhies and Morgan (2003) identify ideal configurations of strategic types (e.g., prospector, defender) and structures (e.g., centralization, formalization) that yield superior marketing effectiveness and efficiency.

Contrary to contingency theory, configuration theory allows for nonlinear relationships between different attributes, including elements of organizational design, and accommodates equifinality, meaning that the theory explicitly acknowledges that different configurations can lead to similar outcomes (Meyer et al. 1993). If contingency and configuration theories are viewed in combination, a firm’s performance

depends on the contingent impact of different structural variables in various combinations rather than any one specific contingency. Such a combination better reflects the reality of firms where multiple elements of organizational design may be at play simultaneously (e.g., high centralization combined with high specialization and interdependence) under multiple different conditions (turbulent environment and decreasing marketing budgets). However, neither contingency nor configuration theory explain *the process* or *mechanisms* through which organizational structures impact performance. Without the understanding of the process it is difficult to provide guidance to managers regarding structure.

Control theory In attempting to explain how management can direct an individual or group to achieve organizational goals, control theory posits that informal or formal control mechanisms help managers align employees’ behavior and activities with the interests of the firm (Ayers et al. 1997; Snell 1992). Informal controls are unwritten and employee-initiated, while formal controls are well documented and management-initiated (Jaworski 1988). Thus, researchers consider how organizational structure, as a formal control mechanism, guides employee action to accomplish firm’s objectives and improves performance. In particular, marketing scholars focus on how managers can influence the behavior and activities of marketing personnel to achieve desired marketing outcomes (Jaworski 1988).

Similar to contingency and configuration theories, control theory does recognize the importance of fit between any implemented structure and the environment, which is one of its advantages (Jaworski 1988). But, like the first two theories, it does not address the mechanisms through which elements of the organizational structure drive or leverage performance outcomes. Furthermore, control theory broadly separates structure-related elements into only two categories, formal and informal controls; and is, therefore, too broad to offer specific guidance to managers.

Resource-based theory (RBT) The perspective that a firm is an idiosyncratic bundle of resources and capabilities, and the resources that are unique, valuable, and available for

deployment but difficult for rivals to imitate lead to a firm's competitive advantage is argued in RBT (Barney 1991). *Resources* refer to assets that “firms use to conceive of and implement its strategies” (Barney and Arkan 2001, p. 138), while *capabilities* are “special types of resources whose purposes is to improve the productivity of other resources possessed by the firm” (Kozlenkova et al. 2014, p. 5). Researchers also distinguish *dynamic capabilities* which “continuously create, extend, upgrade, protect, and keep relevant the enterprise's unique asset base” and are especially helpful in turbulent markets (Teece 2007, p. 1319). RBT has been argued to be tautological, ambiguous in definitions, and static in nature, but scholars integrate other theories such as dynamic capabilities to overcome such criticisms (Teece et al. 1997).

Contrary to the first three theories discussed, RBT specifically addresses the *process* through which structural elements may translate into improved performance. A firm's ability to develop and deploy valuable, rare, imperfectly imitable resources is leveraged in certain structures that allow capabilities to be fully exploited and can lead to competitive advantage (Kozlenkova et al. 2014). For example, the fit between the structural characteristics of an organization (e.g., centralization, specialization) and the business strategy might lead to inimitability and non-substitutability, so fit as a whole can serve as a source of sustainable competitive advantage and improve marketing effectiveness (Vorhies and Morgan 2003).

Under RBT, structural elements cannot be considered resources that drive competitive advantages, as they are hardly rare, often easy to copy, and are not always ready for deployment as a tool in implementing strategy. Yet *configurations* of structural elements may enable competitive advantages, as specific configurations may be rare across firms and more challenging for competitors to imitate, since a competitor cannot discern *which* elements even constitute configurations that led to rival's competitive advantages. Moreover, the ability of a firm to *reorganize* these configurations can be a dynamic capability, which is very beneficial in turbulent conditions as it accommodates change and enables effective deployment of other resources.

Organizational structure in marketing

A review of marketing journals published from 1990 to 2013 identified over 40 empirical studies that examine organizational structure constructs and theories. Among studies that mention organizational structure, almost 70% note the direct impact of structure on marketing variables, while the rest investigate its moderating role. Extant marketing research related to structure can be grouped

parsimoniously into four domains: (1) structure as a driver of market orientation, (2) structure as a driver of innovation, (3) structure as a driver of interfunctional and interdepartmental relationships, and (4) structure as a moderator of the strategy–performance link. To provide insights and future research directions, we review marketing research in each domain and highlight the effects of organizational structure on marketing outcomes and the theories used to explain these effects, as summarized in Table 3.

Structure as a driver of market orientation

Organizational structure characteristics often appear as drivers in models of market orientation (Jaworski and Kohli 1993). Almost 90% of the studies in this domain investigate either centralization or formalization as barriers to becoming more market-oriented, because greater centralization reduces the opportunity to disseminate ideas across units, and greater formalization prevents employees from trying something new or different in response to environmental changes. Although centralization, formalization, and departmentalization overwhelmingly suggest negative antecedents to market orientation, the empirical results are often mixed. For example, some researchers find empirical support for a negative impact of centralization on market orientation (Auh and Menguc 2007; Hernández-Espallardo and Arcas-Lario 2003), but others fail to find any significance (Matsuno et al. 2002; Pelham and Wilson 1996). It may be attributed to ignoring contingency factors in studying the structure-market orientation linkage (Cadogan et al. 2001) or multifaceted nature of the structural elements.

The majority of research in this domain relies on the “theory” of market orientation articulated by Kohli and Jaworski (1990). With its roots in control theory, market orientation theory argues that formal and informal organizational design factors (e.g., structure, rewards, processes), largely controlled by managers, can be altered to foster or suppress a firm's market orientation, which then determines business performance. Most studies ignore the large body of research outside of marketing that sheds light on such topics. For example, Zhou et al. (2008) use resource-based theory and show that market orientation improves employees' sense of pride and job satisfaction, with possible carryover effects for customers.

This research suggests a number of implications and future research opportunities. First, more recent research in marketing examines the impact of organizational structure types (e.g., functional-, product-, customer-centric) on market orientation, and argues that organizing firm's divisions around distinct customer groups (customer-centric structure) enhances customer relationships and ultimately firm performance (Shah et al. 2006). Yet empirical research testing direct

Table 3 Illustrative organizational structure research in marketing (from 1990 to 2013)

Authors	Structural Variables	Context/Data	Unit of Analysis	Theory	Findings/Propositions
Structure as a Driver of Market Orientation					
Auh and Menguc (2007)	<ul style="list-style-type: none"> • Centralization [IV] • Formalization [IV] 	Survey 206 CEOs in Australia	Firm	Control theory	Higher centralization leads to lower levels of customer orientation; the effect of formalization on customer orientation is not significant. Centralization attenuates the negative effect of customer orientation on firm performance; formalization bolsters the positive effect of customer orientation on performance.
Cadogan et al. (2001)	<ul style="list-style-type: none"> • Centralization [IV] • Formalization [IV] 	Survey of 292 New Zealand and 783 Finnish exporting firms	Firm	Theory of market orientation	Formalization increases a firm's level of market orientation in its export markets when the level of market dynamism is low to medium. Centralization increases a firm's level of market orientation in its export markets when regulatory turbulence is extremely low.
Hernández-Espallardo and Arcas-Lano (2003)	<ul style="list-style-type: none"> • Formalization [IV] • Participation (i.e., decentralization) [IV] 	161 first-order marketing cooperatives involved in channel partnerships with second-order marketing cooperatives in the Spanish agriculture industry	Firm	Theory of market orientation	In asymmetrical channel partnerships, formalization and participation improve the target's levels of behavioral market orientation. When formalization is used, the source's knowledge is transferred in a codified form that facilitates the target's assimilation of market intelligence.
Jaworski and Kohli (1993)	<ul style="list-style-type: none"> • Centralization [IV] • Formalization [IV] • Departmentalization (i.e., specialization) [IV] 	Executives of 222 business units from the MSI members and Dun & Bradstreet list	SBU	Theory of market orientation	Centralization of decision making has a negative impact on market orientation. Specifically, it serves as a barrier to intelligence generation, intelligence dissemination, and responsiveness. Formalization and departmentalization have no impact on market orientation.
Kirca et al. (2005)	<ul style="list-style-type: none"> • Centralization [IV] • Formalization [IV] 	Meta-analysis based on 418 effects, 130 samples, 114 studies	Meta	Theory of market orientation	All organizational dimensions are related to a market orientation in bivariate analysis but centralization, formalization, and conflict are not significant predictors in the multivariate analysis. Market orientation is related to performance.
Maltz and Kohli (1996)	<ul style="list-style-type: none"> • Structural flux [IV] 	Survey of 788 non-marketing managers within strategic business units in high-tech equipment manufacturers	SBU	Theory of market orientation	Structural flux increases market intelligence dissemination formality but decreases the perceived market intelligence quality. No significant impact arises on market intelligence dissemination frequency.
Matsuno et al. (2002)	<ul style="list-style-type: none"> • Centralization [ME] • Formalization [ME] • Departmentalization (i.e., specialization) [ME] 	Survey of 364 marketing executives from U.S. manufacturing companies	SBU	Theory of market orientation	Organizational structure mediates the effect of entrepreneurial proclivity on market orientation. Entrepreneurial proclivity has a negative impact on formalization, centralization, and departmentalization. Departmentalization has a negative impact on market orientation,

Table 3 (continued)

Authors	Structural Variables	Context/Data	Unit of Analysis	Theory	Findings/Propositions
Pelham and Wilson (1996)	<ul style="list-style-type: none"> • Centralization [IV] • Formalization [IV] 	Survey of 68 Michigan firms in manufacturing, wholesaling, business services, and construction industries	Firm	Theory of market orientation	but formalization and centralization have no impact on market orientation. The level of small-firm market orientation is improved by increased formalization but not by the previous year's level of formalization. The level of small-firm market orientation is significantly associated with neither current nor previous levels of centralization.
Structure as a Driver of Innovation					
Barczak (1995)	<ul style="list-style-type: none"> • Project teams [IV] • R&D teams [IV] • Product/marketing managers [IV] • Product champions [IV] 	Survey of 365 business units' new product managers in the telecommunications industry	SBU	Contingency theory	Project teams, R&D teams, and product champions are the most effective means for organizing NPD efforts. The use of a product/marketing manager is negatively associated with NPD performance. First-to-market firms use R&D teams to a greater extent than other strategy types (e.g., fast followers, delayed entrants).
Chandy and Tellis (1998)	<ul style="list-style-type: none"> • Business unit autonomy [IV] • Business unit competition [IV] 	Survey of 483 managers in three highly competitive and turbulent hightech industries	SBU	Organizational theory	The extent of autonomy the business unit manager enjoys (relative to the corporate office) and the extent of rivalry among business units increases a firm's willingness to cannibalize. Firms that exhibit higher willingness to cannibalize are more likely to be radical product innovators than other firms.
De Luca and Atuahene-Gima (2007)	<ul style="list-style-type: none"> • Knowledge integration mechanisms (KIMs) [ME] 	Survey of 363 managers in China	Firm	Contingency theory (fit-as-mediation view), knowledge-based view	The greater the cross-functional collaboration, the greater is the use of KIMs (structures and processes that ensure the capture, analysis, interpretation, and combination of knowledge within the firm). KIMs increase the product innovation performance, and also mediate the effect of cross-functional collaboration on product innovation performance.
Froehle et al. (2000)	<ul style="list-style-type: none"> • Cross-functional new service development team structure [IV] • Formalization [IV] 	Survey of 182 U.S. service firms	Firm	Configuration theory	The employment of new-service-development teams has a positive impact on the overall effectiveness of the new service development (NSD) process but no significant effect on speed of executing NSD. Formalization of the NSD process improves the effectiveness and speed of NSD.
Im and Nakata (2008)	<ul style="list-style-type: none"> • Cross-functional integration [IV] 	A survey of 206 new product teams in U.S. high-technology manufacturing firms	Team	Resource-based theory	Cross-functional integration in the new product team enhances a product's perceived superiority relative to competitive products.
Joshi and Sharma (2004)	<ul style="list-style-type: none"> • Cross-functional NPD teams [IV] 	Survey of 165 marketing managers who had recently	NPD project	Knowledge-based theory	Creating cross-functional NPD teams improves the development of customer knowledge, which in

Table 3 (continued)

Authors	Structural Variables	Context/Data	Unit of Analysis	Theory	Findings/Propositions
Leenders and Wierenga (2002)	<ul style="list-style-type: none"> • Cross-functional project teams [IV] • Marketing-R&D integration [DV] 	<p>participated in new product development projects</p> <p>Survey of 211 senior managers in pharmaceutical companies</p>	SBU	Organizational theory	<p>turn fosters new product success. The positive effect of adopting NPD teams on customer knowledge development is enhanced when a firm develops an integration mode of conflict resolution.</p> <p>The use of cross-functional project teams has a positive effect on integration between marketing and R&D, which in turn improves new product performance.</p>
Menguc and Auh (2010)	<ul style="list-style-type: none"> • Formalization [MD] 	A survey of 216 Canadian high-tech strategic business units	SBU	Resource-based theory	The effect of radical product innovation capability on new product performance is positively moderated in a less formalized structure. The effect of incremental product innovation capability on new product performance is negative in a less formalized structure.
Olson et al. (1995)	<ul style="list-style-type: none"> • Cross-functional integration [MD] • Interdependence [MD] 	Surveys 12 firms producing tangible products	NPD project	Contingency theory, resource dependency theory	When a firm has more experience with a new product concept, cross-functional integration can result in higher product quality and sales, shorter break-even time, and a greater sense of personal satisfaction. But the fit between a firm's new product concept experience and structure has no impact on efficiency outcomes and management satisfaction. Interfunctional interdependence in the project increases the need for cross-functional integration.
Sethi (2000a)	<ul style="list-style-type: none"> • Functional diversity of the team (i.e., specialization) [IV] 	Survey of 141 project managers from consumer product manufacturers that had introduced new products	NPD project	Organizational theory	New product quality is highest when functional diversity in a cross-functional team is moderate (i.e., inverted U-shaped relationship).
Troy et al. (2008)	<ul style="list-style-type: none"> • Cross-functional integration [IV] 	Meta-analysis (diverse set of 25 studies)	Meta	Contingency theory	The relationship between cross-functional integration and new product success is contingent; it depends on the level of integration, type of integration, type of information shared, number of functions integrated, dimensions of success, measures of success, country of operation, product vs. goods, and high vs. low technology market.
Troy et al. (2001)	<ul style="list-style-type: none"> • Formalization [MD] • Centralization [MD] • Specialization [MD] 	Survey of 285 employees of housewares manufacturing firm	Firm	Contingency theory	The positive effect of the amount of market information on the number of new product ideas generated by the work group will be enhanced when a firm has a greater level of centralization or specialization. The moderating effect of formalization was not significant.

Table 3 (continued)

Authors	Structural Variables	Context/Data	Unit of Analysis	Theory	Findings/Propositions
Structure as a Driver of Interfunctional and Interdepartmental Relationships					
Ayers et al. (1997)	<ul style="list-style-type: none"> • Centralization [IV] • Formalization [IV] • Marketing-R&D integration [ME] 	Survey of divisional managers for 19 new product development projects of a major U.S. computer manufacturer	NPD project	Control theory	Centralization lowers the level of marketing-R&D integration, the level of flexibility, harmonious R&D-marketing interfaces, and solidarity. In contrast, formalization increases the level of marketing-R&D integration. Marketing-R&D integration in turn improves new product success and perceived relationship effectiveness.
Barclay (1991)	<ul style="list-style-type: none"> • Centralization [IV] • Formalization [IV] • Specialization [IV] • Organization size [Ctrl] 	Survey of a cross-section of purchasing and engineering departments in industrial organization	Interdepartmental dyad	Organizational theory	The degree of formalization reduces the level of interdepartmental conflict. The use of centralization and specialization increases conflict between departments. Larger organizations are found to be more specialized, more formalized, and more closely supervised.
Hartline et al. (2000)	<ul style="list-style-type: none"> • Formalization [ME] 	Survey of 236 managers and 561 contact employees from 176 hotel units	Service unit	Control theory	The adoption of a customer-oriented strategy has a negative impact on reliance on formalization in the organizational structure. Formalized structure increases the use of behavior-based employee evaluation and the use of work group socialization, but it decreases the use of empowerment and employees' organizational commitment.
Lievens and Moenaert (2000)	<ul style="list-style-type: none"> • Centralization [IV] • Formalization [IV] • Complexity [IV] 	Survey of 65 new financial service innovation projects from 36 banks in Belgium	Service innovation project	Contingency theory	The level of centralization impedes the exchange of intra- and extra-organizational information by project members. The level of complexity increases communication flows within and across the team. The level of formalization is curvilinearly related (inverted U) to information transfer across the team but not to information transfer within the team.
Maltz and Kohli (2000)	<ul style="list-style-type: none"> • Cross-functional teams [IV] • Formalization [IV] 	1,061 non-marketing managers at 270 SBUs from high-technology industrial equipment manufacturers	SBU	Organizational theory	The negative effect of formalization on the level of manifest interfunctional conflict within an organization is not significant. The negative relationship between formalization and manifest interfunctional conflict is weaker for the marketing-finance interface than the marketing-R&D interface. The negative relationship between formalization and manifest interfunctional conflict is stronger for the marketing-R&D interface than the marketing-manufacturing interface. Cross-functional team use decreases the level of manifest interfunctional conflict within an organization.

Table 3 (continued)

Authors	Structural Variables	Context/Data	Unit of Analysis	Theory	Findings/Propositions
Menon et al. (1999)	<ul style="list-style-type: none"> • Centralization [IV] • Formalization [IV] 	Survey of 229 senior executives of strategic business units of <i>Fortune</i> 1000 companies	SBU	Resource-based theory	Centralization creates marketing assets and capabilities and resource commitment. Formalization yields higher cross-functional integration, communication quality, and consensus commitment.
Menon et al. (1996)	<ul style="list-style-type: none"> • Centralization [IV] • Formalization [IV] 	Survey of 236 senior marketing executives in divisions of <i>BusinessWeek</i> 1,000 companies	SBU	Organizational theory	During strategy development, greater centralization increases the level of dysfunctional conflict but has no impact on the level of functional conflict among decision makers. During strategy development, greater formalization decreases the level of dysfunctional conflict but has no impact on the level of functional conflict among decision makers.
Menon et al. (1997)	<ul style="list-style-type: none"> • Centralization [IV] • Departmentalization (i.e., specialization) [IV] • Hierarchical levels [IV] 	Survey of a marketing and non-marketing executive from 222 SBUs	SBU	Control theory, contingency theory	Centralization decreases interdepartmental connectedness but increases interdepartmental conflict. Departmentalization decreases connectedness but has no impact on conflict. Hierarchical levels increase conflict but have no impact on connectedness. Perceived product quality increases as the SBU's connectedness increases and as the SBU's conflict decreases.
Moorman et al. (1993)	<ul style="list-style-type: none"> • Centralization [IV] • Formalization [IV] • Complexity [IV] 	Survey of 779 employees from firm and division on the <i>Advertising Age</i> 1990 list of the top 200 advertisers	Dyadic relationships	Control theory	The user organization's formalization has a negative impact on user trust in market researchers. The effect of centralization, or complexity on trust was not significant.
Sethi (2000b)	<ul style="list-style-type: none"> • Autonomy of team structure [IV] • Interdependence [IV] 	Survey of 118 project managers from large consumer product manufacturing firms	NPD project	Social identity theory	The level of team members' interdependence and the extent of autonomy granted to a team increase the extent to which members identify with the team (rather than merely with their functional areas) and perceive a stake in the success of the team.
Structure as a Moderator of the Strategy-Performance Link					
Gebauer et al. (2010)	<ul style="list-style-type: none"> • Structural distinctiveness between service and product units [MD] • Structural proximity of the service organization to customers [MD] 	Survey of 106 firms and 89 strategic business units in manufacturing industry	Firm and SBU	Configuration theory	The internal fit between the service strategies (customer service strategy, after-sales service providers, customer support service providers, outsourcing partners, and development partners) and the organizational design factors determines the success of each service strategy.
Kabadayi et al. (2007)	<ul style="list-style-type: none"> • Formalization [MD] • Decentralization [MD] • Specialization [MD] 	Survey of 291 electronic components manufacturers with multi-channel systems	Firm	Configuration theory	Multiple-channel systems make the greatest contribution to firm performance when their structures are properly aligned with the firm's business strategy (differentiation, cost leadership) and with environmental conditions. There is a

Table 3 (continued)

Authors	Structural Variables	Context/Data	Unit of Analysis	Theory	Findings/Propositions
Olson et al. (2005)	<ul style="list-style-type: none"> • Formalization [MD] • Decentralization [MD] • Specialization [MD] • SBU size [Ctrl] 	Survey from 228 senior marketing managers from broad range of industries	Firm (marketing organization)	Contingency theory (fit-as-moderation view)	<p>configuration of firms operating in highly (less) uncertain and munificent environments that combine a differentiation (cost leadership) strategy with an organic, specialized (bureaucratic, unspecialized) channel decision structure and a large number of mostly direct channels.</p> <p>A firm's overall performance is determined by how well the marketing organization's structural characteristics and strategic organizational behavior (customer-, competitor, innovation-, and internal/cost-oriented behaviors) complement alternative business-level strategies (prospector, analyzer, low cost defender, differentiated defender).</p>
Stathakopoulos (1998)	<ul style="list-style-type: none"> • Centralization [MD] 	Survey of 293 marketing managers across different industries in the U.S.	SBU	Configuration theory	For an SBU pursuing a defender strategy, high centralization increases managerial performance; for an SBU pursuing a prospector strategy, low centralization increases managerial performance.
Vorhies and Morgan (2003)	<ul style="list-style-type: none"> • Formalization [MD] • Centralization [MD] • Specialization [MD] • Work group interdependence [MD] 	Survey from chief marketing executives of 186 trucking industry	Firm (marketing organization)	Configuration theory, resource-based theory	Structure and task characteristics that fit with the ideal profile for each strategic type (prospector, analyzer, defender) perform better in terms of marketing effectiveness and efficiency. But there is a negative correlation between effectiveness and efficiency.
Xu et al. (2006)	<ul style="list-style-type: none"> • Global organizational structure (i.e., geographical structure) [MD] 	Survey of 206 senior managers in multinational companies	Firm	Configuration theory	The fit among global marketing strategy, global organizational structure, and global management process determines performance in international markets. Specifically, the ideal profile organization, which pursues a global marketing strategy that entails standardization of a marketing program across countries and a global organizational structure, can achieve higher performance than its peers.

IV-organizational structure is used as an independent variable. ME-organizational structure is used as a mediator. MD-organizational structure is used as a moderator. DV-organizational structure is used as a dependent variable. Ctrl-organizational structure is used as a control variable

or contingent linkages between structure types and customer-related outcomes is scarce. Second, researchers may benefit from applying dynamic capabilities and resource-based theory to study how adapting structure in turbulent markets (e.g., unit reconfiguration) affects market orientation. One study shows that *structural flux*, or the speed at which a firm changes its structure and rules, increases market intelligence dissemination but decreases perceived market intelligence quality, leaving the net effect unresolved (Maltz and Kohli 1996). Thus, more research is needed to examine how different structural types and characteristics interact with dynamically changing contextual variables to determine a firm's market orientation as well as performance implications.

Structure as a driver of innovation

Most marketing research in this domain focuses on the effects of organizational structure on different innovation outcomes, such as new product success (Troy et al. 2008), radical innovation (Chandy and Tellis 1998), and product idea generation (Troy et al. 2001). Nearly half of all studies in this domain address the effects of team structure on innovation. The use of a team structure facilitates intrafirm collaboration and creativity among employees, which is paramount for achieving new product and service success (Barczak 1995; Froehle et al. 2000) and customer knowledge development (Joshi and Sharma 2004). Team structure generally has a positive effect on innovation, but its effectiveness highly relies on team characteristics, managerial decisions, and the environment (Sethi 2000a). The most widely studied characteristic is cross-functional integration, which drives new product performance (Im and Nakata 2008), and its effectiveness increases when a firm sells services rather than goods (Troy et al. 2008).

Researchers use a multitude of theories in this domain to explain the effect of structure on innovation with contingency, configuration, and resource-based theories being most common. Contingency theory often is coupled with knowledge-based (De Luca and Atuahene-Gima 2007), resource dependency (Olson et al. 1995), resource-based (Menguc and Auh 2010), or organizational theories (Chandy and Tellis 1998; Leenders and Wierenga 2002), within an overall conceptual model. In general, these theories explain how the elements of organizational structure induce superior innovation performance, but they do not sufficiently describe how a firm should initiate and manage its organizational structure in highly complex, dynamic markets.

The review highlights several insights and future research directions for this domain. First, in most structure research on marketing innovation, success is often measured indirectly (i.e., operationalized as market share or sales revenue of new products). More research is needed to evaluate how organizational structures affect different innovation outcomes such as generality, originality, or radicalness of innovation as structure

may have differential effects on various measures of innovation. Second, a growing number of studies examine how flatter and more versatile structures facilitate innovation. Additional research may investigate how other structural aspects, such as an ambidextrous or hypertext structures, nurture superior innovation effectiveness and efficiency (O'Reilly and Tushman 2004), and their implications for marketing functions. Similarly, network literature may inform marketers of network structure characteristics in marketing-R&D-sales interface that enable members to better gather and transfer new knowledge from internal and external sources (Tsai 2001).

Structure as a driver of interfunctional and interdepartmental relationships

The majority of the studies in this domain describe how structural characteristics, primarily formalization and centralization, affect relationships among units and groups in the firm through conflicts (Barclay 1991; Maltz and Kohli 2000), communication flows, and organizational commitment (Hartline et al. 2000; Lievens and Moenaert 2000). Yet there is no consensus on the effect of these characteristics across studies. For example, formalization reduces willingness to trust market researchers (Moorman et al. 1993) but also decreases conflict and increases work group socialization (Barclay 1991; Menon et al. 1996). To explain mixed findings, research is needed to consider the *synergies* (complementary or substitute) among structure characteristics or relevant contextual factors (e.g., relationship duration, communication frequency) to understand the boundary conditions of structural variables' effects. For example, longer duration or high intensity of the interdepartmental relationship may enhance the positive effect of formalization on socialization between members from different functional areas.

A popular theory in this area is control theory, and researchers generally examine simultaneous effects of various informal (e.g., culture, social control) and formal (e.g., structure) mechanisms on relational outcomes rather than narrowly focusing on a single control mechanism (Hartline et al. 2000; Moorman et al. 1993). Yet studies using contingency theory (Lievens and Moenaert 2000) and resource-based theory (Menon et al. 1999) tend to limit their focus to structural elements and fail to consider concurrent, informal mechanisms. Many studies cite their use of "organizational theory" (e.g., Barclay 1991); future research may identify which specific theoretical frameworks are best suited to link structure to relational outcomes.

Our review suggests the following future research directions. First, empirical findings in this domain provide only snapshots of how structure affects interfunctional or interdepartmental relationships. In relationship contexts, the dynamic aspects of relationships are critical (Palmatier et al. 2013), so it would be insightful to study how the effects of structure vary

over the different stages of a relationship among employees from different functional areas or departments. Second, most studies were conducted in a turbulent environment (e.g., high-tech manufacturers, computer markets) or service industry (e.g., banks, hotels). Future research could examine how the effects of structure on internal relationships depend on external conditions and thereby provide guidance to managers on when to use each structural tool, depending on the business context. Finally, structural design decisions can impact both internal (with employees) and external (with customers) relationships, possibly with differing effects. Thus, future research could capture the simultaneous effects of both relationships as well as potential interactions among structural variables and firm's internal and external relationships.

Structure as a moderator of the strategy–performance link

The last domain of marketing research that investigates structure focuses on the effect of fit between organizational structure and strategy, rather than evaluating its direct effect on marketing outcomes. Studies generally support the notion that structure should be aligned with strategy to produce higher performance, but identifying which structure fits with which strategy is not always simple. Most empirical studies examine the “ideal fit” of structural characteristics (centralization, specialization) with different types of strategies, using Porter's (1980) or Miles and Snow's (1978) typologies, across various marketing contexts, such as marketing organizations (Olson et al. 2005; Vorhies and Morgan 2003), services (Gebauer et al. 2010), international markets (Xu et al. 2006), and multi-channel systems (Kabadayi et al. 2007). For example, Kabadayi et al. (2007) identify two configurations that exhibit better performance than channel systems in which there is misalignment among structure, strategy, and the environment. Differentiators (vs. cost leaders) with specialized (vs. bureaucratic, unspecialized) channel decision structures in highly (vs. less) uncertain and munificent environments outperform their peers with alternative combinations. It suggests that individual employees in a highly specialized structure have greater expertise, which enables them to adjust their behavior quickly to unpredictable market changes and develop unique, attractive offerings.

Most research in this domain is guided by configuration theory and compares the relative performance of configurations, instead of testing simple interactions between variables. Thus, the studies highlight the concept of equifinality, such that superior performance can be achieved by different organizational structures, even if the contingencies that the firm faces are the same (Miller et al. 1984). Although configuration theory provides managers with more options to choose their structure and strategy, this approach is questionable, in that there has been “no analysis of the contribution of individual

elements to the performance of the whole” (Whittington et al. 1999, p. 585), which limits theory development.

Key implication from the review of this domain is that a noticeable gap arises when we consider that most studies examine the fit between structure and *firm-level* strategies (e.g., differentiation, cost leadership) or strategic types (e.g., prospector, analyzer, defender; Stathakopoulos 1998), instead of applying the configuration framework to study the fit between structure and *marketing* strategies (e.g., advertising, selling, promotion, R&D strategies). Although some studies cite factors that increase or decrease the effectiveness of advertising and R&D (e.g., Naik et al. 2005), no prior research has considered how the returns from these two marketing mix investments vary with the firm's structural type or characteristics.

Emerging perspectives of structural marketing

Structural marketing: using structural design as a marketing tool

Managers use “organizational structure” to achieve a wide range of marketing goals, such as increasing their focus on customers, growing their brands, and cultivating market learning. Yet in academia, conceptual research about the role of structural design in *marketing* remains underdeveloped, often relying on insights from management and organizational psychology, which are focused on the role of structural design in relation to organizational research problems (e.g., employee satisfaction, empowerment; Hempel et al. 2012). Since “the wrong structure can doom all other market-driven initiatives in the organization to failure” (Day 1999, p. 208), it is surprising that researchers studying structure start with a management rather than a marketing perspective. In this section, we take tentative first steps in developing *structural marketing*, which uses structural design to achieve marketing objectives.

But why does the study of organizational structure need to be adapted to a marketing perspective? The field of marketing suggests a unique purpose of organizational structure design. Marketing literature describes structure as a means to effectively link employees to customers (how units inside of the firm collaborate with customers). The ideal structural alignment is thought to be market- and customer-focused instead of operation- or product-focused, thereby maximizing “customer's total experience” (Day 2006). To a certain extent, customers co-design organizational structure. In contrast, management literature views structure as a means to effectively oversee employees (how units inside of the firm collaborate among themselves), and assume that structure needs to be suited for product success or management control instead of

customer lifetime value maximization or advertising effectiveness. Furthermore, management literature is insufficient in guiding the understanding of how organizational structure is interlinked with marketing strategies and market-based capabilities.

In the remainder of this article, we apply organizational structure conceptualizations from other research domains to the empirical findings from marketing research and develop a series of tenets and propositions that parsimoniously describe the effects of structure on marketing goals. With each tenet, we attempt to advance the understanding of the connection between structural elements and specific marketing objectives, using insights from extant theory, empirical studies, and business practice. From these general theoretical tenets, we develop specific propositions to guide future research. To illustrate these tenets and propositions, we also offer a series of cases and examples from business practice (presented in Table 4).

Effects of structural design elements on the relational outcomes

There has been a growing attention to a customer-centric or market-driven organization, which can improve market orientation, customer relationship, and financial performance (Shah et al. 2006). To promote customer centricity, researchers and managers focus on structural design elements that can “mirror the segmentation of the market” (Day 1990, p. 361) by improving the firm’s alignment with *external* markets or customer segments. An emerging organizational form in marketing is a *customer-centric structure*, a structural design in which the firm’s business units align with distinct customer groups (Lee et al. 2015). This structure enables each division to focus on a unique customer segment, which increases its knowledge of a customer group, throughout the firm’s hierarchy (Gulati 2007). Different types of organizational structures offer varying degrees of customer centricity; structures organized by external groups (customers) versus internal groups (operations or products) enable firms to be more responsive and adapt faster to changing customer needs and make more market-oriented decisions (Day 2006). In addition, customer-centric structures house functional responsibility in divisions that provide complete customer solutions, and also enhance various market-relating capabilities, including customer accountability, customer communication (through a single contact), and response times to changing customer needs (Shah et al. 2006). For example, in 2007, only a year after switching to a customer-centric structure, Intel experienced almost 40% increase in its net income and over 30% increase in stock price in comparison to 2006, reflecting increased customer satisfaction (Intel Corporation 2007).

However, aligning structures with customers often duplicates functionalities across divisions, decreases cost efficiency (Gulati 2007), and introduces more complexity into communication and decision making (Homburg et al. 2000). For example, Intel’s switching to a customer-centric structure led to significant increases in administrative, marketing, and R&D expenses: 29% of revenue in 2007, then 30% in 2008, and an overwhelming 39% in 2009 (see Table 4). The ultimate impact of a customer-centric structure on *firm performance* thus likely depends on the tradeoffs between customer alignment benefits and the additional costs (Lee et al. 2015). Firms always incur additional internal costs and coordination complexities associated with customer-centric structures, but generating benefits is contingent on various external factors.

Tenet 1: Structural design elements that promote alignment between *internal* employees and *external* customers (e.g., customer-centric structures) improve the entity’s speed and ability to adapt to changing customer needs but add to its internal costs and the complexity of its communication and decision processes. Structural-based adaption benefits exert greater impact on relational outcomes (e.g., satisfaction, loyalty, word-of-mouth) and firm performance when customer change is frequent and customers both desire and reward offerings that provide better fit.

- P1: Customer-centric organizational structures have a positive impact on relational outcomes.
 P2: Customer-centric organizational structures have a positive impact on the costs of coordinating internal activities.

Due to the trade-offs in customer-centric structures (relational outcomes vs. costs), it is important to understand when these structures offer benefits. In environments in which the needs of customers remain relatively stable and customer preferences do not change frequently (e.g., commodities, airline), firms face less market uncertainty. In such cases, firms can easily identify customers’ stable needs, so quick responses or continuous market learning grow less critical and provide fewer opportunities for improving customer relationships (and offsetting the added costs) even without implementing customer-centric structures. In contrast, when customers’ needs change rapidly (e.g., high technology, healthcare), the ability to sense the changes and respond quickly becomes more important, so those firms have greater needs for customer knowledge and responsiveness. For example, the Mayo Clinic operates in a highly dynamic market that currently innovates to address emerging needs. The Mayo Clinic enjoys a 15% higher customer satisfaction rating than the industry average because it is very focused on meeting customer needs. The clinic assigns a physician to each customer and the

Table 4 Business examples illustrating structural marketing

Company & sources	Relevant tenet (s) & structural elements	Description of and motivation for structural marketing	Effect of structural marketing
Intel; Intel Corporation (2005, p. 11, 28; 2007; 2009); Edwards (2005); Kirkpatrick (2006).	Tenets 1 and 2; Customer-centric structures, customer-centric vs. product-centric structure, decentralization.	Slipping technological leadership, market shares, and profit margins called for a change in Intel's strategy. Its prior strategy—developing one-size-fits-all products—has stopped working by 2005, when the company switched from a product organizational structure to a customer-centric structure, focusing on five customer groups that required different types of products: "During the first quarter of 2005, we reorganized our operating segments to bring all major product groups in line with our strategy.... The Intel corporate and product brand identities were revamped in early 2006 to signal Intel's new business strategy to deliver customer-focused platform solutions." Intel's then-CEO, Paul Otellini, who conceived of the reorganization, "believes that to keep Intel growing, every idea and technical solution should be focused on meeting customers' needs from the outset. So rather than relying on its engineering prowess, Intel's reorganization will bring together engineers, software writers, and marketers into five market-focused units." The new customer-centric structure required decentralization and separate marketing initiatives for each of Intel's customer groups, to communicate relevant end-user benefits: "Currently, our direct marketing to the consumer focuses on digital home entertainment and building awareness and demand for new usage models and capabilities. For businesses, our marketing to large enterprises and small to mid-size organizations focuses on delivery of products and technologies designed for performance per watt, reliability, manageability and security." The new customer-focused strategy made marketing initiatives more effective, but it created additional administrative, marketing and R&D costs.	To accommodate the preferences of each of Intel's five customer-centric groups and implement their market-focused strategy, Intel increased its administrative, marketing and R&D expenses every year, until the new structure was fully implemented. In 2007, administrative, marketing and R&D expenses accounted for 29% of revenue, then 30% in 2008, and an overwhelming 39% in 2009. This suggests that separate R&D and marketing efforts for each customer group led to marketing and R&D inefficiencies, by duplicating expenses for each customer group due to decentralization, though it also might have allowed them to be more effective.
Cisco; Cisco (1996–2010); Forbes (2013); Gulati (2007); Stewart and Fryer (2008).	Tenets 1 and 2; Customer-centric structures, customer-centric structure, centralization, cross-functional integration, team structures.	In 1997, Cisco adopted a decentralized structure focusing on three autonomous customer segments. Each unit had its own R&D, marketing, and sales departments and was tailored to the needs of its specific customer segment. This strategy was very successful; in 2000, Cisco became the most valuable company in the world. However, after the dot.com crash in 2001, resulting in the loss of \$2.7 billion in one year, Cisco needed to cut costs. The company recognized that separate marketing and R&D for each of its customer segments might have ensured a customer-centric structure but also was cost inefficient. To decrease these inefficiencies, Cisco implemented a more centralized structure, eliminating the separate marketing and R&D departments and transforming them into company-wide functions. Yet Cisco also recognized that by becoming more centralized, it risked losing its focus on the customer—one of the keys to its previous success. To compensate for the elimination of the departments that focused exclusively on specific customer segments, Cisco began to rely more heavily on cross-functional integration and collaboration. It established "councils" or "boards"—teams of employees from different departments with relevant expertise who worked together on specific projects. To prevent a possible loss of its focus on the customer due to the increased degree of centralization, Cisco mandated a high degree of alignment between employees and customers through direct interactions. Even employees from departments that did not typically communicate with customers (e.g., human resources) were put in direct contact with customers.	By becoming more centralized, Cisco reduced its marketing costs by 20% in 2001, and another 35% in 2002 (under its decentralized structure, they had grown by roughly 50% each year between 1996 and 2001). R&D expenses also decreased. CEO John Chambers credits the establishment of cross-functional teams and opportunities for ensuring alignment between employees and customers for the company's survival and growth, through not only the industry crisis of 2001 but also the 2008 recession. In 2013, Cisco was the 12th most valuable and 48th most profitable brand in the world.
Mayo Clinic; Mayo Clinic (2012); Berry	Tenets 1 and 3; Team structure, boundary-spanning	The Mayo Clinic has a boundary-spanning, team-based structure, with some features of a network structure, to provide superior medical care and develop groundbreaking innovations. Each patient is assigned to a physician, who is responsible, depending on each patient's case, for assembling a cross-functional team of doctors from all necessary human resources) were put in direct contact with customers.	Experts often credit the team-based structure with the incredible outcomes the Mayo Clinic continues to achieve, calling it the main competitive advantage of the hospital. The Mayo Clinic draws patients from all over the world and enjoys higher customer satisfaction (86%) than the

Table 4 (continued)

Company & sources	Relevant tenet (s) & structural elements	Description of and motivation for structural marketing	Effect of structural marketing
(2004); Consumer Hospital Assessment (2012).	structure, project team, cross-functional integration, specialization.	<p>specializations (e.g., oncology, pulmonology), administrative staff, and nurses. This project team structure assembles a team for the purposes of providing care to one specific patient. The features of the network structure include reliance on informal, cooperative, relational norms that permeate the entire organization. For example, doctors who are not formally on a patient's team can be reached quickly for consultation on an ad hoc basis. Other organizational aspects, including doctors' compensation structures (salaries are not based on the number of patients seen) and a shared records system, promote cross-functional communication and collaboration, to achieve the best outcomes for patients.</p> <p>This structure also allows the Mayo Clinic to be one of the most innovative hospitals in the world. For example, delivery-of-care innovations result from physician-led, cross-functional committees. Although the decision-making process is slower than with a traditional top-down approach, it enables improvements on the indicators that most hospitals consider impossible. Team-based structure is especially critical in the dynamic healthcare industry, because of the overwhelming amount of information related to new treatments, research, changing government regulations, and evolving consumer characteristics (e.g., aging populations), which could never be processed by a single doctor or department. Boundary-spanning teams can aggregate knowledge and apply it, to remain an innovation leader in its industry. Furthermore, healthcare is a service-based industry, and the cross-functional and boundary-spanning nature of the team-based structure allows the Mayo Clinic to examine the service process in its entirety and identify and correct any problems or gaps at any stage of care delivery.</p>	<p>industry average (71%). It is top ranked more often than any other academic medical institution in the United States. It also is the source of many medical breakthroughs and innovations, from the discovery of cortisone, for which the Mayo Clinic doctors received the Nobel Prize, to the first FDA-approved hip replacement and open heart surgeries, to designing rapid tests for anthrax, to cutting-edge cancer treatments, to award-winning mobile apps that improve patient experiences. The Mayo Clinic has been extremely successful at innovating.</p>
3M: 3M (2013); Von Hippel et al. (1999).	Tenets 1, 2, and 3; Multidivisional team structure, decentralization, formalization, specialization, autonomy, employee-customer alignment, cross-functional integration.	<p>3M has 40 business units, organized around five autonomous businesses: consumer electronics & energy, health care, industrial, and safety & graphics. As is typical for a multidivisional structure, 3M has high levels of decentralization. Innovation occurs in informal, self-appointed, cross-functional teams. Every employee has substantial autonomy. They can spend 15% of their work time on any project or idea they like. Furthermore, any employee may apply for funding from a different division, even if the idea has been turned down by her or his own division. If the idea is good, the employee forms a boundary-spanning team (e.g., manufacturing, finance, sales) with relevant expertise to work on the project. The team formation process is not restricted by any formal procedure; teams form and are joined voluntarily. 3M encourages organized knowledge sharing, such as research presentations, and informal communication: "This culture of cooperation, communication and cross-pollination of ideas among marketers, scientists and other employees generates enthusiasm to share technologies and best practices across 40 business units and 30 research labs around the world."</p> <p>To innovate radically, 3M promotes alignment between employees and customers. Employees seek out experts in some area (e.g., an outside cancer researcher, blogger known for reviewing tech gadgets), believing that ideas for radical innovations already exist, conceived of by "lead users," who are ahead of the market trends but are unable to find a product because it does not exist yet. For example, when 3M's healthcare division recognized a major opportunity for products that could detect very small objects, such as very early stage tumors, it identified top radiologists, who suggested that the military may have had the needed expertise. By collaborating in informal teams with lead users and a set of 3M's cross-functional employees, the company came up with a break-through innovation.</p>	<p>The various features of 3M's structure have made the company successful on many dimensions. In 2013, for the third consecutive year, 3M made the Thomson Reuters "Top 100 Global Innovator" list. The company counts a large number of patents, extremely high citation rates, and an average of two major innovations every week.</p> <p>Decentralization, cross-functional integration, and high levels of autonomy also make 3M one of the "50 Best Employers in America," with employees reporting high rates of flexibility (79%), satisfaction (77%), and meaningfulness (59%). The collaborative culture allows 3M to hire and retain talent to sustain its competitive advantage, ultimately leading to exceptional customer satisfaction. In 2013 3M was ranked highest in customer satisfaction and word of mouth in technology and electronics sectors, surpassing such renowned companies as Apple and Sony.</p>

Table 4 (continued)

Company & sources	Relevant tenet (s) & structural elements	Description of and motivation for structural marketing	Effect of structural marketing
Tumi; Tumi (2012); StreetInsider (2014).	Tenet 1 and 2: Customer-centric structure, employee–customer alignment.	Tumi has been a customer-centric organization from its inception in 1975. Using its expertise in learning and focusing on customer needs, the company has expanded from only one customer segment (male, frequent business air travelers) to five, around which it centers all its activities. Tumi clearly separates and addresses the needs of its customer segments: core customers (business professionals and frequent travelers), premium customers (high-income consumers who desire distinctive products of highest quality), trend/sport consumers, i-tech consumers (younger adults wanting youthful designs and a lower price point), and women (female consumers who desire high quality products with a feminine flare). Each of its divisions can focus on just its customer segment, research it at length, identify its needs in detail, and, on the basis of this knowledge, design products that cater to the segment. Tumi designs high-quality products and is known for its innovativeness, as evidenced by its numerous patents. However, a challenge facing firms with customer-centric structures is the inefficiencies resulting from duplicated functions across each customer segment. Surveys show that Tumi's existing customers are very satisfied, because they are getting a product that matches their needs and expectations closely, but this structure is inefficient for generating widespread corporate brand awareness, because each group focuses on only its segment. Some marketing inefficiencies (i.e., increasing marketing costs every year since 2009) associated with the customer-centric structure may be the cause of Tumi's problems today.	Tumi's IPO in 2012 was priced above expectations. Since then though, several analysts have downgraded Tumi's stock. In December 2013, Goldman Sachs removed Tumi from its Conviction Buy List. Market observers mention the lack of widespread brand awareness as a key challenge for Tumi. The company itself recognizes increasing brand awareness as one of its priorities, without which further growth will be problematic for the company.
BMW; BMW (2012); Edmondson (2006); Groom (2013).	Tenet 1 and 3: Project teams; network structure; cross-functional integration; formalization; centralization.	The automotive industry is dynamic and competitive, so innovation is not a luxury but a requirement for survival. Consider the changes that have affected the industry just in the past few years. Consumers' new preferences include better mileage, lower emissions, seamless integration with their favorite smartphones, real-time navigation, automated parking, and so on. Government regulations that affect the industry also change constantly. Firms' abilities to accommodate such changes and differentiate themselves from competition absolutely require innovation; 85% of CEOs in this industry say that innovation is their top priority. BMW also recognizes that "Speed and organizational agility is increasingly vital to the auto industry, since electronics now make up some 20% of a car's value—and that level is rising. BMW figures some 90% of the innovations in its new models are electronics-driven. That requires once-slow-moving automakers to adapt to the lightning pace of innovation." Strategic goals are set by the management, but BMW relies on project teams and ad hoc networks to achieve innovation goals: "the kind of informal networks that flourish at BMW and the noise and borderline chaos they engender in big organizations are vital for innovation—especially in companies where knowledge sits in the brains of tens of thousands of workers and not in a computer server. Melding that brain power, they say, is essential to unleashing the best ideas." Arguably, in technologically complex industries, with so many moving parts and uncertainty, organizational structures that decrease formalization and centralization, and allow for collaboration, easy access to knowledge, and the expertise of various departments, would seem to offer the only viable option. BMW agrees; it even forced "teams of designers, development engineers, production experts, finance managers, and marketing executives to move in together for three years and work together in open office spaces hammering out conflicts over new models." Industry consultants note: "By shifting effective management of day-to-day operations to such human networks, which speed knowledge laterally through companies faster and better than old hierarchies can, BMW has become as entrepreneurial as a tech startup."	By aligning its strategy with its organizational structure, BMW achieves superior performance. In 2013, it ranked ninth on the list of the most innovative brands, including other industries, such as technology. It received 11 red dot awards in 2012—the most prestigious awards for product design. One of BMW's most recent innovations, the i8, a plug-in hybrid, has yet to be released on the market but already has sold out orders for its i3 electric car, which has not been introduced to the U.S. market yet. Consumers' perceptions of BMW brand quality also are reflected in the 70% increase in BMW's stock price between 2007 and 2012, economically challenging years for many players in this industry.

physician then assembles a team of doctors that can address the unique needs of that specific customer. This also allows the Mayo Clinic to be one of the most innovative medical providers in the world (see Table 4). Thus, in highly turbulent markets, structural elements that align a firm with its external markets should generate relational benefits that exceed the additional costs, resulting in a net improvement in firm performance.

P3: The positive effects of customer-centric organizational structures on (a) relational outcomes and (b) firm performance are enhanced as market dynamism increases.

Effects of structural design elements on marketing mix effectiveness and efficiency

Next, we turn our attention to the moderating role of organizational structure on the effects of marketing mix on relevant outcomes. Firms make marketing investments (advertising, sales force, R&D) to improve brand and innovation performance, but empirical evidence suggests that these effects depend on boundary conditions (e.g., Naik et al. 2005). In practice, marketing executives express dissatisfaction with the effect of organizational structure on returns from the marketing mix, reporting that only 48% of restructuring efforts increased marketing mix effectiveness (Neff 2008), but no academic research has examined how the returns from marketing mix expenditures vary across different structural designs.

Structure that supports the alignment between internal employees and external customers should enhance the effectiveness (e.g., advertising impact, patent citation rate, sales conversion rate) of marketing mix spending. Customer-centric structures help employees identify trends, unique preferences, and common problems (Shah et al. 2006), and in turn, marketing mix efforts can better accommodate high-value customers' needs. The added market knowledge gained from customer-centric structures also enables employees to improve target product development (Berry 2004) (See Mayo Clinic case in Table 4), advertising design and placement, and selling strategies, such that customers perceive these offerings to be of better quality. For example, when Intel switched to a customer-centric structure, “engineers and marketing people joined forces to create advertising that would persuade consumers to pay a premium for Centrino-powered notebooks” (Edwards 2005). The revised advertising message was better tailored to specific customers and offered a more persuasive value proposition. Similarly, a structure with greater autonomy for boundary-spanning employees enhances their involvement and commitment to customers and markets (Sethi 2000b), so marketing mix efforts by such a firm should be

more persuasive for customers and better match their needs, making it more effective.

However, structural design elements that nurture the alignment between internal employees and external customers can also reduce the efficiency (e.g., cost per impression, cost per patent, and cost per sales call) of a firm's marketing mix investments, because the externally-oriented structure typically requires duplicated efforts across different units, and it sacrifices the opportunity to achieve economies of scale. Specifically, a customer-centric business unit that creates advertising designs and placement campaigns for a specific customer group likely is very effective, but only at a higher cost for impressions and awareness (low efficiency). For example, a luggage company Tumi, which is organized around its customer groups, has been struggling with low brand awareness although its marketing and advertising costs have increased every year since 2009 (Tumi 2012; see details of case in Table 4). In contrast, functionally organized firms instead gain economies of scale in the design and purchase of advertising space, resulting in high efficiencies (Galbraith et al. 2002), but they also might have less impact (low effectiveness). In addition, greater autonomy from authority and rules introduces increased competition among business units and resource duplication (Chandy and Tellis 1998), so a firm with high levels of autonomy must deploy more resources (input) to achieve the same level of marketing outcomes (output) obtained by its less autonomous peers. Structural design elements that grant greater autonomy to boundary-spanning employees then may diminish marketing mix efficiency.

Tenet 2: Structural design elements that promote alignment between *internal* employees and *external* customers or enhance boundary-spanning employees' autonomy (decentralization) increase the effectiveness (e.g., advertising impact, patent citation rate) but decrease the efficiency (e.g., cost per impression, cost per patent) of marketing mix expenditures.

P4: The effects of marketing mix expenditures on *perceived brand quality* are greater for firms with customer-centric organizational structures.

P5: The effects of marketing mix expenditures on *brand awareness* are lower for firms with customer-centric organizational structures.

Marketing researchers rely on effectiveness and efficiency as outcome measures when studying the relationship between structure and marketing investments, because “effectiveness, regarding the degree to which desired organizational goals are achieved, and efficiency, regarding the ratio of firm resource inputs consumed to goal outcomes achieved, are two important and distinct dimensions of organizational performance”

(Vorhies and Morgan 2003, p. 103). In line with the extant literature, we argue that the effectiveness and efficiency of marketing mix investments vary with the level of autonomy of boundary-spanning employees. Autonomy implies low levels of centralization and formalization (Chandy and Tellis 1998), and we expect that a firm with a centralized or formalized structure experiences low marketing mix effectiveness but high marketing mix efficiency.

For example, centralized authority and decision making impose cognitive restraints on decision makers and decrease the adoption of market-driven ideas (Menon and Menon 1997), such that salespeople may suffer lower conversion rates due to the mismatch between offerings and customers' preferences. Similarly, formal rules and procedures lower members' commitment to the organization and the job, such that advertising messages developed by employees may fail to meet customers' requirements. Yet both centralization and formalization tend to standardize organizational processes and minimize resource duplication (Ayers et al. 1997), which helps increase the efficiency of marketing mix investments. For example, in the face of the 2001 dotcom crash Cisco instituted a more centralized structure, which allowed it to reduce its marketing costs by 20% in 2001, and another 35% in 2002 (under its decentralized structure, they had grown by roughly 50% each year between 1996 and 2001; see Table 4).

Implementing highly centralized tight control or strict policies can positively leverage both marketing effectiveness and efficiency when a firm sells multiple products under a single master brand (i.e., corporate branding strategy). Because corporate branding focuses on utilizing the synergies among the products rather than customizing them for specific customers (Rao et al. 2004), firms can have higher advertising impact or conversion rate when they provide consistent marketing messages across units with the use of higher bureaucratic controls. Corporate branding also results in economies of scale by using one umbrella brand name, so giving a smaller group of people greater power for decision making or employing standardized procedures can further lower the coordination costs across units, thereby reducing total costs. In that sense, our argument follows both contingency and configuration theory, in the claim that the fit among organizational structure, firm strategy (marketing strategy), and environmental factors determine performance. As such, we propose:

- P6: Marketing mix expenditures (advertising, sales force, R&D) are *less effective* for firms with more (a) centralized and (b) formalized organizational characteristics. Such effects become *less* salient when a firm adopts corporate branding strategy.
- P7: Marketing mix expenditures (advertising, sales force, R&D) are *more efficient* for firms with more (a) centralized and (b) formalized organizational characteristics. Such effects become *more* salient when a firm adopts corporate branding strategy.

Effects of structural design elements on marketing innovation

One of the main barriers to innovation success is the absence of organizational structure that would enable a firm to develop novel ideas and technological capabilities throughout the organization (Hauser et al. 2006). According to a survey of 260 innovation executives, "Only 30% of the respondents agree they have an effective organizational structure for innovation" (Capgemini Consulting 2012, p. 5). Although the role of structural elements on new product success has been studied (e.g., Olson et al. 1995), findings are mixed (Troy et al. 2008). Thus, in this section we investigate how and when structure improves innovation.

There has been a long debate on how the adoption of organizational structure influences different innovation outcomes such as incremental and radical innovation (Damanpour and Gopalakrishnan 1998). Incremental innovation represents modification of the current offerings, and is aimed at satisfying the needs of the existing customers (Atuahene-Gima 2005). Successful incremental innovation demands communicating insights across internal groups and executing resulting plans, which is enabled by structural design that spans both internal and external boundaries of the organization. In contrast, radical innovation represents clear departure from existing technologies and approaches and is aimed at addressing the latent needs of emerging customers. Because successful radical innovation demands "vision [ing] the market" instead of "listening to the market" (O'Connor 1998), it is critical to have a structure that supports the acquisition and integration of changing and conflicting information from external sources, which better support leaps in the innovation process (Grant 1996b; Nonaka and Takeuchi 1995).

Researchers suggest various organizational forms that are best suited to achieve incremental and radical innovation. Drawing on dynamic capabilities and organizational learning theories (Huber 1991; Teece et al. 1997), scholars argue that modular organizational structures provide new ways to disassemble and recombine resources, knowledge, and capabilities to foresee and adapt to turbulence in the environment (Eisenhardt and Brown 1999). In particular, with the use of network, team, or ambidextrous structures, firms can constantly change units' responsibilities, find novel ways to combine resources, and learn new skills. Such processes not only help a firm become forward-looking in uncovering novel ideas but also backward-looking for effective learning from the market. For example, BMW argues that to remain as one of the most innovative players in its industry it needs to be agile. Thus, BMW uses modularity of project teams and ad hoc networks to improve their innovativeness: "the kind of informal networks that flourish at BMW and the noise and borderline chaos they engender in big organizations are vital for innovation—especially in companies where knowledge sits in the brains of tens of thousands of workers and not in a computer"

(Edmondson 2006). We argue that modularity in structure improves both incremental and radical innovation outcomes.

Although adopting structural design elements that cultivate team structures and modularity purportedly improves innovation performance, it is unclear under what conditions these structural elements lead to new product success. Hauser et al. (2006), p. 695 urge marketing scholars to investigate “when teams, cross-functional teams, virtual teams, or other organizational forms are best for innovation.” Thus, we further argue that modular structure has a greater impact on innovation success when a firm operates in a condition in which the ability to transfer and aggregate knowledge is more valuable (Kozlenkova et al. 2014). For example, when customer preferences are stable, silo structures work as well as boundary-spanning structures, because knowledge is easy to codify and transfer across units through formalized activities.

Tenet 3: Structural design elements that promote modularity (e.g., team, ambidextrous, network structures) enhance innovation that fulfills both current and future customers’ needs. Such effects become stronger when customer change is frequent and customers both desire and reward offerings with better fit.

P8: Modular structures have a positive impact on (a) incremental innovation and (b) radical innovation performance.

We contend that firms dealing with dynamic customer preferences (e.g., high-tech markets) enjoy more benefits than firms meeting stable customer needs (e.g., commodities) when they implement modular structures. When customers’ needs are more predictable, a firm does not need a frequent update on market information for innovation, so agile structures produce less gain. In contrast, when customers’ needs change continually, firms need to increase absorptive capacity and develop capabilities that are conducive to flexibility of knowledge absorption (Van den Bosch et al. 1999). For example, 3M, one of the “Top 100 Global Innovators,” uses fluid team structures to continuously innovate in its turbulent market: “This culture of cooperation, communication and cross-pollination of ideas among marketers, scientists and other employees generates enthusiasm to share technologies and best practices across 40 business units and 30 research labs around the world” (3M Co. 2013; see Table 4 for more details). Thus, a modular structure facilitates greater radical innovation in turbulent and unpredictable markets.

Agile structures may also be more valuable for service firms than for manufacturing firms in terms of developing innovations, since service innovation requires more tacit knowledge (due to intangibility) and extensive customer interactions (due to co-production), which are enhanced in adaptive structures (Ordanini and Parasuraman 2010).

Service innovation is backed by processes and requires simultaneous interactions among different functional areas, some that gather information from mature markets and others that experiment with new markets. Because service innovation necessitates greater information flows across distinct organizational functions, modular initiatives increase the likelihood of successful innovation.

P9: The positive effect of modular structures on radical innovation increases as (a) market dynamism and (b) the service content of the offering increases.

Conclusion

Because “structure plays a powerful role in creating a market-driven organization” (Day 1999, p. 208), it has become crucial to recognize “organizational structure” as a key variable in marketing models, which constitutes structural marketing. Most marketing researchers adopt and apply reasoning from management or organizational psychology literature to study organizational structure, but we extend understanding in this domain by providing theoretical insights into how various structural elements affect *marketing* objectives. To develop a more holistic marketing approach and logic on organizational structure, we first reviewed various fields of study to understand the structural types, characteristics, and theories most relevant to marketing. We then parsimoniously grouped over 40 empirical marketing articles into four major domains: structure as a driver of market orientation, structure as a driver of innovation, structure as a driver of interfunctional/interdepartmental relationships, and structure as a moderator of the strategy–performance link. Finally, building on multiple theories, we have provided conceptual guidance for future research and practice, by offering tenets and propositions, as well as several business cases to support our theoretical arguments. Thus, we contend that marketing academics should not sidestep organizational structure issues, but rather they should examine how structure can help solve marketing problems.

Theoretical implications

We advance structural marketing as a new lens for marketing research by offering several theoretical insights. First, our study points to the role of organizational structure as a strategic marketing variable that can affect a wide range of marketing outcomes. Although prior studies provide support for the effect of structure on market orientation and new product success, we describe its effects on other core marketing objectives such as relational outcomes (customer satisfaction, loyalty) and brand equity (brand quality, brand awareness). Specifically, the choice of organizational structure not only has a direct effect on customer-related outcomes but also

leverages the impact of marketing resources and strategies on performance. Second, we shed light on the trade-offs that arise among different structural elements. While current marketing studies suggest that firms need to be more customer-centric or modular to achieve competitive advantage, we argue that this one-size-fits-all approach to structural forms may be detrimental in some cases. For example, a customer-centric structure fosters relationship with customers, but it also has adverse effects on coordination complexity (Lee et al. 2015). Thus, we propose a more nuanced view that argues the “optimal” organizational structure requires a comprehensive understanding of its benefits and costs. Lastly, to better understand the trade-offs, we also consider contextual factors relevant to marketing (e.g., branding strategy, market dynamism, services) in our propositions, and explain when a specific structural form should payoff. More broadly, our paper infuses a marketing-specific perspective into understanding the effects of organizational structure on outcomes of interest to marketers.

Managerial implications

Our paper has a number of implications for managers and practitioners. First, we emphasize that leaving it to executives to make structural-design decisions without the guidance from a structural marketing perspective may result in diminishing marketing and business performance outcomes. For instance, structural realignment is often driven by financial portfolio strategies or management buyouts, rather than by key marketing concerns, namely, to cultivate customer relationship. Business cases and examples that we provide may guide managers to make more marketing-driven decisions when reorganizing structures (Table 4). Second, managers in marketing, sales, and R&D organizations need to be more cognizant of the effect of structural changes, rather than passively implementing them, because any restructuring may hamper marketing efforts. Third, managers need to recognize that structure operates differently across the environments (e.g., service industry, high tech market, business-to-business) and firm-specific characteristics (e.g., branding and marketing strategies).

Future research directions

The research agenda that arises is threefold. First, future research should examine the longitudinal effects of structure on marketing outcomes. Studies that do not take these across-time effects into account provide an incomplete picture of the relationships between structure and marketing outcomes, as they do not inform us of how a firm learns and adapts to new structural forms or the time it takes for results to materialize. Second, new studies may expand the scope to the enterprise level and explain the interplay among organizational design elements, such as structure, leadership, culture, control, and

processes. Further research is needed to understand how the impact of structural design elements on marketing outcomes will change when accompanied by other organizational design elements. Third, little is known about how other theories (e.g., transaction cost analysis, institutional theory) may explain the effects of structure in marketing models (Hult 2011). Future studies may develop and search for new forms of organizational structure that are more relevant for marketing objectives. It may be fruitful to explore the new structures that managers are implementing “in the field” to understand the ramifications of these changes. Finally, researchers may benefit from testing how organizational structure works at different levels of the organization.

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