Incremental Approaches to Strategic Management

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1. INTRODUCTION

In 1985, General Motors initiated the Saturn Project, a $5 billion investment in a system of production and management that was intended to beat back the upsurge in imported cars and provide the model for organizations entering the twenty-first century. Two years later, the project was drastically scaled back and the debut of the Saturn car pushed several years beyond the scheduled date. The reasons given for the cutbacks were the sheer complexity of the project and the decline of resources available to General Motors because of increasing competition (Buss and Guiles, 1986).

The Saturn Project is a highly visible example of a class of problems—strategic problems—that confront most organizations. Strategic problems involve, at the very least, the survival of an organization, and, at a higher level, the fulfillment of a defined purpose or mission. The most common approach to strategic management, discussed in the preceding chapter, has been called the rational or, more formally, the synoptic approach. It follows a well-defined and developed procedure for carrying out strategic functions, as characterized in Table 1. The leader of an organization, using the explicit goals of the organization as a screening device, scans the environment for threats or opportunities. When they are discovered, plans are devised for evaluating alternative methods for exploiting the opportunities or countering the threats. All possible consequences of each option are identified and the alternative that maximizes the return to the organization, as measured against its explicit goals, is chosen and implemented.

The major characteristic of the synoptic model of strategic management is that it follows a rational, comprehensive, and formal procedure that moves the organization
Table 1  Comparison Between Synoptic and Incremental Approaches to Strategic Management

<table>
<thead>
<tr>
<th>Strategic dimension</th>
<th>Synoptic</th>
<th>Incremental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triggering mechanisms</td>
<td>Continuous environmental scanning generates</td>
<td>Problems or performance gaps trigger search for solutions</td>
</tr>
<tr>
<td></td>
<td>opportunities or problems for strategic action</td>
<td></td>
</tr>
<tr>
<td>Means-ends relationships</td>
<td>First identify the ends of action and then the</td>
<td>Means and ends are not easily distinguished.</td>
</tr>
<tr>
<td></td>
<td>means to achieve them</td>
<td>Therefore, analysis of means and ends is limited or</td>
</tr>
<tr>
<td>Test of a good strategy</td>
<td>The best choice is the one that most closely</td>
<td>Agreement among participants defines the best choice</td>
</tr>
<tr>
<td></td>
<td>approximates the desired end</td>
<td></td>
</tr>
<tr>
<td>Analytic comprehensiveness</td>
<td>All important factors are considered</td>
<td>Analysis is confined to a few alternatives only</td>
</tr>
<tr>
<td>Integrative</td>
<td>Efforts are made to integrate decisions into a</td>
<td>Decisions are not integrated but only loosely coupled</td>
</tr>
<tr>
<td>comprehensiveness</td>
<td>unified strategy</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Adapted from Lindblom (1959) and Frederickson (1983).*

toward the maximization of its goals, which are typically defined in economic or financial terms. Often a single individual, a chief executive officer (CEO) or president, is depicted as the central player in the process.

A second general approach to the strategic management process is incrementalism. This approach, as summarized in Table 1, addresses the strategy process as one that cannot be accomplished in a rational, straightforward manner. The strategic problem is too complex and ever changing. As a result, the strategic process moves in an incremental or adaptive manner. Decisions are driven by multiple goals advocated by different constituencies, who are represented in the strategy process directly or by agents. Thus, maximization is replaced by an optimization process with the various goals acting as constraints in the decision process. Consequently, the strategic process is disjointed or decentralized.

The major characteristic of the incremental approach is that it is a decentralized process of negotiation among several constituencies adapting to environmental challenges. The organization is constrained by multiple goals composed of mixtures of economic, political, and social considerations. Rather than a single individual leader, coalitions dominate the process.

This chapter examines the characteristics of incremental approaches to strategic management. Our discussion begins with a review of several research traditions that have provided the intellectual foundations for incremental approaches to strategic management.
Drawing from the research review, we identify and describe components of a contingency framework for selection of appropriate strategic management approaches. We conclude the chapter with a discussion of two incremental strategy techniques and needs for further research.

II. RESEARCH TRADITIONS

Although often criticized as suboptimal, incremental approaches to strategic management are supported by several streams of scholarly research. This section summarizes relevant research from three fields: (1) public policymaking, (2) theory of the firm, and (3) evolutionary theory.

A. Public Policymaking

Probably the most frequently cited research on the incremental process is that by Lindblom (1959, 1979). Lindblom argued that synoptic or rational-comprehensive methods of decision making were impossible to implement for all but simple problems. The synoptic method is limited by the information demands of complex problems and by the decision makers' intellectual capacities. Lindblom's attack on the synoptic method drew upon and benefited from a developing criticism of rational decision making (Simon, 1957; March and Simon, 1958).

Lindblom articulated an alternative to the synoptic model, termed successive limited comparisons or incrementalism, as a method for decision making in public administration. He conceived of incrementalism as building from the current situation, "step-by-step and by small degrees" (1959, p. 81). Lindblom contended that the successive limited comparisons method was superior to the rational-comprehensive method both as a description of reality and as a normative model for policymaking.

Braybrooke and Lindblom (1963) later extended Lindblom's original formulation and termed it disjointed incrementalism. The distinguishing feature between disjointed incrementalism and the original formulation was incorporation of the premise that analytic work was fragmented among many partisans in policymaking. Braybrooke and Lindblom's advocacy of disjointed incrementalism was grounded in both limitations on human cognition and the fragmented, partisan structure of market-oriented democracies. They argued that disjointed incrementalism was the optimal mode of policymaking because it is consistent with the structural features of polyarchies, with their checks and balances, widespread political participation, and one-man, one-vote rule.

The influence of Lindblom's formulation of incrementalism as step-by-step formation of policy is evident many years later in Quinn's (1980) description of effective strategies in companies. Quinn writes (p. 58):

The most effective strategies of major enterprises tend to emerge step by step from an interactive process in which the organization probes the future, experiments, and learns from a series of partial (incremental) commitments rather than through global formulations of total strategies.

The theme that effective strategies often emerge incrementally from an interactive, experimenting process is also very prominent in Mintzberg's (1978, 1987) research on strategy.

Incrementalism has been applied most widely by scholars studying public policymaking, although the broad acceptance of Lindblom's formulation suggests its applicability
to government and business. Wildavsky's (1964) analysis of federal budgeting revealed that incremental politics was superior to rational models for explaining budgetary change. Wildavsky argued that reformers called for budgetary decisions to be made using comprehensive means-ends analysis. He showed, however, that lack of agreement on ends and limited knowledge about the numerous consequences of policies overwhelmed any attempts by budget officials to be comprehensive. Lack of comprehensiveness spawned a related criticism that the budget is uncoordinated because the parts are not systematically related to the whole. Wildavsky argued that coordination is not supplied by a single person or organization, but coordination does indeed occur through individual activities of participants and mutual adjustments among them.

In a study of the Cuban missile crisis, Graham Allison (1971) demonstrated the plausibility of three different models for explaining the U.S. response. One model, the rational, coincides with the synoptic approach to making strategy. The other two models, organizational process and bureaucratic politics, share many features with Lindblom's (1959) and Braybrooke and Lindblom's (1963) formulations of incrementalism. Integral to the latter models are ideas such as problematic search, the use of standard operating procedures, and action based on self-interest.

Theory of the Firm

Incremental interpretations of the behavior of organizations also exist in the literature about theory of the firm. Economists have debated whether the theoretical construct of the firm, as offered in the classical presentation of competitive markets, should be replaced by more realistic constructs (Machlup, 1967). Economics has been split between those who would treat the firm as a rational, marginalist actor and those who wish to describe its functioning in behavioral terms (Machlup, 1967). In either case, the question arises: If markets are the most efficient form for economic activity, why do firms exist?

The center post around which markets are organized is the pricing system. It is the ability of the pricing system to adjust to changing conditions that gives markets both their efficiency and their flexibility, at least in standard neoclassical economic theory. In this model, the firm follows very closely a synoptic approach to planning its product output. In the case of a perfectly competitive market, a firm has all the relevant information it requires about cost of inputs, type of product, and price. It needs only to determine its output quantity. In markets that are not perfectly competitive, the calculations are more complex, but they are again done by formula, that is, marginal cost equals marginal revenue.

This scenario is appropriate if factor prices or product preferences remain constant. If these change, reflecting a degree of environmental turbulence, then the pricing mechanism in the market must adjust. These adjustments in the pricing system do not occur costlessly. Recognition of the costs incurred in adjusting prices began the movement away from the synoptic model of firm planning.

Coase (1937) noted that firms arise out of markets as a way to minimize the costs associated with adjustments in the pricing mechanism, especially related to labor. In describing the forces that catalyze firms out of markets, Coase focused attention on the crucial role that uncertainty and information play in generating costs for the price adjustment mechanism. The firm is a way of internalizing those costs and minimizing them through contracting.
Alchian and Demsetz (1972) approached the origins of the firm from a slightly different direction, but uncertainty and information were also important concepts in their framework. Economic tasks are rarely accomplished by isolated individuals, but are more often performed by terms of individuals. Individuals have skills that are unique. The value of these skills increases when combined with the complementary skills of other team members. Because it is difficult to determine the individual contribution of team members to the accomplishment of a task, teams must be monitored. This hierarchical structure becomes the firm (Alchian and Demsetz, 1972).

The existence of teams operating in a hierarchical structure is a simple matter when the firm is a single-product, single-market entity. When a firm operates in more than one market, many teams may exist. These teams were described as coalitions by Cyert and March (1963). They suggested that decision making in organizations is problem directed and that the search for solutions is guided by simple rules and biases. These two processes result in a strategic management system far different from the synoptic model derived from standard neoclassical theory.

One further element from research about theory of the firm should be noted. In describing the mechanisms at work in the contracting process, Williamson (1975) notes that the value orientation of the bargainer, the degree of opportunism, is important in determining the likelihood and character of negotiation. The more opportunistic the individual, the more likely he or she will attempt to renegotiate to acquire a larger proportion of an organization's resources. This value orientation is moderated by other cognitive factors and an organization's culture (Bower and Doz, 1979).

The empirical tests of the strategic management process that should exist if firms were as described in neoclassical literature have been the subject of several comprehensive reviews (Ham, 1975, 1976; Vancil, 1976; Schendel and Ham, 1979; Armstrong, 1982). In essence, the empirical research indicates that the degree of formality, comprehensiveness, centralization, and hierarchical structuring in the strategic management process depends on a number of factors. Among these factors are the level of complexity in the organization (Vancil, 1976) and in the environment (Armstrong, 1982), and the support of different levels of management for planning (Schendel and Ham, 1979). Research has shown that formal planning is appropriate, but not in all cases (Armstrong, 1982). Some organizations have been more successful with a bottom-up approach (Ham, 1976). And it is difficult to be comprehensive, at least initially, unless an organization is in a mature industry (Schendel and Ham, 1979).

C. Evolutionary Theories

Closely allied to the discussion above has been recent economic thinking on how markets change over time and on the role firms play in that change. Strategic management involves the fit between an organization and its environment. Several scholars have attempted to explain how this fit develops over time (Hannon and Freeman, 1977, Nelson and Winter, 1974, 1982; Williamson, 1975). Each has diverged from the standard economic approach to adjustment over time. The divergence involves both ends and mechanisms for adjustment.

As noted in the previous section, the standard economic model assumes that the firm is a passive actor following the dictates of the market. The goal of the firm is profit maximization through the efficient allocation of factors of production. If this occurs under perfect competition, the long-run result will be the same as the short-run result.
Inefficent firms are immediately replaced by new entrants, so the basic competitive equation does not change over time. Market structure remains the same, and therefore the result is that successful action today will likely be successful tomorrow.

Strategic variables other than the factors of production are largely ignored by this model. Empirical studies of economic growth, however, have shown that factors of production accounted for a smaller amount of growth than changes in technology (Solow, 1957). Consequently, the importance of other strategic variables, especially technological change, has been recognized. In order to explain the impact of changes in technology on market structure, new models have had to be developed. In developing these models, different approaches to the strategic management issue have been pursued.

1. Adaptive Learning Models

Schumpeter (1934) argued for a more dynamic approach to the economic efficiency question. He argued that through technological innovation, a firm is able to acquire monopoly profits, thus driving a market toward concentration. Competitors must go beyond the original innovation in order to survive. These arguments were ignored until recently, when they became more salient because economic environments have grown more complex and uncertain. As a result, the efficacy of doing tomorrow what is done today has been called into question.

Nelson and Winter (1974, 1982) have presented the most comprehensive model based on Schumpeter's arguments. In modeling the firm, they chose the behavioral approach suggested by Cyert and March (1963). Through goal-oriented search routines firms adapt to environmental changes. The image thus presented is that of a firm adjusting to continuous, predictable technological change in the environment. How a firm reacts to discontinuous change is less well developed in this model.

Another type of adaptive model is based on the concept of transaction costs (Williamson, 1975). Transaction costs are the costs related to establishing and carrying out any type of trading activity. The concept has been used to explain not only the emergence of firms out of markets but also development of firms from a simple structure to more complex structures such as multidivisional firms (Ouchi, 1980; Teece, 1980; Williamson, 1975). As with adjustments to technological change in the Nelson and Winter model, the transaction costs-driven model of evolution looks at change as gradual and continuous. Subunits of organizations confronted with environmental change learn and adapt. In time, the number of subunits and the degree of adaptation transform the entire organization (Hannan and Freeman, 1977). How organizations adjust to sudden, discontinuous change is again not clearly explained by these models.

2. Discontinuous Change Models

A second approach to evolution concerns discontinuous change in environments. One attempt to model the effect of such changes on organizations is presented in population ecology theory (Hannan and Freeman, 1977). The method for change in the organization is not through adaptive learning, but through selection of the most appropriate form to fit the environment. If the organization fails to adjust, it will be selected against by the environment and disappear. Environmental change is not necessarily smooth and continuous, but can be discontinuous. Therefore, the organization may have to radically alter its form.
Hannan and Freeman do not discuss in detail the mechanisms by which this type of organizational adjustment occurs. However, other literature does suggest avenues for this change. Most appropriate to the strategic management issues discussed in this chapter is the role of the entrepreneur. The role of the entrepreneur, and more importantly entrepreneurial action, is to go beyond the ordinary and routine. Entrepreneurial action leads to new ideas and directions that are often radical in their effects on the organization (Baumol, 1968). Through these actions, organizations can meet the challenges presented by discontinuous change in the environment.

3. Empirical Evidence

There has been relatively little empirical testing of the evolutionary models discussed above. The lack of research is attributable partly to the difficulties in assembling the data necessary to test the theories and partly to the extended time needed to conduct research about evolutionary processes. Two of the models, transaction costs and population ecology, have generated some empirical research (see, e.g., Aldrich and Mueller, 1982; Robins, 1987), but much of it has been case-based and retrospective. One exception was a quantitative, longitudinal study of the integrated circuit industry by Methé (1985). Fit between environmental needs and organizational strategy and structure was shown to change over time with certain types of strategies and structures being more successful (Methé, 1985). Changes in technology for the dynamic random access memory (DRAM) device were found to set up conditions that favored certain firms. Firms that followed strategies that linked them with upstream manufacturers of capital equipment were found to be most successful in introducing the more complicated generations of DRAM devices (Methé, 1985).

D. Summary

Several conclusions are consistent with the preceding review of research. First, many of the basic tenets of incrementalism have solid theoretical and, to a lesser extent, empirical support. Second, research suggests that strategic approaches that approximate the synoptic model are rarely used successfully, but do serve as an ideal for some organizations. The preceding two conclusions support the view that a contingency approach to strategic management may be superior to any single approach. Third, an organization’s environment is critical in any consideration of appropriate strategy and it may be the prime strategic management are assessed further in the next section.

III. DETERMINANTS OF STRATEGY PROCESSES

Although organizations have confronted strategic problems since ancient times, it has not been until quite recently that these problems and the processes involved in solving them have been studied formally (Bracker, 1980). Many of the competing definitions of strategy that have been developed during the recent burst of interest have had three elements in common: (1) objectives for the organization, (2) an environment in which the organization must operate, and (3) resources necessary to carry out required operations (Bracker, 1980).

In keeping with these directions, we define strategic management as that process that devises the strategy by which an organization can fulfill its mission by bridging the gap between short- and long-term goals through the use of organizational capabilities in a
dynamic environmental context. Hence, organizational mission and short- and long-term goals are the ends to be accomplished by means of a strategy that utilizes organizational capabilities. The discussion that follows explores in detail the components of this definition as a prelude to introducing a contingency framework for selection of strategic management approaches.

A. The Environment

The research of Emery and Trist (1965) and Lawrence and Lorsch (1967) established the contingency approach to organizational design. One set of environmental factors, that is, the general economic, political, and social conditions and their rates of change, is not amenable to influence by an organization. However, three dimensions that emerge from these broader environmental characteristics are critical to an organization's strategic choices. First is the sensitivity of an organization to change in the social dimension. These changes would include issues related to product-service quality as well as social responsibility-accountability. Second is the degree of globalization of an organization's environment. This includes the extent to which an organization may have to compete against foreign organizations as well as the regulation of foreign influences. The final dimension is the extent of technological change confronted by an organization. This includes the degree of change in products or services as well as the extent of changes in their delivery. These three dimensions can be influenced by an organization, but only to a limited degree.

Changes in these dimensions affect both private and public sector organizations. For example, in the social dimension, concern over the role U.S. organizations play in South Africa is of major importance to strategic managers. Increasing interdependencies in the global economy have caused government agencies and private firms alike to establish joint ventures with foreign organizations. Technological changes have set conditions that allow for a fundamental shift in U.S. strategic nuclear policy through the Strategic Defense Initiative. Further, many industries are confronted with changes in their basic technologies. Firms in the chemical industry, for example, are currently confronted with changes in underlying technologies that they cannot halt and, therefore, must adapt to in order to survive (DeYoung, 1987).

Another set of relevant environmental factors involves an organization's relationships with other organizations in its environment. Perhaps the most important of these relationships involves organizations that control resources and final end-user markets. Porter (1980) has argued that organizations must consider not only the actions of firms producing the same product, but also the actions of suppliers, customers, potential competitors, and substitute products. Ansoff (1985) has noted that in addition to product-market strategy, organizations must develop strategies for assuring the flow of critical resources for production and must recognize that firm actions will affect nonmarket actors. These nonmarket actors or strategic interest groups can influence a firm's strategy and must be considered in the strategic management process.

The three major sets of elements that comprise an organization's environment—the broad set of general economic, social, and political conditions, the three strategic dimensions of global, social, and technological change, and the negotiated relationship among the various organizations in an environment—determine the level of complexity and uncertainty an organization confronts. The greater the level of complexity and degree of uncertainty, the higher the level of turbulence. From a strategic perspective,
the level of turbulence is critical for the choices organizational participants make and for selection of an appropriate strategic process.

B. Organizational Capabilities

An organization's capabilities are a function of two sets of components. The first involves an organization's abilities—what it "can do." Elements in this set include resources, skills, and procedures that increase and enrich the repertoire of activities that the organization can perform. An example would be developing a distinctive competence in the area of quality control. The second set of components encompasses an organization's culture—what it "will do." Elements in this set include the attitudes and other cognitive factors that affect the willingness of organizational members to perform current activities or to learn new ones. Extending the example above, the willingness of organization members to alter inventory, production, and training procedures in order to establish a distinctive competence in quality control requires an organizational culture open to such changes.

While the distinction between organizational abilities and culture is not rigid, organizational structure, systems, and financial resources most often fit into the "can do" set. Each of these resources contributes to the organization's ability to do work.

Structure provides a framework for doing work. Systems give guidance on how the work should be carried out. People do the work. Financial resources link these together because money can be used to acquire other objects necessary to accomplish tasks and as a reward for accomplishing tasks.

The second set of factors, the "will do" set, refers to the beliefs, values, and experiences residing within an organization—that is, the organization's culture. An organization's culture is maintained and transmitted by its members. Leaders of internal stakeholder groups are particularly central to the maintenance and transmission of culture. Organizational systems and, to a lesser extent, structure also affect culture. Systems, especially compensation and reward systems, send strong messages as to what is valued. The positioning of various departments within a structure—in fact, the very existence of departments—may communicate a particular value or belief orientation.

Combining the two sets, abilities and culture, establishes what an organization can and will do in order to meet the challenges present in its environment. Even the ability to recognize these environmental challenges depends on organizational capabilities. The two sets may complement or conflict with one another. The degree of compatibility between the two sets combined with the level of turbulence in the environment will determine the need for bargaining in strategic management.

C. Mission, Goals, and Objectives

The determination of the mission, goals, and objectives of an organization is conceived as negotiated among the various stakeholders, both internal and external (Lindblom, 1959; Mintzberg, 1979). Mission, goals, and objectives may or may not be explicitly stated. It is also possible that mission, goals, and objectives may never be clearly articulated and may be understood only tacitly (Mintzberg, 1973; Quinn, 1977). In any case, the central point is that they are the result of negotiation among various stakeholders in the organization (Murray, 1978).

It is important to note that most organizations have multiple goals. Consequently, the organization is engaged in a balancing act among various goals and stakeholders who support them (Ansoff, 1985). The relative importance of each goal may change over time.
This occurs in response to environmental stimuli and to changes in the needs or relative influence of stakeholders (Bower and Doz, 1979). Organizations faced with this situation no longer can maximize; they must optimize among the goals.

D. Strategy

Strategy is the link between mission, goals, and objectives and the capabilities of the organization. Through combining, augmenting, or jettisoning various capabilities, a strategy is adjusted to meet the changes in goals and objectives. It may be formally stated or the result of a series of decisions, which may not be formally or explicitly articulated (Mintzberg, 1978, 1987).

Strategy mediates between long-term and short-term goals and objectives. The resolution of the tension between short term and long term may determine the fate of the organization. For example, some observers have argued that it is precisely an over-operational view, or attention to short-term goals, that has resulted in the lack of competitiveness of U.S. companies in the world arena (Abernathy, Clark, and Kantrow, 1983; Reich, 1983). Thus, a balance must exist between long term and short term if an organization is to survive (Ansoff, 1985).

Mission, goals, objectives, and strategy are negotiated among the various stakeholders. Beginning with Barnard (1938), it has become increasingly obvious that the CEO of an organization rarely sets the strategy as an individual act. The relatively unidimensional treatment of the entrepreneur in economics has also been recognized as overly simplistic (Baumol, 1968). A large literature has developed around the theory of the firm and the relative strengths of actors within the firm (Alchian and Demsetz, 1972; Coase, 1937; Jensen and Meckling, 1976; Williamson, 1975). The influence of internal actors on the strategic management process has also been extensively studied (Bower and Doz, 1979; Cyert and March, 1963). The importance of these various actors is that they represent groups within the organization who have a stake in the outcomes of different strategic actions. These stakeholders may coalesce around their role in the organization (Thompson, 1967), some position of power, or some value orientation (Dubinskas, 1985).

The ultimate consequence of these groups for the present study is that they can form coalitions to influence or initiate strategic actions. Strategy, therefore, involves managing the process of internal bargaining. Thus, the strategic process is a highly political process (Mintzberg and Walters, 1985; Pettigrew, 1977). Mission, goals, objectives, and strategy will change over time to reflect the status of the various constituencies that affect them.

E. Cognitive Factors

An underlying assumption of the preceding discussion is that strategic management processes are cognitive, that is, driven by the personal knowledge, perceptions and limitations of organizational actors, rather than purely, or even primarily, rational and objective processes. Because of the complexity and uncertainty inherent in strategic management, individuals and groups engaged in the process operate under conditions of bounded rationality. Steimbruner argued that under such circumstances existing sets of beliefs are used to simplify decision contexts. When groups of individuals are involved, as is the case in negotiations among stakeholders, the actors simplify their perceptions so that decisions can take place. Consequently, organizations employ systems of beliefs to provide a basis
Incremental Approaches to Strategic Management

for stakeholders to simplify their perceptions in order to make strategic decisions (Steinbrenner, 1974).

Belief systems for managers are a result of their experiences as they progress through their careers. Experiences predispose managers to choose particular solutions to strategic problems. Thus, it is not uncommon to find top managers in the same organization approaching the same problem with different solutions (Bower and Doz, 1979).

The sum total of the shared beliefs of top management has been defined as an organization's culture (Lorsch, 1986). While an organization's culture is more broadly based than its top management, top managers probably have the strongest influence in determining culture. Culture is an outcome negotiated among various stakeholders. It is preserved through the socialization process that each new employee undergoes. It is, however, mutable over time. Culture provides the filter for reducing complex and uncertain decision situations into ones tractable for bargaining.

To summarize, the choice of a strategic management approach is dependent on several primary considerations, including an organization's environment, its abilities, and its culture. An organization must attempt to match its environment or it will be overwhelmed (Ashby, 1961). Matching is achieved by using the capabilities available to the organization. These capabilities have two components. The first component involves personnel, structure, systems, and financial resources. It includes the skills of individuals, the amount and flexibility of financial resources, and distinctive competences. The second component is related to the collective values, beliefs, and experiences of an organization's members, its culture.

IV. INCREMENTAL APPROACHES: A CONTINGENCY PERSPECTIVE

The dimensions on which strategy is contingent are summarized in Table 2. Arrayed across the top of Table 2 are various approaches to strategic management. The approaches are divided into four types: (1) synoptic, (2) entrepreneurial, (3) logical incremental, and (4) disjointed incremental. With the exception of the synoptic, the strategic management approaches are assumed to contain some or all of the elements of incrementalism summarized in Table 1.

The conditions that influence selection of a strategic management approach are represented in the rows in the upper half of Table 2. The culture dimension ranges from strong congruence on beliefs and values to weak congruence on beliefs and values. Very strong congruence on beliefs and values promotes agreement on mission, goals, objectives, and strategy. Weak congruence produces little consensus on mission, goals, objectives, and strategy.

The abilities necessary to carry out the activities of the organization range from common abilities, and therefore easily replaced or substituted for, through increasing degrees of specialization to unique abilities, and therefore difficult to replace or substitute. This would also include abilities that are unique in combination to an organization, similar to the team economics of Alchian and Demsetz.

The turbulence levels range from low to high. It should be noted that low turbulence is not to be confused with a stable or unchanging environment. Low turbulence is compatible with change that is infrequent or predictable. High turbulence connotes frequent, large, and discontinuous events that are difficult to forecast. Uncertainty and complexity are high.
Table 2  Approaches to Strategic Management, Contingent Supporting Conditions, and Bargaining Characteristics

<table>
<thead>
<tr>
<th>Supporting conditions</th>
<th>Approaches to strategic management</th>
<th>Logical incremental</th>
<th>Disjointed incremental</th>
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<tbody>
<tr>
<td></td>
<td>Synoptic</td>
<td>Entrepreneurial</td>
<td></td>
</tr>
<tr>
<td>Organizational abilities</td>
<td>Common</td>
<td>Unique</td>
<td>Specialized</td>
</tr>
<tr>
<td>Cultural congruence</td>
<td>Very strong</td>
<td>Strong</td>
<td>Moderate</td>
</tr>
<tr>
<td>Environmental</td>
<td>Low</td>
<td>High</td>
<td>Moderate</td>
</tr>
<tr>
<td>turbulence</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Bargaining</td>
<td>Initial</td>
<td>Episodic</td>
<td>Periodic</td>
</tr>
<tr>
<td>characteristics</td>
<td>Intensity</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>Frequency of</td>
<td>Means–ends</td>
<td>Simultaneous means</td>
<td>Simultaneous</td>
</tr>
<tr>
<td>bargaining</td>
<td>relationship</td>
<td>sequential</td>
<td>means refine ends</td>
</tr>
<tr>
<td>Intensity</td>
<td>High</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>Means–ends relationship</td>
<td>Considered</td>
<td>Simultaneous means</td>
<td>Simultaneous or not at all</td>
</tr>
<tr>
<td></td>
<td>sequential</td>
<td>predominant</td>
<td></td>
</tr>
</tbody>
</table>

A. Application of the Contingency Framework

The contingency framework is useful for describing situations that confront organizations and for providing guidance for organizations undergoing change. An organization must be synchronized with the demands of its environment. The range of conditions within which a particular strategic management approach would be most appropriate is identified in the columns in the top half of Table 2. Because an organization has relatively more control over its capabilities than over its environment, adjustments are more easily made in these. Adjusting the culture or the mix of abilities will allow the organization to adapt to its environment.

When an organization is confronted with low environmental turbulence and its capabilities are comprised of a common ability set and very strong cultural congruence, synoptic planning is the most appropriate strategy approach. The initial mission is set and the strategy is devised to support it. In terms of the stages of the strategic management process, implementation flows naturally from the formulation stage because there exists agreement on means and ends. The same is also true about evaluation and control of the strategy. The primary emphasis is on maintaining the strategy. The synoptic approach involves the most constraining set of supporting conditions. It is the most specialized of approaches to strategic management, and it can be used effectively in only a narrow range of circumstances.

For organizations that are confronting moderate to high environmental turbulence and have strong cultural congruence, an entrepreneurial approach to strategic management is appropriate (Mintzberg, 1973). While unique abilities generally increase the need for bargaining, strong cultural congruence offsets the need to bargain. High turbulence
provides opportunities for an entrepreneurial organization to "leap-frog" other organizations. Thus, the entrepreneurial approach to strategic management is most appropriate at moderate to high levels of environmental turbulence.

In organizations with only a moderate degree of cultural congruence, the entrepreneurial approach to strategic management may not be appropriate. This type of situation calls for the logical incremental approach that has been described by Quinn (1977). Logical incrementalism permits each subsystem of the organization to move forward incrementally according to its own imperatives. Enterprise strategy is shaped simultaneously and proactively at critical junctures in the evolution of subsystem strategies.

Disjointed incrementalism is the most robust of the strategic management approaches. It can occur in environments with turbulence levels ranging from low to high. It will most often occur in environments characterized by high levels of turbulence. While its range of competence is not confined to organizations with weak cultural congruence, disjointed incrementalism is most appropriate in such organizations.

B. Bargaining Patterns

Each of the strategic management approaches involves a relatively unique pattern of bargaining over strategic issues. These bargaining patterns are described in the lower half of Table 2. The bargaining patterns can be described in terms of three dimensions: (1) frequency of bargaining, (2) intensity, and (3) means-ends relationship. The frequency of bargaining involves how often the basic mission, goals, and strategy are discussed before agreement is reached or they are adjusted to meet changes in organizational capabilities or environmental turbulence. Frequency of bargaining ranges from bargaining over initial positions, to episodic or periodic bargaining, to continuous bargaining.

Intensity is a measure of the amount of time, resources, and involvement expended by the organization and its stakeholders in bargaining processes. High-intensity bargaining involves the entire organization and its stakeholders. It is expected that higher-intensity bargaining occurs when cultural congruence is low, especially as the turbulence level rises. Bargaining intensity also should be higher when ability requirements are unique rather than common.

Related to intensity is the means-ends relationship in bargaining. Ends and means will be considered explicitly and sequentially to varying degrees during bargaining. The value-maximizing orientation of the synoptic approach emphasizes sequential consideration of ends and means. At the other extreme, disjointed incrementalism involves simultaneous consideration of ends and means. From our definition of strategic management, the mission, goals, and objectives of the organization are considered the ends and the strategy and organizational abilities the means to accomplish the ends.

In synoptic approaches to strategic management, intense bargaining occurs at the outset of the process. Because environmental turbulence is low and cultural congruence is high, further bargaining is not necessary. This does not mean that the environment is not monitored or that adjustments are not made to strategy. However, adjustments involve "fine tuning" and the mission and goals remain unchanged. Because of the comprehensive quality of the synoptic approach, the entire organization is mobilized to establish mission and strategy. As noted by many observers (Lindblom, 1959, 1979; Mintzberg, 1978), this approach attempts to determine, analyze, and plan for all possible contingencies. Consequently, the level of resources devoted to a planning/bargaining session is high.
Bargaining patterns shift within the entrepreneurial approach to strategic management. As ability requirements become unique, the frequency of bargaining increases, even with high cultural congruence. This is most characteristic of organizations in technology-intensive environments. As the turbulence level increases, more entrepreneurial activity is required. Bargaining frequency is episodic—that is, it occurs according to no set schedule. Each bargaining session is designed to meet a particular environmental change; as the turbulence level increases, bargaining would become more frequent. Because of the strong cultural agreement in an entrepreneurial organization and the degree of uncertainty in the environment, bargaining intensity is low. Most members of an entrepreneurial organization agree to follow the entrepreneur's vision of the environment. This acceptance is often a matter of faith, since most entrepreneurial organizations operate in environments not amenable to quantitative analysis.

Bargaining becomes more formal and periodic in logical incrementalism because of moderate levels of cultural congruence and environmental turbulence. As the turbulence level increases, both bargaining frequency and intensity increase. In the logical incremental approach, steps are taken to reduce the intensity at each bargaining session (Quinn, 1980). Further, since the bargaining sessions are more frequent, the need to discuss major alterations in the mission or strategy is less likely to occur.

Disjointed incrementalism involves continuous bargaining because cultural congruence is weak and environmental turbulence is high. It should be noted that there is an upper bound on bargaining, since as the turbulence level increases the situation approaches chaos (Alchian, 1950). So much time and resources are expended on bargaining over strategic issues that nothing is left for other activities and the organization may fail to survive. Since the number of bargaining sessions is high and they are decentralized throughout the organizational system, bargaining intensity is low at each session, but cumulatively for the entire organization over time it is high. Changes in the strategic posture of the organization also tend to be at the margin, reducing the need for commitment of large amounts of resources at each session. These marginal commitments can become large when aggregated over the entire bargaining process.

The degree of cultural congruence has the strongest effect on whether means or ends are discussed in the bargaining sessions. Strong congruence would mean that ends are generally accepted and that bargaining over means is dominant, as in the entrepreneurial approach. Moderate cultural congruence would indicate that ends may sometimes have to be redefined, but most often these are accepted and bargaining over means is predominant, as in the logical incremental approach.

C. Incremental Strategy Techniques

Thus far incrementalism has been identified with three general strategy variations: entrepreneurial, logical incremental, and disjointed incremental. The strategy literature, however, contains many examples of specific techniques that employ the premises underlying incrementalism. Two of these, stakeholder management and strategic issues management, are discussed at greater length below.

1. Stakeholder Management

One technique that draws on the premises of incrementalism is stakeholder management. It is intended to explicitly address the interests of any group or individual who is affected by or who can affect the future of an organization. In some respects, stakeholder
management techniques are designed to anticipate the need to bargain over mission and strategy and to diminish the need for bargaining by designing strategy according to expected claims of stakeholders.

Freeman (1984) proposed a process for extracting enterprise strategies from information about stakeholders. The process involves three activities: (1) stakeholder analysis, (2) values analysis, and (3) societal issues analysis. Stakeholder analysis facilitates identification of what groups and individuals are affected by the achievement of an organization's purpose. It requires defining a specific map of stakeholders and the "stakes" each has in the organization. Stakeholder analysis helps managers consider the effects their actions have on external groups.

Values analysis requires identifying intrinsic and instrumental values of executives, the organization itself, and its stakeholders. The purpose for values analysis is to understand conflicts and inconsistencies among groups within the organization. The conflicts and inconsistencies are the product of explicit analysis of differences between values of the organization and its stakeholders.

The final task of stakeholder analysis is to identify major issues facing society. Identification of major social issues permits assessment of their impact on the stakeholders of the organization. Awareness of these possible impacts permits some adjustment.

The payoff of this three-step process is that it sensitizes the organization to stakeholder concerns that must be addressed. Stakeholder management provides the organization with information necessary to formulate or adjust its strategy. Freeman (1984, p. 101) describes the results:

By combining an understanding of the stakeholders in an organization, the values of the organization and an account of the social issues which affect the firm now and in the future, we can articulate a statement of either where the organization currently is, with respect to its enterprise strategy, or we can formulate a new direction for the enterprise.

2. Strategic Issue Management

Strategic issue management involves the identification of future developments that are likely to significantly influence an organization's achievement of its objectives (Ansoff, 1980; King, 1982). Although the contents of strategic issues may vary, the procedure is likely to be problem driven. Strategic issue management is also likely to accord the organization considerable flexibility. Bryson and Reaboring (1986, p. 19) write:

In recent years, many firms have developed strategic issue management processes actually separated from their annual strategic planning processes. Many important issues emerge too quickly to be handled as part of an annual process. A separate, quick response is necessary. Typically task forces reporting directly to top management are used to develop responses to pressing issues that turn up unexpectedly.

Douglas Edie and Edward Podoll (1986) paint a similar picture of strategic issue management, labeling it a "halfway house," involving "selection of a small number of issues to which strategic planning is applied, rather than attempting the much more expensive—and often unimplementable—comprehensive, organization-wide planning."

Strategic issue management entails scanning the environment to identify major organizational issues and committing resources to specific change objectives to address
the issues. The process can be conducted frequently and quickly with key organizational participants. For example, Eadie and Podolil (1986) described an application of strategic issue management involving the Mentor, Ohio, city council that was conducted during the course of a few intensive sessions.

V. CONCLUSIONS

A. Utility of Incremental Approaches

In this chapter, it has been argued that incremental approaches to strategic management merit use by organizations because of advantages they afford in coping with typically complex circumstances. Incremental approaches have several features that make them attractive, because the (1) permit an organization flexibility in coping with uncertain environmental circumstances, (2) recognize the need to bargain with stakeholders, and (3) bring demands for analysis and integration into line with human and organizational capacities for rational behavior. Synoptic approaches to strategic management agree with our ideal for rational action, but they can be applied successfully in only a narrow range of situations. The tradeoff between synoptic and incremental approaches has been cogently articulated by Lindblom (1979, p. 519):

The choice between synopsis and disjointed incrementalism—or between synopsis and any form of strategic analysis—-is simply between ill-considered, often accidental incompleteness on one hand, and deliberate, designed incompleteness on the other.

Although we have asserted the general utility of incremental approaches, we have simultaneously recognized the need to adapt to organizational circumstances. A contingency framework for assessing the applicability of incremental versus synoptic approaches was presented. The framework suggested that choice of an effective strategy is contingent on three broad considerations: organizational abilities, cultural congruence, and environmental turbulence.

B. Future Research

The opportunities for research on strategic management, and particularly incremental processes, are quite open-ended. However, it is important that future research build from past theory to develop a cumulative body of knowledge. Although some of the research traditions discussed earlier have endured many years, they have not been used to develop a more formal theory of strategic management. Future research needs to overcome key impediments to more complete and valuable theories.

Frederickson (1983) has developed a research agenda designed to enlighten the debate about synoptic and incremental strategic processes. Because an organization’s strategy may evolve from many decisions over a period of years, Frederickson has recommended that research should be focused on how organizations make and combine individual strategic decisions. This approach would permit empirical identification of strategy types, ranging from synoptic to incremental and intermediate hybrids. It would also permit assessment of the contingency model developed here, as well as a host of other research issues.

Another recommendation offered by Frederickson (1983) is that greater emphasis should be placed on developing constructs and operational measures. This task will no
doubt be difficult, given the need for organization-level measures and the "intangibility" of many of the concepts ( Mintzberg, 1977 ). However, strategy research has clearly reached the stage where construct development is necessary and valuable.

This chapter has reviewed various approaches to strategic management. Its primary focus has been on how incremental approaches differ, not only from the synoptic approach, but also from one another. A review of several research traditions indicated considerable support for the premises underlying incremental approaches to strategic management. We have concluded that the choice of an effective strategic management approach is contingent on three environmental and organizational factors and that different approaches involve characteristic patterns of bargaining.

REFERENCES


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