

Organizational Adaptation: Interorganizational Relationships and Environmental Uncertainty

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Abstract: Researchers have advanced organizational adaptation theory arguing that the interaction of strategic choice and environmental determinism provides explanations for the adaptation process (Hrebiniak & Joyce, 1985). Recent research indicates that the organizational adaptation research domain still contain gaps (Abatecola, 2012). Although the research literature expands over several decades, the question of how organizations change remains to be one of importance to scholars. Organizational adaptation theory may be extended further by the proposal that environmental uncertainty and choice of interorganizational relationships may influence the adaptation process. Milliken (1987) differentiates the three types of environmental uncertainty, which are state, effect and response. Each type of environmental uncertainty holds implications for organizations in general and influences administrators' strategic choices in particular. Under watch of the three different types of environmental uncertainty, state, effect and response, organizations may be more likely to enter interorganizational relationships depending on the fundamental contingencies of relationship formation.

Key words: adaptation; strategic choice; uncertainty

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1. Introduction

Researchers have advanced the organizational adaptation theory arguing that strategic choice and environmental determinism interact and provide explanations for the adaptation process (Hrebiniak & Joyce, 1985). Previous theoretical work proposed that choice and determinism could be viewed as mutually exclusive ends of a single continuum (Astley & Van de Ven, 1983). With the extension of adaptation theory to include the interaction of strategic choice and environmental determinism, an opportunity exists to further increase understanding of the organizational adaptation process.

The thesis of this paper is that organizations characterized as operating in an environment of high determinism with high choice may facilitate adaptation by entering interorganizational relationships. The choice of interorganizational relationships may depend on the fundamental contingencies of the relationship which are necessity, asymmetry, reciprocity, efficiency, stability and legitimacy (Oliver, 1990). Under each of the three different types of environmental uncertainty, state, effect and response, organizations may be more likely to enter interorganizational relationships dependent on certain fundamental contingencies.

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Hrebiniak and Joyce (1985) present a typology of organizational adaptation describing sets of conditions for the organizational adaptation process which are shown in Figure 1.

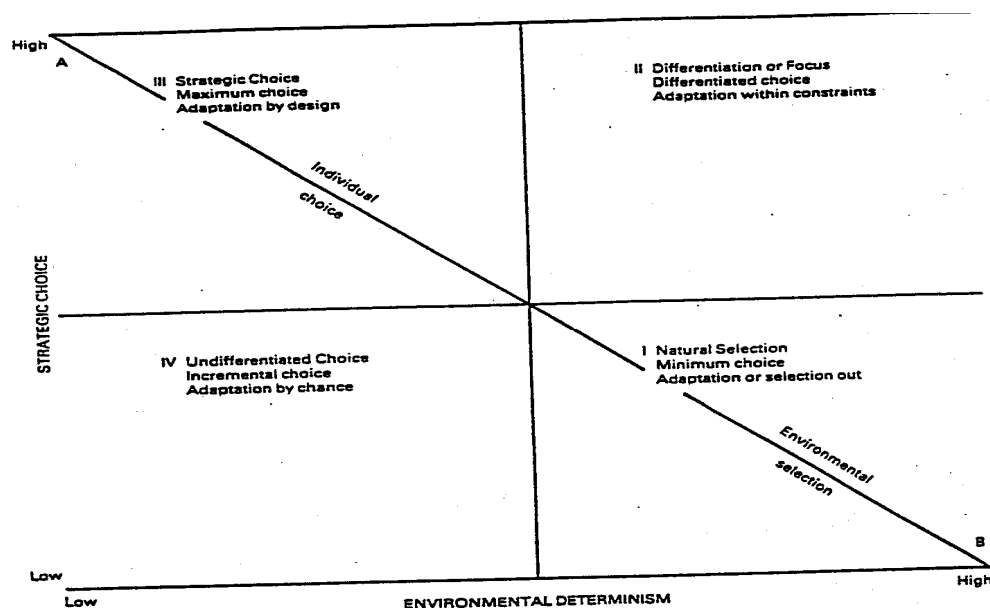


Figure 1 Relation of Strategic Choices and Environmental Determinism in Organizational Adaptation (Hrebiniak & Joyce, 1985, p. 339)

Each quadrant depicts the sets of conditions reflecting the interaction of environmental determinism and strategic choice. Although most of the adaptation literature concentrates on Quadrants I and III, this paper focuses on Quadrant II, which is the set of conditions that depicts the interaction between high determinism and high choice. High determinism means that features of the actual environment, such as the clear existence of various niches, cannot be controlled by the organization (Hrebiniak & Joyce, 1985). High choice means that individuals and organizations, through decision making, are capable of exhibiting control on features of their environment. Thus organizations in Quadrant II adapt by choice within the constraints imposed upon them. The argument of this paper addresses how Quadrant II organizations may facilitate their adaptation process by entering interorganizational relationships.

This paper will first discuss a significant aspect of the importance of organizational adaptation. Next, characteristics of the Quadrant II organization are described, which is followed by a discussion of the three types of environmental uncertainty. The paper then turns to the fundamental contingencies that may be most relevant to organizations when considering to engage in interorganizational relationships. Under each type of environmental uncertainty, state, effect and response, organizations may be more likely to consider certain fundamental contingencies. The paper closes with conclusions and a2-tie implications for Quadrant II organizational managers.

2. Importance of Adaptation

The process of adaptation is important to organizations because the ability to adapt can determine success or failure (Emery & Trist, 1965). A higher level of success, relative to organizations in the same environment, may allow the more successful firm to be less dependent on other organizations. An organization's capability to

decrease its dependence on other organizations in its environment is important since the concept of dependence has been used to explain power in relationships (Emerson, 1962). When power is viewed as the inverse of dependency, organizations may expend influence over other organizations in their task environment (Hrebiniak & Joyce, 1985). An organization's capacity to exert influence over others gives that organization potential power (Provan, 1980). Therefore, adaptation is important because of its relatedness to success and power. Because of the importance of adaptation, organizations would be expected to engage in activities that may increase their adaptability.

The activity of entering into one or more interorganizational relationships may assist an organization in the adaptation process. Interorganizational relationships "are the relatively enduring transactions, flows, and linkages that occur among or between an organization and one or more organizations in its environment" (Oliver, 1990: 241). Oliver (1990) integrates the literature on interorganizational relationships in an attempt to provide understanding about the reasons and conditions for interorganizational relationship formation. Inherent in the argument of this paper is that the primary reason an organization would enter into an interorganizational relationship (IOR) is to facilitate the organization's adaptation process. The next section of the paper will discuss how the conditions of high determinism and high choice characterize the typical organization in Quadrant II.

3. The Quadrant II Organization

Hrebiniak and Joyce (1985) develop a typology of organizational adaptation by employing a two by two matrix that graphically displays the interactions between organizational choice and environmental determinism. The subject of this paper is Quadrant II; where organizations are in a highly deterministic environment and have a high degree of strategic choice. The Hrebiniak & Joyce (1985) theory of organizational adaptation has spurred some research in the strategy area of the organization literature. Two empirical studies have applied the Hrebiniak and Joyce (1985) adaptation theory and examined the strategy and performance relationships between organizations which were categorized into one of the four quadrants. The Lawless and Finch (1989) study found only partial support for the Hrebiniak and Joyce (1985) theory and called for additional research. The Marlin, Lamont and Hoffman study found greater support than the Lawless & Finch (1989) study and concluded that the "Hrebiniak and Joyce (1985) theoretical framework is a useful refinement to the more traditional, bipolar views of organizational adaptation" (1994, p. 237). This paper builds on Hrebiniak and Joyce's (1985) theoretical framework by examining how the Quadrant II organization may facilitate its adaptation process through interorganizational relationships under three different types of environmental uncertainty, state, effect and response.

Organizations in Quadrant II adapt by choice within the constraints imposed upon them. Quadrant II organizations exist in a turbulent environment and have a wide range of choices in some areas but are constricted in other areas (Hrebiniak & Joyce, 1985). "Organizations attempt to control their positions by affecting the parts of the environment that are malleable" (Lawless & Finch, 1989, p. 352). Organizations in Quadrant II are described as large firms in highly regulated industries, with low resource dependency on external sources (Hrebiniak & Joyce, 1985).

Included in Quadrant II are firms which are multi-product or multidivisional organizations. This type of organization may have a subunit or division that could be in an environment characterized by anyone of the other three quadrants or have several divisions distributed among all four quadrants. For example, an organization may

have one division in Quadrant I with low determinism and low choice while another division is in Quadrant III with low determinism and high choice. The multidivisional organization introduces problems in levels of analysis, even in the analysis of intraorganizational decisions (Hrebiniak & Joyce, 1985). This paper does not address those divisions or subunits of a multidivisional organization that are not characterized by the conditions of Quadrant II. Although this is a limitation of the paper, analyses of multidivisional organizations with divisions or subunits that are not characterized by Quadrant II go beyond the scope of this paper.

Firms in Quadrant II usually follow a differentiation or focus strategy (Hrebiniak & Joyce, 1985). A differentiation strategy is one of differentiating the product or service to the extent of creating something perceived as being unique. A focus strategy narrows its strategic target and serves the targeted segment of the market more effectively than competitors. Both strategies imply limitations on overall market share achievable and may or may not involve a trade-off with overall cost position (Porter, 1980). A differentiation or focus strategy could create a perception of uniqueness or effectively serve its target market by offering a product at a high price for low price for affordability to the customer. Organizations in Quadrant II, because of the condition of high choice relative to the other quadrants, have an abundance of resources, have high flexibility in switching resources and have fairly high autonomy (Lawless & Finch, 1989, p. 354). Although Quadrant II organizations have a wide range of strategic choices, environmental uncertainty may make choosing between strategies problematic. The next section of the paper discusses how different types of environmental uncertainty influence organizational administrators' choices.

4. Environmental Uncertainty

Environmental uncertainty is regarded as one of the fundamental problems an organizational administrator must face (Thompson, 1967). For this reason, environmental uncertainty has received a substantial amount of attention from organizational researchers. Although environmental uncertainty is accepted by organizational researchers as being important, some confusion surrounds the exact meaning of the construct environmental uncertainty. One researcher makes an important point asserting that the confusion regarding environmental uncertainty is in part caused by researchers too frequently and too quickly assuming that they know the meaning of the construct (Milliken, 1987). This assumption leads researchers to ignore distinctions between different types of environmental uncertainty which may ultimately influence the findings of their studies. Milliken (1987) differentiates the three types of environmental uncertainty which are state, effect and response. Each type of environmental uncertainty holds implications for organizations in general and influences administrators' strategic choices in particular.

State environmental uncertainty is defined as the inability to understand how components of the environment may be changing (Milliken, 1987, p. 136). An example of this type of uncertainty is organizational managers not knowing the probability of change in governmental regulations of its industry. Effect uncertainty is defined as the inability to predict the impact of environmental change on the organization (Milliken, 1987, p. 137). This type of uncertainty refers to organizational managers knowing the nature of environmental change but not knowing how the change will affect the organization. Response uncertainty is defined as the inability to predict the outcomes or consequences of a response choice (Milliken, 1987, p. 137). This type of uncertainty is experienced by administrators when they attempt to choose between several strategies while they are unable to predict all the possible outcomes of each strategic choice.

Each type of environmental uncertainty creates some limitations on the organizational administrator's ability to make choices. The lack of certainty about the environment may cause an administrator to postpone making a strategic choice. The inability of organizational administrators to have confidence in their decisions or to make decisions in a timely manner, may hinder an organization's progress in adaptation. Thus, the organization may seek ways to strengthen its ability to make choices by attempting to lower the amount of environmental uncertainty, whether it is experiencing either state, effect or response uncertainty. One way the organization may be able to lower its uncertainty and facilitate its adaptation process is to engage in interorganizational relationships (IORS).

5. Interorganizational Relationships

This paper adopts the same assumptions of the theory and research regarding the prediction of IORs which are: "organizations consciously enter into relationships for specific reasons and the contingencies explain why organizations enter into relations from an organizational (top-management) perspective" (Oliver, 1990, p. 242). The needs to facilitate adaptation and to reduce environmental uncertainty have been presented in this paper as the primary and secondary reasons, respectively, for organizations to enter into IORs.

Oliver (1990) integrates the IOR literature and generates six fundamental contingencies for interorganizational relationship formation: necessity, asymmetry, reciprocity, efficiency, stability and legitimacy. The contingency of necessity may force an organization to enter an IOR in order to comply with legal or regulatory requirements. The contingency of asymmetry is related to the power of the organization and its ability to exert influence over other organizations. IORs formed under asymmetry means that one organization, because of its position of power, may be able to have more control in the relationship. The contingency of reciprocity offers a rationale for the formation of IORs that asymmetrical motives cannot explain (Oliver, 1990). In an IOR formed under reciprocity, both organizations are gaining equivalent benefits from the relation and control is not the most important issue. The contingency of efficiency is more internally orientated in that the organization is motivated to improve its internal input/output ratio (Oliver, 1990). The stability contingency prompts organizations to establish IORs based on the need for dependability and reliability in their relations. The legitimacy contingency relates to organizations responding to pressures to justify their activities or outputs (Oliver, 1990).

These six contingencies are used in this paper to help explain why organizations in Quadrant II, under each particular type of environmental uncertainty, would enter into an IOR. The next section of the paper discusses the contingencies that are most likely to be considered when an organization enters an IOR. This paper does not intend to argue that the other contingencies are not viable considerations, rather this paper addresses the contingencies which would appear to be the most important to organizations under each type of environmental uncertainty. However, it is also important to note that an organization may encounter more than one type of environmental uncertainty at the same time. In order to contend with each type or types of environmental uncertainty, organizational administrators could simultaneously consider several fundamental contingencies and engage the organization in a number of IORs.

5.1 State Environmental Uncertainty

In the condition of state environmental uncertainty, Quadrant II organizations would be likely to enter into an IOR under the contingency of necessity or the contingency of legitimacy. State environmental uncertainty is the top-level managers' uncertainty about the probability of general changes in the environment or future actions of key organizational constituencies (Milliken, 1987). Because Quadrant II organizations are in highly regulated

industries, necessity may cause firms to establish linkages to meet necessary regulatory requirements (Oliver, 1990). IORs formed because of necessity may be prompted by the need to comply to a higher authority and are likely to be mandated rather than voluntary (Oliver, 1990).

The deterministic nature of Quadrant II's environment demands that organizations attempt to stay in good graces with key environmental stakeholders or those in authority positions. A significant motive for the organization may be to enhance its legitimacy through an IOR. Attempts to increase legitimacy through relationship formation may be targeted at licensing boards or external stakeholders (Oliver, 1990). The organization's engagement in an IOR may create a conduit for information flows and contacts that allow the top-level managers to better ascertain the nature of the environment. The IOR helps to reduce the state environmental uncertainty and allows the organization to be better able to adapt.

5.2 Effect Environmental Uncertainty

In the condition of effect environmental uncertainty, Quadrant II organizations would be likely to enter into an IOR under the contingency of asymmetry and the contingency of reciprocity. Effect environmental uncertainty involves a lack of certainty of cause-effect relationships such that the nature of the environment is known, but how it will affect the organization is not known (Milliken, 1987). Quadrant II organizations have low resource dependency and could have the capacity to influence other organizations and hold potential power (Provan, 1980). Quadrant II firms, in an attempt to control their own positions, may be prompted to exercise their power over other organizations through asymmetrical IORs. The organizations's ability to control its positions may enable the firm to buffer or insulate itself from potential effects of changes in the environment.

The firm may also enter into an IOR of reciprocity with the intent that the relationship is formed in an attempt to exert control over another organization. For example, two organizations may team up in order to be more powerful than a third party. The Quadrant II organization may reduce its effect uncertainty by attempting to control its ability to function and adapt to the changing environment (Oliver, 1990).

5.3 Response Environmental Uncertainty

Under the condition of response environmental uncertainty, Quadrant II organizations would be likely to enter into an IOR under the contingency of stability or the contingency of efficiency. Response uncertainty is closest to the definition of uncertainty related specifically to decision making (Oliver, 1990). This type of uncertainty may be best explained by Simon's (1947) bounded rationality which explains how organizational administrators, when faced with choosing between possible choices or decisions, cannot know every possible outcome or potential consequence of each decision. Quadrant II top-level organizational managers, because of the high level of strategic choice available to them, may have to choose between several strategic options. Top-level managers may wish to enter IORs that grant them some stability and predictability in the face of response uncertainty. The formation of this type of relation has been often characterized as an adaptive response to environmental uncertainty (Oliver, 1990). Therefore, administrators or top-level managers could be expected to form relationships which could grant them some stability and allow some predictability in the outcomes of their choices so that response uncertainty is lowered.

Top-level managers may also choose IORs based on the contingency of efficiency. Quadrant II organizations that pursue a differentiation strategy may achieve differentiation by engaging in inherently costly activities such as extensive research or the purchase of high quality materials (Porter, 1980). However, threats to the organization, such as market shifts, may cause administrators to re-evaluate their cost position and to attempt to respond by entering into an IOR based on the contingency of efficiency.

Organizations frequently operate in a relational context of environmental interconnectedness and depend on their linkages to other organizations to increase performance and survival (Oliver, 1990). The fundamental contingencies of necessity, asymmetry, reciprocity, stability, efficiency and legitimacy form the general basis of the relationship that the organization considers when entering an IOR. This paper has attempted to identify which contingencies are most likely to be relevant under the three types of environmental uncertainty of state, effect and response. As stated earlier, an organization may encounter situations where one or more of the three types of environmental uncertainty exist concurrently. Thus it would not be unusual for organizational administrators to attempt to lower the different types of uncertainty and make choices to engage the organization in several IORs based on different fundamental contingencies.

6. Conclusion and Implications

This paper focuses on the Quadrant II organization characterized by the interaction of high environmental determinism and high strategic choice (Hrebiniak & Joyce, 1985). Adaptation theory has been extended by arguing that the choice to enter interorganizational relationships under environmental uncertainty facilitates the adaptation process. Quadrant II firms adapt by choice within the constraints imposed on them by the deterministic environment. Firms may make strategic choices to enter IORs in an attempt to control their positions in parts of the environment that are malleable. Organizational researchers have increasingly acknowledged that IORs are the interconnectedness of organizations that firms use as a means of survival (Oliver, 1990). Organizations may rely on their IORs to assist them in the adaptation process in the face of environmental uncertainty. As demonstrated in the paper, organizations may enter into IORs based on a particular type of environmental uncertainty and the fundamental contingencies of the relationship.

The argument presented in this paper has implications for top-level managers of Quadrant II organizations. The deterministic nature of the Quadrant II's environment constrains some organizational outcomes. However, the Quadrant II top-level managers have high choice over the means or methods of competition (Hrebiniak & Joyce, 1985). When top-level managers are faced with one or a combination of the three types of environmental uncertainty, they may want to consider the strategic choice of entering into an IOR to facilitate the organization's adaptation process. The organizational choice to enter into an IOR may be dependent on the fundamental contingencies of the relationship. Because organizational top-level managers may encounter a combination of the three types of environmental uncertainty at the same time, the strategic choices may guide the organization to engage in several IORs. If further research supports the argument that IORs facilitate the organizational adaptation process, managers and practitioners may want to consider these implications.

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