THE INFLUENCE OF THE STRATEGIC PLANNING PROCESS ON STRATEGIC CHANGE

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This paper proposes that organizational decision-makers exist in a market for strategic issues where different internal and external trends and developments compete for decision-makers' attention. The paper describes how an organization's strategic planning process affects the set of strategic issues that do capture decision-makers' attention. It explains how characteristics of the strategic issue array translate into effective and timely initiation and implementation of strategic change.

INTRODUCTION

Top-level decision-makers operate in a market for strategic issues. Strategic issues are defined as developments, events and trends having the potential to impact an organization's strategy (Ansoff, 1980; Brown, 1981; King, 1982). Strategic issues can represent problems or opportunities to decision-makers. Problem issues, when acted upon, reduce the potential loss to the organization. Thus a competitor may introduce a new technology or product that substantially modifies the availability of substitutes, and poses a potentially significant threat to the viability of a firm's product. In contrast, opportunity issues represent developments or trends, that if acted upon, represent a potential gain for the organization. The development of a new material or new technology outside of the firm's boundaries, as a strategic issue, might lead to a major competitive advantage for a firm. Both problem and opportunity strategic issues are important because they affect an organization's ability to achieve its goals or objectives (Zentner, 1984). All strategic issues indicate there is some disparity between the 'real' and some 'ideal' state (Keisler and Sproull, 1982).

Strategic issues are difficult to manage because of the subjectivity involved in their detection and diagnosis. They are ambiguous, complex and fluid, making their identification and diagnosis an ongoing, interpretive and politically charged activity (Dutton, Fahey and Narayanan, 1983).

There is a market for strategic issues in organizations as issues have value to organizational members. The recognition and legitimation of strategic issues and the administrative routines devised to process them (e.g. meetings, minutes, memos, conferences; Huff and Pondy, 1983) provide a channel for promoting interests and conveying concerns that might not otherwise have a legitimate outlet. For example, the adoption of a new technology, considerations of an acquisition candidate, or the firing of a CEO emerge as plausible alternatives only in the context of a particular set of strategic issues. Thus the screening and legitimation of strategic issues is one important mechanism through which power and influence are exercised (Bachrach and Baratz, 1962; Clegg, 1975).

Strategic issues serve as vehicles for translating individuals' concerns into organizational action. By framing an individual's issue as an organizational strategic issue, individuals increase the

chances that their personal agendas will become operational. For example, a division or sub-unit head who is able to direct top-level management's attention to declining labor quality as a general strategic concern for the firm, gains quicker and more extensive support for divisional attempts to implement new quality control programs. In fact, research suggests that more effective general managers are those who mobilize resources and information to operationalize their agendas (Kotter, 1982).

Strategic issues are also points of attentional focus for decision-makers, driving the collection and interpretation of information in predictable ways. For example, a strategic issue surrounding a new competitor's entry into the firm's primary market is very different from an issue concerning impending deregulation. Each issue defines a different subset of information as relevant and important for the organization. For the competitor issue, data on how to raise barriers to entry or the potential for retaliatory action gains value (Porter, 1980). For a deregulation issue, data on the regulatory environment and information on its probable impact are likely to be prized by decision-makers.

Strategic issues can thus be seen as having political as well as informational consequences. These consequences can, in turn, be seen to influence strategic decision activity and strategic change in organizations.

The purpose of this paper is to establish and describe this relationship in two discrete steps. Step 1 describes the effects the strategic planning process has on the set of strategic issues attended to in an organization. In step 2, characteristics of the strategic issue array are related to the initiation and implementation of strategic change. By outlining these linkages, one begins to see how the strategic issue array acts as a critical vehicle through which strategy formulation influences strategic change. In addition, the proposed relationships generate a set of hypotheses that await future empirical test.

THE STRATEGIC ISSUE ARRAY

The arguments linking strategic planning and strategic change rest on an understanding of strategic issues and characteristics of an organization's strategic issue array. As mentioned at the beginning of the paper, strategic issues are internal or external developments, events, and trends viewed by decision-makers as consequential to the organization. These developments, events and trends are not attended to in isolation. Instead, organizational decision-makers' attentional resources are distributed across a set of strategic issues (as March (1981) has noted with decisions) hereafter called the strategic issue array.

Organizations vary in the extent to which their issue array is large or small (*array size*). Organizations vary in the diversity of issues considered at one time (*array variety*) and the frequency with which any one issue is replaced by another (*array turnover*). Finally, some organizations may have issues that are very narrowly defined, while others consider issues that are much broader in scope (*issue scope*).

An organization with a small array size is one in which decision-makers devote attention to only a few critical issues. One could argue that automobile manufacturers, until the past 5 years, considered a fairly small number of strategic issues (Yates, 1983). However, the significant changes in the automobile industry have shaken the complacency of decision-makers in the industry, and forced organizations to expand the size of their issue array by considering fundamental issues such as 'who are our competitors?' and 'what is the consumer's vision of a desirable car?'

Recent research suggests that automotive producers have also increased array variety by devoting attention to a more diverse set of strategic issues. In part the increased array variety emerges from car producers' ventures into untraditional markets (e.g. GM's ventures into data processing and electronics, *Business Week*, 1984), exposing decision-makers to a larger set of data about potentially significant trends and developments.

For some organizations, issues move into and out of decision-makers' attentional fields very quickly. In other organizations, issues are 'sticky' or enduring, in the sense that they consume attention over long time periods. These latter organizations can be characterized as having a strategic array with low turnover.

The large interpretive element of strategic issues (Dutton *et al.*, 1983) implies that issues can be conceptualized at varying levels of abstraction. These differences in abstraction are

captured by the notion of issue scope. Issues can range in scope from very narrowly defined ones—applying to a particular goal or activity (e.g. 'concern with R & D investment', or 'whether product liability laws will be interpreted more stringently', King, 1982)—to far broader issues such as 'what is the likelihood that our firm's mission is becoming obsolete?' or 'is the definition of our product undergoing fundamental revision?' Differences in issue scope are important as they have implications for the role an issue will play in the initiation and implementation of strategic change.

The form and content of the strategic issue array captures the way decision-makers conceptualize and make sense of their internal and external environments. Differences in strategic issue arrays across organizations represent different views of significant problems and opportunities. Where these problem/opportunity sets represent the initiatives and catalysts for intentional strategic change, an understanding of the strategic issue array is fundamental to understanding organizational action.

For the purpose of this paper we argue that an organization's strategic planning process plays a major role in determining the form and content of the strategic issue array. The content and form of the strategic issue array, in turn, significantly influence the extent and success of strategic change. The overall model for the discussion is represented by Figure 1.

STRATEGIC PLANNING PROCESSES AND THE STRATEGIC ISSUE ARRAY

The strategic planning process is defined as the set of human interactions, formal and informal, that take place in the course of generating a strategic plan (Lyles and Lenz, 1982). For the purposes of the discussion below, the focus will be on corporate-level as opposed to business- or functional-level planning (Lorange and Vancil, 1976).

The strategic planning process serves both an instrumental and symbolic function. Symbolically, the strategic planning process serves to build consensus in the organization by providing short-hand expressions (Bresser and Bishop, 1983) or simplifying categories (Starbuck, 1983) for communication and understanding. For example, the designation of a strategic business unit (SBU) as a 'cash cow' or a 'dog' establishes expectations about the likely performance and contribution of these groups, significantly affecting interactions between SBU members (Dutton, Fahey and Narayanan, 1983). The process has ritualistic elements, i.e. patterns of meetings, formal procedures and communication programs that reinforce a sense of pervasive rationality and control in the organization (Ackoff, 1981).

At the instrumental level the strategic planning process serves as a type of performance program (Cyert and March, 1963)—absorbing uncertainty by reducing the information load facing decision-makers (Boulton et al., 1982). Through the planning process, information critical to the organization's survival is received (Lenz and Lyles, 1983) and interpreted (Daft and Weick, 1984). Signals are received in the form of informational inputs, e.g. data on internal actions such as personnel changes, capital requirements, etc., or external actions such as competitor moves, regulatory changes, etc. Formally or informally, this process produces the array of strategic issues that have been earmarked as significant for the organization's future.

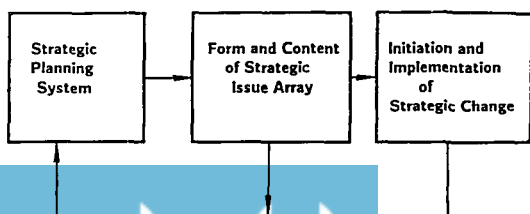The next section outlines how various characteristics of the strategic planning process system-

Figure 1. The overall model linking the strategic planning process and strategic change

atically influence characteristics of the strategic issues decision-makers attend to. The focus is on the instrumental role of the strategic planning process, i.e. how attributes of the process affect the scope of the strategic issues and characteristics of the issue array (size, variety and turnover).

CHARACTERISTICS OF THE STRATEGIC PLANNING PROCESS

Organizations employ a variety of strategic planning processes. While some researchers have attempted to capture these differences using aggregate terms such as planning completeness (Lindsay and Rue, 1980), the attempt here will be to isolate several distinctive characteristics of the strategic planning process and to describe their probable influence on the array of strategic issues top decision-makers consider. In particular, four attributes of the strategic planning process will be discussed in terms of their implications for the content of strategic issues considered as relevant and important for the organization.

Planning focus

Planning focus refers to the division of labor between corporate- and division-level management in initiating, formulating, reviewing and executing plans (Lorange, 1979). Organizations can be characterized as having either a bottom-up or top-down planning focus. If the focus is bottom-up, division-level management play the primary role in the planning process and the process can be characterized as more participative. In contrast, where the process is top-down, corporate-level management secures the major role in the planning process and participation in the process is more limited.

The planning focus determines the major sources for strategic issue initiatives generated during the strategic planning process. For example, issues arising in a decentralized or bottom-up planning process are likely to be more narrowly focused (e.g. ROI, market share, etc.) than issues spawned from a top-down process (e.g. what business should we be in?). The scope of an issue is more limited because of the greater specificity of information available at lower levels of the organization, as well as the participants' motivation to attend to sub-unit or division-

level issues due to their greater relevance and consequentiality. Indirect support for this argument comes from research on environmental scanning, showing that lower-level managers (who are the primary initiators of strategic issues in a bottom-up process) are unaware of corporate-level issues (Aguilar, 1967). Other researchers have made this argument implicitly in warning that one of the pitfalls of a top-down planning process is that business element-based concerns (or issues) may never be given adequate attention (Chakravarthy and Lorange, 1983).

At the same time, a bottom-up planning focus is likely to create greater diversity in the set of issues which capture decision-maker attention. By employing a bottom-up planning process, decision-makers' receptors to information are sensitive to more varied pockets of information. Contingency arguments for the design of planning systems employ this rationale in arguing for a decentralized planning process for organizations operating in more uncertain environments.

Planning formality

Organizations also vary in the extent to which there are written procedures, schedules and documents guiding the planning process (Bazziz and Grinyer, 1981). While planning focus had its major effect on the scope and variety of the issues considered, formality makes its mark on the number of issues in the issue array and the frequency of issue turnover. It is posited that use of a more formalized planning process increases the number of strategic issues being given consideration at any one point in time, but decreases the frequency of issue turnover. The logic for each of these propositions is elaborated below.

A more formalized planning process is a more rationalized system for constructing strategic plans. Formalization in organizations produces efficiency gains for both the receipt and processing of information (Weber, 1947). Formalized planning processes systematize information collection and dissemination, thus facilitating the identification and storage of strategic issues. These efficiency gains translate into an organizational capacity to consider a greater number of strategic issues at any one point in time.

However, efficiency gains accruing from a formalized process must be weighed against the

reduction in issue flexibility. Stated in other terms, a formalized planning process retards prompt and efficient elimination of an issue once it becomes unimportant or resolved.

Further, planning formality often implies 'rules of evidence' that act as filters for admissible strategic issues.[1] For example, formalized systems often highlight subunit performance as a key criterion in judging whether an issue is relevant or not. The emphasis on performance implies that the strategic issue set will be dominated by performance-based strategic issues rather than more qualitative issues such as business definition, or whether opportunities for new product development should be pursued (Dutton, 1983). The difficulty of dissolving organizational procedures in formalized systems generalizes to difficulties in removing strategic issues from the routines that generate them. The programs, procedures and rules embedded in a formalized process make it difficult to eliminate issues. The formalized planning process crystallizes issues into defined and codified products and routinizes their treatment, making it difficult to eliminate them once they are formal elements in the planning program.

The tendency for a formalized planning process to make difficult the removal of strategic issues was illustrated in a recent in-depth study of an issue management system used by a large diversified organization (Dutton, 1987). The study involved a comparative tracking of the processing of 12 strategic issues over a 5-year time period using data gathered by personal interviews. The study revealed that none of the issues was officially removed from the agenda of strategic issues, despite the fact that the concerns that prompted the issues had dissipated or the issues had been resolved in some way. The perseverance of the issues (and the accompanying reports generated about them) illustrate the low rate of issue turnover produced by a formalized planning process.

Planning diversity

Involvement in the planning process can vary in terms of the variety of individuals involved at any particular level in the organization. While the top-down vs. bottom-up distinction high-lighted the possibility of different approaches to vertical involvement, planning diversity captures the variety in horizontal involvement. Where planning diversity is high there are many different types of individuals (e.g. staff and line managers) involved in the planning process. With this sort of planning process, multiple and potentially clashing perspectives have input into the identification of strategic issues. As a result it is expected that a greater number of issues are identified, the issues attended to are of greater variety and the issues tend to be broader in scope. The links to issue scope are made first.

The potential for conflict is high with a diverse planning process. One means for reaching agreement among the clashing views of planning participants is to frame issues more broadly. By moving a strategic issue to a higher level of abstraction, splintered sub-issues are accommodated under the blanket of a more general issue. For example, in a more diverse planning process, different divisional representatives may each be concerned with indicators that there is changing demand for their product. As separate strategic issues, each concern competes for the limited supply of attentional resources from corporate decision-makers. This conflict creates pressure to express the issue more broadly, e.g. as an issue of expanding demand in service industries.

The reframing of the issues on a broader plane allows for the expression of the unique concerns of each division while uniting them under a more general issue umbrella. Where there is diverse participation in the planning process, the broadening of the issue base is likely to occur more often, producing a more general set of strategic issues for the organization.

Similar to the argument made in discussing planning focus, the heterogeneity of informational inputs implied by a diverse planning process translates into more opportunities for decision-makers to be exposed to a wider range of strategic issues. Assuming that exposure to a wider range of issues results in attention to some proportion of them, greater planning diversity translates into a larger and more varied strategic issue array.

Planning intensity

Finally, organizational planning processes vary in terms of the frequency of contact of planning participants. In some organizations the planning

cycle requires frequent, lengthy, face-to-face contacts between planning participants. In other organizations participants communicate once a year, and when they do it is through written and not verbal contact. Planning intensity captures the level of personal resources participants must devote to the planning process. It is assumed that intensity is highest when participants meet frequently, in person, over long periods of time. It is proposed that the intensity of the planning process expands the scope of the issues considered, decreases the size of the issue array, and increases the frequency of the issue turnover.

The scope of strategic issues considered in a more intensive planning process is broader because the amount of time expended trying to understand issues collaboratively is greater. When individuals get together frequently, and spend more time discussing issues verbally, there is greater potential to understand the complexities of the strategic issues than with a less intensive process. As more time is spent sharing information about issues, interrelationships between issues become visible, and issues are framed more generally.

As the issues become more general, the number of strategic issues considered shrinks. Strategic issues are merged with one another as interrelationships and more inclusive issues are identified. At the same time the frequent meetings in an intensive process provide opportunities to retire old issues that no longer fit the definition of 'critical' to the organization, as well as providing opportunities to introduce new strategic concerns, increasing the rate of issue turnover. Thus the intensity of the planning process predictably affects the issue scope, size and turnover of the strategic issue array.

The links between characteristics of the planning process and strategic issues are summarized in Table 1. The proposed relationships can be viewed as a hypothesis for future empirical test.

THE STRATEGIC ISSUE ARRAY AND STRATEGIC CHANGE

The final piece in the argument linking an organization's strategic planning process to strategic change rests on the relationship between the content and form of the strategic issue array and strategic change. This section explores this link by describing how characteristics of the issue array have implications for the successful initiation and implementation of strategic change. As used in this context, strategic change refers to non-routine, non-incremental and discontinuous change (Tichey, 1983). For example the recent diversification and redesign efforts in General Motors (*Business Week*, 1984) represent obvious strategic changes.

The strategic change process can be conceptualized as a process having two major phases similar to the phases in general models of the innovation process. Phase one is called initiation—referring to the initial activities in the change process, when knowledge of the need for change is built and a decision to make a change is made. Phase two is called implementation, and it refers to the activities surrounding the utilization and institutionalization of the change in the organization (Zaltman, Duncan and Holbek, 1973).

During both phases of the strategic change process certain political and informational dynamics occur. The key political dynamic occurring during the initiation phase of strategic change

Table 1. Links between characteristics of the strategic planning process and the strategic issue array

Process characteristic	Strategic issue array			
	Issue scope	Array size	Array variety	Array turnover
1. Planning focus				
Top-down	Broad		Limited	
Bottom-up	Narrow		Greater	
2. Planning formality		Greater		Low
3. Planning diversity	Broad	Greater	Greater	
4. Planning intensity	Broad	Greater		High

concerns building sufficient interest in the issue to incite decision-makers' investment in the issue. In some cases this may mean building a coalition to support the issue. For other issues a particular individual may be sufficiently powerful to exceed the political interest threshold.

On the informational side, the initiation phase requires that decision-makers have sufficient information to assess the nature of the issues, as well as information on at least one avenue to resolve it. Thus, in order for strategic change to proceed there must be sufficient political interest and technical information to accomplish activities in the initiation phase.

In a similar way there are both political and technical informational requirements which must be met during the implementation phase of strategic change. On the political side there must be a broad base of personal acceptance and interest in the change for acceptance and utilization to occur. In fact studies of innovation processes have shown that increased participation in implementation (Yin, Heald and Vogel, 1977) and perception of political interest in an innovation enhance implementation success (Ettlie, 1984; Kraemer and Dutton, 1979). Similarly, in the context of strategic change, political interest and personal commitment to the change are likely to increase implementation success.

In addition to political support, implementers of the change require information on the change *as it is implemented*, so that necessary modifications to ensure implementation success can be made (Kanter, 1983). Again, the literature on the implementation of innovations underscores the importance of adaptations and modifications to an innovation over time. These modifications depend on the receipt of information over the course of the implementation process.

The goal in describing the two phases of strategic change, in terms of the political and informational dynamics of each, is to move closer to explication of how the strategic issue array affects the strategic change process. One can think of strategic issues as representing pockets of shared concern in an organization. The scope of the issues attended to, the size, variety and turnover of the issue array, determine whether these shared concern(s) detract from or add to effective strategic change. The content and form of the strategic issue array create political and informational dynamics, contributing or diminishing the possibility of effective initiation and/or implementation of strategic change.

Issue scope and strategic change

The scope of strategic issues attended to in an organization has equivocal effects on strategic change. On the one hand, an issue of broader scope suffers a selective disadvantage (when compared with a narrowly defined issue) in generating sufficient interest and in collecting the necessary information for change initiation. The difficulties arise because broad-based issues potentially appeal to a wider base of support in the organization. Although a broadly defined issue has a wider base of potential stakeholders in the issue, it takes a greater number of persons to reach consensus about what to do about the issue. This may be the type of issue where side payments are necessary in order to achieve sufficient consensus for action (Cyert and March, 1963). The difficulties in gaining consensus are accentuated by the difficulty in generating an alternative for resolving the issue. Thus a broadly defined strategic issue encounters difficulties during change initiation due to the problems in identifying an effective resolution for the issue and in gaining consensus about an option once it is identified.

On the other hand, if worked through effectively, the difficulties encountered in accomplishing the political and informational tasks during initiation pay off handsomely in phase 2 of the change process. A broadly defined issue builds a wide constituency base (Cobb and Elder, 1972), i.e. it mobilizes a wide band of commitment for implementing the change. The wide band of commitment to implementing the change, in turn, promotes understanding of the change and provides incentives to furnish critical feedback information for adapting the change as it is actualized.

The argument can be translated into predictions for the strategic change efforts of GM, as mentioned earlier. The dominant U.S. auto manufacturer is currently undergoing a major strategic change effort by adding new markets, modifying its strategy in old markets, and undergoing large-scale redesign efforts (*Business Week*, 1984). The logic presented above suggests that the way original initiating issues were framed

(in terms of being very narrowly or broadly defined), has implications for the success of the change efforts. If the originating strategic issue(s) were very broadly defined, e.g. 'How can GM be more market-driven or responsive to the customer?', then the initiation of these changes is likely to be difficult and lengthy. On the other hand, this issue framing contributes to effective and flexible implementation. For example, the strategic issue of making an organization more market-driven is of such scope that it provides individuals with wide latitude in perceiving that there is an opportunity for them to influence the issue in their favor. Manufacturing managers could perceive an opportunity for enhancing their influence by increasing product quality, while marketing would see a clear benefit to them in increased concern for the customer.

However if the issues initiating the change were defined very narrowly, e.g. 'what should be done to achieve regulatory compliance?', or 'what can be done to control the growing rate of imports?', change to resolve the issues would have been initiated quickly and effectively, but the changes would encounter difficulties during their implementation.

Array size and strategic change

The number of issues commanding the attention of decision-makers is also related to the process of strategic change. Holding resources of the organization constant, the size of the strategic issue array determines the average attentional load carried by decision-makers. When the attentional load is high, decision-makers' attention is scattered across more issues. The more dispersed attention existing when decision-makers consider many strategic issues simultaneously has implications for the political and informational dynamics in strategic change.

During the initiation phase of change, support for any one issue may be difficult to sustain. Because a large issue array means multiple issues compete for decision-makers' attention, it is difficult to exceed the threshold of interest necessary to incite decision-makers' investment in any one issue. Where this interest is necessary for sustaining the issue on the agenda and generating alternatives for dealing with the issue, initiation of strategic change will be delayed, if it occurs at all. In a similar way, the sheer amount of information that must be processed simultaneously to accommodate the large set of issues further delays initiation success.

During the implementation phase, a large issue array further inhibits the strategic change process. Where many strategic issues imply frustration and struggles over the initiation of change efforts, individuals involved in and affected by the change are likely to experience extreme frustration. Resistance to change is magnified when there is difficulty in prioritizing changes. The prioritization problem is much more pronounced when decision-makers are considering many as opposed to few strategic issues. Thus a large issue array creates political and informational demands that slow down the process and effectiveness of strategic change.

Where organizations are slow to change when decision-makers are confronted with 'issue overload' (implied by a large issue array), external events or the mandate of top-level decision-makers may be necessary to overcome this inertia. Research findings indicating that the perception of a clear crisis is a necessary prerequisite for the accomplishment of radical change certainly support this argument (e.g. Jonsson and Lundin, 1977). Further, Tushman and Romanelli (1985) have made a convincing case that executive succession or top-level management turnover is a frequent catalyst to major strategic reorientations.

The inertia implied by the difficulties of prioritizing a large set of issues may be overcome by actions of top-level decision-makers. Bower (1970) and Burgelman (1983), for example, have shown that the impetus or political support for change can be initiated through the actions of powerful top-level managers or sponsors. Thus the prioritization problem cited above may be overcome by definitive statements and actions implying an ordering of issues by powerful organizational leaders.

Array variety and strategic change

The effects of a large issue array can be magnified or depressed by the variety in the issue array. For example, if the number of issues commanding attention is large, but the issues are similar to one another, attention to the issues and interest in resolving them is intensified rather than diminished. As a result, the initiation of strategic

change will be facilitated from both a political and technical–informational standpoint.

From a political standpoint, coalitions concerned with any one issue may see their interests served by dealing with several issues simultaneously. Where the issues are similar to one another, for example where all strategic issues relate to government regulation, individuals or groups activated by any one issue potentially see their interests served by taking action on several issues collectively. Hence it is likely that the interest threshold necessary for strategic change will be exceeded more easily and within a shorter time period than when decision-makers consider similar types of strategic issues.

An array of limited variety also facilitates the collection and comprehension of information necessary to understand an issue and to develop at least one alternative for dealing with it. Information collected for any one issue has potential applicability to other issues, meaning issue-relevant information can be collected more efficiently.

Implementation of strategic change is also enhanced when decision-makers face a more homogeneous set of strategic issues. The interest gained in initiation by the consideration of similar strategic issues translates into greater commitment potential during the implementation phase of strategic change.

On the information side, an array of limited variety also eases the interpretation of feedback necessary to modify the change as it is utilized in the organization. Similarity across issues means that change efforts of the past are relevant to current implementation efforts. If, for example, a design change is being implemented in response to the strategic issue of 'poor coordination between division units', then the probability is higher that those affected by the change will have had some type of experience with design changes in the past. Contrast this situation with one where an organization faces heterogeneous issue array. Change efforts undertaken to respond to the issues are very different from one another, and there is considerable learning and adjustment required to incorporate each new change. In these cases, implementation efforts are hampered by the relatively greater learning and information requirements.

The variety of the strategic issue array and its links to strategic change may provide one explanation for the difficulties encountered when organizations pursue an unrelated diversification strategy (Salter and Wienhold, 1979). Decision-makers in these types of organizations face a far wider range of strategic issues than in single-product or related diversified firms. The variety in strategic issues makes the initiation and implementation of change difficult, tending to slow down the process of organizational adaptation.

Array turnover and strategic change

The most difficult characteristic of the issue array to relate to strategic change is the dimension called array turnover. This characteristic captures the ease of entry and exit of issues into and out of the strategic array. If an organization has an array with rapid turnover, issues move quickly into and out of decision-makers' attention. The rapid turnover of issues does not imply that they are resolved—only that the issues have been removed from the set of issues receiving collective attentional investment in the form of resources and time.

An organization with issues that turn over rapidly is likely to have more strategic change initiated than an organization with a lower turnover rate. This hypothesis rests on several assumptions. It assumes that interest in any one issue is enhanced by the perception that quick action will be taken on an issue. This perception is created by issues moving rapidly in and out of the attentional field. Decision-makers who make the decision on an issue, and other organization members who have an interest in an issue, may be more willing to invest in any particular issue if they think at least some decision (either to take action on the issue or to stop considering the issue) will be made.

At the same time, although interest may be higher in issues that are part of a fluid array, support for a change strategy for resolving the issue has less time to develop. In essence an organization with strategic issues moving quickly on and off the agenda is a more efficient 'problem-setter' (Metcalfe, 1981), i.e. more issues are dealt with in a shorter period of time than with a low turnover array. The gains in efficiency, however, have to be weighed against losses in implementation success. Change strategies devised in an organization where issues are

moving onto and off of the issue array have less time to root and build the necessary commitment for their successful implementation. Rapid turn-over may lead to a perception that issues are being identified so fast that it is difficult to implement any given change in response to one issue before another strategic issue becomes active.

In sum, issue turnover has a set of mixed effects on the strategic change process. It facilitates strategic change during the initiation phase by encouraging persons interested in the issue to get involved because of the perception that some action will be taken on the issue. On the other hand, these actions have difficulty during implementation as there is not the same amount of time available for building commitment to any change effort.

The links between the strategic issue array and the two phases of strategic change are summarized in Table 2. The proposed links, as in Table 1,

can be viewed as a set of hypotheses that should be tested in future empirical research.

ASSUMPTIONS, IMPLICATIONS AND CONCLUSIONS

The major point of the discussion has been to establish the link between an organization's strategic planning process and the initiation and implementation of strategic change. The connections were drawn by highlighting the significance of the content and form of an organization's strategic issue array on the set of issues receiving collective attention by decision-makers. It was proposed that the strategic planning process systematically influences the scope of issues considered and the size, variety and turnover of the strategic issue array. The content and form of the strategic issue array, in turn, facilitate or constrain the political and

Table 2. Characteristics of the strategic issue array and their hypothesized effect on strategic change

Strategic issue array characteristics	Phase of strategic change			
	Initiation		Implementation	
	Political dynamics	Informational dynamics	Political dynamics	Informational dynamics
Broad issue scope	Broad base of interested constituents. Difficulties gaining consensus[a] (−)	Difficulties getting necessary information (−)	Broader base of commitment (+)	More sources for information feedback (+)
Large array size	Multiple issues vie for interest (−)	Potential for information overload (−)	Frustration from too many change initiatives (−)	Excessive informational demands possible (−)
Large array variety	Interest diffuse and fragmented (−)	Diverse information requirements (−)	Difficult to gain commitment (−)	Feedback difficult to interpret. High learning requirements (−)
Rapid array turnover	Issue interest intensified by perception that action will be taken (+)	 (?)	Lacking time to build commitment (−)	 (?)

[a] '+' and '−' signs denote direction of impact on strategic change.

informational dynamics taking place during the initiation and implementation of strategic change.

In this formulation of strategic change, the role of the individual is minimized. However the values (Sturdivant, Ginter and Sawyer, 1985), beliefs and characteristics of powerful individuals in organizations can have a pronounced effect on the initiation and implementation of strategic change (e.g. Hambrick and Mason, 1984). In addition, individual decision-makers play a critical role in the planning process, and through their effect on shaping the structure of planning, can influence strategic change outcomes. While the focus of this article has not emphasized the influence of individuals, future models must incorporate their direct and indirect effects on strategic change. In particular it would be useful to develop hypotheses linking individual characteristics to characteristics of the strategic issue array.

The central role attributed to the strategic issue array in organizations rests on several key assumptions. A critical assumption is that the organization's internal and external environment can be represented as a patterning of strategic issues. This view of the environment contrasts sharply with depictions of the environment as a set of general components (e.g. the technical, economic or social component) or as a set of cognitive maps or collection of stakeholders (Lenz and Engledow, 1986). However, recent studies of managerial perceptions of strategic issues (e.g. Dutton, 1987; Huff and Pondy, 1983) suggest that issues are relevant and important means of environmental sense-making.

A second assumption underpinning this model of strategic change is that decision-makers actually attend to a limited array of strategic issues, and that these issues have social currency in the organization. This assumption remains to be tested and challenged—creating further impetus to ground the proposed model with empirical research.

If one accepts these assumptions and the logic of the arguments, then several implications of this analysis emerge. At its most basic level the model suggests that the seeds for strategic change and the probability of its success or failure and timeliness—are set very early in the decision-making sequence. It suggests that the political alignments and informational requirements are determined when a set of strategic issues are identified and formulated. This view is consistent with researchers' claims that problem definition, formulation and diagnosis are pivotal for subsequent decision-making activities (Dutton, Fahey and Narayanan, 1983; Keisler and Sproull, 1982; Kolb, 1983; Lyles and Mitroff, 1980; Metcalfe, 1981; Mintzberg, Raisinghani and Theoret, 1976).

However, the model of this paper departs from these views by underlining the importance of the total strategic issue set in determining the outcomes generated by a particular strategic issue. Thus action taken to resolve a single strategic issue cannot be understood apart from information and interests incited in the context of other strategic issues making claims on decision makers' attention. For example, an issue concerning 'potential deregulation in the industry' is likely to gain greater attention if decision-makers are not diverted by more immediate, pressing issues such as 'a significant performance issue in division B', 'diversification moves of competitors' or other issues that sway the interest of decision-makers.

In this sense, the viewpoint in this paper resembles Quinn's (1980) conclusions formed from conducting extended case studies of strategic change in large-scale organizations. His research suggests that initiatives for strategic change emerge incrementally from localized pockets of issue-solving. His perspective is similar in recognizing the importance of initiatives (political and informational) generated by the *set* of anomalies or strategic issues facing decision-makers (Pondy, 1983).

Several implications for managing the strategic change process emerge from this analysis. The model proposes that indirect or direct actions can be taken to affect the content and form of the strategic issue array in order to influence the initiation and implementation of strategic change. Indirect changes include modifying the organization's planning process to encourage changes in the issue array. More direct actions include designing specific processes or systems for strategic issue management to alter the organization's issue portfolio (Huff and Pondy, 1983). In recent years these systems and processes have gained widespread publicity and utilization as additions to strategic planning or external affairs units (Brown, 1981, Dutton and Ottensmeyer, 1987). Returning to the original model in Figure 1,

there are possible feedback loops between the form and content of the strategic issue array, as well as the initiation and implementation of strategic change and the strategic planning process. For example, if strategic change is not sufficiently timely or radical, this feedback may serve to induce changes in planning process characteristics. Similarly, if the content and form of the strategic issue array is deficient in some way, this dissatisfaction may create incentives for modification of the strategic planning process.

Actions taken, whether direct or indirect, can be tailored to the change requirements of the organization. For example, one can consider modifying the planning process to affect strategic change success. If designers wish to enhance the initiation of strategic change, they may work to narrow the issue scope (by employing a bottom-up planning focus, decreasing planning diversity and intensity), limit the size and variety of the array (by increasing the formality of the planning process, and limiting the process diversity and intensity), or to enhance the rate of issue turnover (e.g. by decreasing planning formality or increasing planning intensity).

As these recommendations imply, there are some contradictory prescriptions for designing a planning process that facilitates the initiation of strategic change. However, the arguments consistently suggest that a low-diversity planning process facilitates the initiation of strategic change through its effect on the form of the strategic issue array.

This implication is important, as it stands in stark contrast to arguments made in the literature proposing that variety in structures and processes enhances flexibility and change (e.g. Metcalfe, 1981). Innovation researchers represent strong proponents of this view; for example, encouraging increasing the complexity of an organization's structure to enhance the adoption of innovations (e.g. Hage, 1980; Dewar and Duncan, 1977). However, using the arguments drawn in this paper, variety in structure as represented by a diverse planning process would hurt rather than hinder timely, effective strategic change.

In contrast, the implementation of strategic change requires a different design for the planning process. Such changes are aimed at broadening the issue scope, decreasing the array size and variety, and reducing array turnover. The design implications for enhancing strategic change through changes in the planning process are summarized in Table 3. As the table suggests, there are design trade-offs in constructing a planning process necessary to facilitate both the initiation and implementation of strategic change. The most clearly interpretable implication is that a diverse planning process hampers both phases of strategic change, a formal planning process impedes the implementation of change, while a top-down process enhances implementation efforts. Further design implications await theoretical extensions and empirical testing of the relative importance of different characteristics of the issue array in determining effective strategic change initiation and implementation. Only by knowing whether the issue array's size, variety, turnover or issue scope are more important in change initiation and implementation, can further design implications be extracted.

In conclusion, this paper has argued that the

Table 3. Design implications for enhancing the initiation and implementation of strategic change

Planning process design alternatives	Initiation		Implementation
Top-down planning focus	Mixed support	(Increases scope [−], decreases variety [+])	Enhances
Formal planning process	Mixed support	(Increases size [−], increases turnover [+])	Impedes
Diverse planning process	Impedes		Impedes
Intensive planning process	Mixed support	(Increases scope [−], increases turnover [+])	Mixed support (Increases scope [−], increases size [−], increases turnover [−])

organization's planning process acts as a type of agenda-builder—creating and prioritizing a limited array of strategic issues. The planning process, however, is not the only agenda-builder. The external environment of the organization (e.g. competitive conditions), the organization's financial performance and characteristics of top-level managers (e.g. age, functional orientation, etc.) all may affect the content and form of the strategic issue array. However, in light of the formalized role of planning systems as detectors, prioritizers and initiators of issue-relevant decisions, they are a major force in this agenda-building process.

The major hypothesis of the paper has been that the design of the planning process systematically affects the occurrence and success of strategic change efforts *through* its effects on the content and form of the strategic issue array. This hypothesis awaits empirical test. Its development at a conceptual level urges theorists and practitioners to critically consider the role of the planning process in problem-setting and in solidifying and motivating strategic change.

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