

Organizational Design Constructs: From Culture to Structure to Performance

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Abstract

We theoretically examine the relationships amongst a set of organizational culture and structure variables, and how they are related to firm performance. Drawing on literature from organizational theory and sociology, we hypothesize that the customer orientation, as a manifestation of underlying assumptions in the organization, affects espoused values in regard to beliefs on management control, working with others, and making decisions that are global. These espoused values will influence organizational structure with respect to locus of decision making, number of layers in the hierarchy, level of horizontal integration, and nature of formalization in the organization. The propositions are discussed, and the academic and management implications of the findings are provided.

Keywords

Organizational Culture, Organizational Structure, Time-Based Manufacturing.

1. INTRODUCTION

The impact of organizational culture on firm practices, and ultimately on performance, has long been recognized although this explicit recognition made its debut fairly recently. According to Baker (2002), it was not until the early 1980s that organizational culture became a “business phenomenon,” which was triggered by the publication of four seminal books by Ouchi (1981). Baker (2002) notes that the first two books attest to the role that Japanese corporate culture played in Japanese business successes while all the books point to organizational culture as the key to organizational performance. Similarly, Hofstede et al. (1990) suggest that organizational culture is a “relatively recent addition” and state that the term entered the U.S. academic literature through an article by Pettigrew (1979) in the *Administrative Science Quarterly*.

Based on Siehl and Martin (1981) and Tichy (1982), she defines culture as the “social or normative glue that holds an organization together” (p. 344). Smircich (1983) further stresses that culture is an expression of values or social ideals and beliefs that are shared by organizational members. As such, culture provides a sense of identity and facilitates the generation of commitment to something larger than the self. Importantly, culture may guide and shape organizational behavior.

Deal and Kennedy (1982) posit that both weak and strong cultures have a determining impact on organizational behavior. Barney (1986) also discussed the omnipresent effects of culture on the firm. He states that “culture has pervasive effects in a firm because a firm’s culture not only defines who its relevant employees, customers, suppliers, and competitors are, but it also defines how a firm will interact with these key actors. Barney (1986) advanced an argument that suggests that firms can use their organizational culture as a means to provide sustained cost and service advantages. This can be accomplished when a firm has a valuable, rare, and imperfectly imitable culture. He points out that this is especially true when core beliefs are linked with management control practices.

While culture was initially seen as a means of enhancing internal integration and coordination (Bates et al., 1995), organizational culture can also mediate adaptation to the environment. Schein (1985) characterizes culture as a coping mechanism that employees use to deal with problems of external adaptation and internal integration. Sims and Lorenzi (1992) define organizational culture as a type of consensual schema that can reduce equivocality through shared interpretations that can guide employee behavior in organizations.

According to Bates et al. (1995), organizational culture can also impact many aspects of the organization, including organizational structure and organizational behavior. Organizational structure, in turn, affects both the kind and flow capacity of communication amongst organizational members. Organizational structure can serve as a conduit for communication, which is essential for organizations that embrace a customer oriented culture.

In this paper, we suggest that organizational culture has far reaching effects on the choice and intensity of organizational practices. In our attempt to understand the impact of organizational culture on organizational processes, we use Schein's (1992) conceptualization of culture. Schein (1985, 1992) defines three levels of cultural phenomena: At the surface, there are artifacts, which include primarily visible behaviors such as organizational structures, practices and processes, technology, rituals, and language. This level includes all the phenomena that one sees, hears, and feels when one encounters a new group with an unfamiliar culture. At a more latent level, below the artifacts, we have espoused values, which are manifested as strategies, goals, and philosophies, and their espoused justifications. This level represents the sense of what "ought to be," as distinct from "what is." At an even more latent level, below espoused values, we have basic underlying assumptions, which are unconscious, taken-for-granted beliefs, perceptions, thoughts, and feelings. Basic underlying assumptions are the ultimate sources of values and actions. To ascertain the meaning of artifacts and espoused values, one has to decipher the underlying assumptions in an organization.

We position customer orientation as an underlying assumption and investigate its impact on espoused values such as beliefs on management control, beliefs on working with others, and beliefs on making decisions that are global. We then present a three stage succession of artifacts. We suggest that espoused values have a direct impact on the organizational structure of the firm. We thus see organizational structure as an artifact of the organizational beliefs and values. Organizational structure enables or disables communication. Subsequently, organizational structure is posited as a direct antecedent to communication.

2. THEORY DEVELOPMENT

We begin this section by providing a brief historical overview of the literature on organizational culture, structure, and internal communication. We relate organizational structure and culture and we further posit that organizational design has an impact on internal communication, which subsequently affects organizational practices. A series of hypotheses are stated and are organized according to Schein's (1985) conceptual schema.

2.1. Organizational Culture

Despite the strong influence that anthropology has exerted on the study of culture, Ouchi and Wilkins (1985) strongly assert that the study of organizational culture is more deeply entrenched in sociology than in any other intellectual tradition. The organization can be viewed as a social phenomenon with features that can distinguish it both from an environment but also from the individual desires and predispositions of its members.

It is thus no coincidence that scholars have advanced arguments for a strong relationship between organizational culture and structure. The work of Gibson (1994) is indispensable in this respect, and Walsh (2004) eloquently adopted and used Gibson's (1994) framework in her

empirical study. Gibson (1994) presented a two dimensional framework addressing the effects of culture on structure. Using the first perspective, culture is considered external to the individual or group, and organizational structure is looked upon as a purposeful activity that results in purposeful design (Walsh, 2004). This is reflective of the traditional approach to organizational design, where organizational structure is the consequence of the adoption of cultural rules. According to Walsh, this perspective is congruent with the resource dependency and structural contingency theories, and with most strategy based research. The thesis is that organizations can change their structures to gain a competitive advantage. It is primarily the job of the leaders in the organization to interpret the environment's culture and prescribe the structural parameters such as formalization and centralization.

At the opposite end of the continuum, Gibson (1994) posits culture as a phenomenon embedded in individuals and groups, while structure is a purposeful activity. Culture cannot be divorced from the individuals and occurs "as the result of a subjective and sometimes unconscious process of social negotiation" (p. 304), In Walsh's (2004) words, this perspective suggests that organizational structure is viewed as a manifestation of cultural values.

Yet in another perspective, culture is viewed as embedded within individuals but is enacted through structure. Gibson (1994) advances the notion here that structure can be viewed "as an enacted phenomenon that results from semi-subconscious social processes internal to the cultural system" (p. 7). Walsh (2004) notes that this perspective is reflective of social construction theorists such as Barley (1986), Schein (1985), and Van Mannen and Barley (1984). Schein's (1985) model of culture draws heavily from this perspective. Schein (1985) describes culture as "the basic assumptions and beliefs that are shared by members of an organization, that operate unconsciously and define in a 'taken for granted' fashion, an organization's view of itself and its environment" (p.6). Schein (1985) suggests that this created culture manifests itself through members' basic assumptions, which are reflected in values and artifacts.

Gibson's (1994) last perspective portrays organizational structure as a product of distal cultural moderators. Walsh (2004) states that "culture is viewed as external to the individual or group, and structure is viewed as enacted" (p. 305). Gibson (1994) notes that this perspective has not been examined in research.

Irrespective of which perspective one may adopt or subscribe to, the persistent effects of culture on organizational design cannot be ignored. It is thus imperative that the relationships between organizational culture and structure constructs be attended to. What is also obvious from the totality of the above discussion is that differentiating between cultural and structural attributes may be a thorny issue as structure can be considered a manifestation of cultural attributes. Schein's (1985) model appears closest to our conception of structure as an expression of values and beliefs in the organization, and is in accord with the framework presented by Nahm et al (2004).

2.2. Organizational Structure

Organizational structure is the way responsibility and power are allocated, and work procedures are carried out among organizational members (Blau, 1970; Dewar and Werbel, 1979). Robbins (1990) echoed the above definition by saying that organizational structure determines task allocation, reporting lines, and formal coordination mechanisms and interaction patterns. On the other hand, Goldhaber et al. (1984) defined organizational structure as "the network of relationships and roles existing throughout the organization" (p. 44).

Organizational structure has multiple dimensions, and Damanpour (1991) provides a rather thorough list: Through an extensive review of the organizational innovation literature, he documents that researchers have used specialization, functional differentiation,

professionalism, formalization, centralization, managerial attitude toward change, managerial tenure, technical knowledge resources, administrative intensity, slack resources, external communication, internal communication, and vertical differentiation, in their probe into the relationships between organizational determinants and innovation. Daft (1995) provides a list that includes formalization, specialization, standardization, hierarchy of authority, complexity, centralization, professionalism, and personnel ratios. Germain (1996) focuses on specialization, decentralization, and integration in describing the role of context and structure in adopting logistical innovations. Paswan et al. (1998) use formalization, centralization, and participation in explaining linkages among relationalism, environmental uncertainty, and bureaucratization in distribution channels. Koufteros and Vonderembse (1998) employ centralization, formalization, and complexity in describing the impact of structure on just-in-time attainment. Germain et al. (1994) focus on integration, performance control, specialization, and decentralization in their research on the impact of just-in-time selling on organizational structure. Lysonski et al. (1995) concentrate their attention on the degree of centralization of decision-making, formalization of rules and procedures, and structural differentiation in their investigation of environmental uncertainty and organizational structure from a product management perspective.

The demarcation of the internal communication channels is unavoidably impacted by the aforementioned organizational structural dimensions. The flow of information, intensity of communication, reporting lines, and overall horizontal and vertical interaction vastly depend on the degree of centralization, formalization, vertical differentiation, and other structural attributes. Katz and Kahn (1966) viewed internal communication as the flow of information within the organization.

2.3. Internal Communication

According to Grunig et al (2002), internal communication is a “specialized sub-discipline of communication that examines how people communicate in organizations and the nature of effective communication systems in organizations” (p. 486). The history of internal communication is well documented, who state that the early work in internal communication was shaped by interests in business and industrial communication from the 1920s to the 1950s, and in human relations from the 1950s to the mid 1970s (Kim, 2005).

Internal communication is important as organizational members need to communicate to accomplish their tasks effectively and efficiently. Organizational practices such as pull production cannot be successfully carried out in the absence of adequate communication. Just as in any military campaign where communication channels act as the central nervous system, communication is vital for pull production success where organizational members depend on one another for effective and efficient flow of information. The next few sections discuss Schein’s conceptualization of culture in more detail as it pertains to our context.

2.4. Underlying Assumptions

“Customer orientation” is used here as a manifestation of underlying assumptions. It is defined as the degree to which a company focuses on getting closer to its customers to identify their desires in order to provide higher levels of quality of service and products.

In an environment where customer requirements are certain and market conditions are stable, management can focus on the issue of efficiency and productivity (Doll and Vonderembse, 1991; Skinner, 1985). In this environment, cost leadership is the strategy of choice (Nemetz and Fry, 1988; Parthasarthy and Sethi, 1992, 1993). In an environment with substantial change, where customer requirements are complex and constantly changing, listening to the “voice of the customer” becomes the most critical task in an organization. If indeed the true mission of the firm is to focus on customers, then the espoused values in the organization will have to focus

on responding to external elements (Nemetz and Fry, 1988; Parthasarthy and Sethi, 1992, 1993).

The implication is that customer orientation, the basic assumption, is an antecedent to subsequent beliefs, the espoused values. Managers would have little choice but to give full attention to the ever-changing needs of their customers, and satisfy the need requirements responsively. As a result, firms would adopt beliefs that support decision making through more information sharing and less command and control approaches, working across departments, and system-wide thinking in decision-making, (Clark, 1989; Doll and Vonderembse, 1991; Nemetz and Fry, 1988; Skinner, 1985). Thus, the following three propositions are presented:

Proposition 1a: Firms with a high level of customer orientation would espouse values that are supportive of less decision making using a command and control approach.

Proposition 1b: Firms with a high level of customer orientation would espouse values that are supportive of employees working with others across functional boundaries.

Proposition 1c: Firms with a high level of customer orientation would espouse values that are supportive of making decisions with a global, company-wide perspective in mind.

3. DISCUSSION AND CONCLUSIONS

This study investigated a network of constructs that relates customer orientation to espoused value, which in turn affect the organizational structure, and performance outcomes. It was conducted in response to calls by researchers for more research into organizational culture and effectiveness (Denison and Mishra, 1995). Firms must develop norms and beliefs that support their capacity to receive and interpret signals from their environment and translate these into internal cognitive, behavioral, and structural changes (Kanter, 1983). As expected, strong positive relationships were found between level of customer orientation and espoused values relating to beliefs on management control, beliefs on working with others, belief on making decisions that are global. We also found that managerial beliefs, i.e., espoused values, had in general a positive statistical effect upon organizational structure, i.e., artifacts. This echoes Calori and Sarnin's (1991) finding that firms that value adaptation are likely to give priority to satisfaction of clients, and are willing to try new ideas.

4. IMPLICATIONS FOR MANAGEMENT AND FUTURE RESEARCH

This research indicates that a higher level of customer orientation leads to more integrative beliefs. In their desire to constantly provide value to customers, managers in an ever-changing and highly competitive environment are increasingly exhibiting a set of beliefs that focuses on integrating various resources (employees, suppliers, facilities and equipment) and procedures (organization of work and management control) toward the single goal of meeting and exceeding their customers' expectations.

It is evident from this research that customer orientation is related to the espoused values in the organization, which subsequently can have an effect on the deployment of organizational structure and manufacturing practices. Thus, emphasis should be placed on creating and maintaining a culture that is conducive to effectively meeting customer expectations.

This study was subject to some shortcomings that limit the interpretation of the results, and we will leave their investigation for further studies. First, cross-sectional data could be used to test the the propositions, which capture the perceptions of manufacturing executives at a point in time. The organizational culture and structure constructs are dynamic in nature, involving elements of time, and might be better examined over an extended period. However, cross-sectional data do not capture any continuous transformations in the organizational culture and structure variables that might have affected pull production practices and performance. A

longitudinal study is desirable to complement this study to understand how and why the organizational culture and structure variables are associated with pull production practices and performance.

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