

Strategic Issue Management Systems: Forms, Functions, and Contexts

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Organizations use strategic issue management (SIM) systems to enhance their capacity to adapt. Despite increasing prominence, very little is known about the design and use of these systems. This paper presents typologies of the forms SIM systems can take and the functions SIM systems can serve. It describes how pressures imposed by different contexts affect both the form and function of SIM systems. Implications for theory and practice are discussed.

Strategic issues are developments or trends that emerge from an organization's internal or external environments; they are perceived to have the potential to affect an organization's performance (Ansoff, 1980; King, 1982). Issues as different as a division's failing performance, a trend toward deregulation, or a declining birth rate may represent strategic issues to an organization.

Strategic Issue Management (SIM) systems are one set of organizational procedures, routines, personnel, and processes devoted to perceiving, analyzing, and responding to strategic issues; they enhance an organization's capacity to adapt and to learn (Duncan & Weiss, 1979; Hedberg, 1981; Normann, 1985). Adapting implies that an organization can achieve a better alignment with its environment (Lawrence & Lorsch, 1967), and learning implies the alignment is facilitated by greater knowledge and understanding (Fiol & Lyles, 1985).

SIM systems facilitate an organization's adaptive capability in two distinctly different, yet complementary ways. First, a SIM system can collect, disseminate, and interpret information and by doing so, identify issues that require managerial interpretation (Daft & Weick, 1984). Thus, ad-

aptation or better alignment between an organization and its environment is achieved through a SIM system's role in helping to solve the problem of managing equivocality (Weick, 1979) or reducing uncertainty (Thompson, 1967).

However, a SIM system's contribution to adaptation can be more than an informational one. Alignment with its environment also requires that an organization deal effectively with resource dependencies (Pfeffer & Salancik, 1978) and pressures for accountability (Tetlock, 1985).

Accountability pressures mean that "an organization must both be able to document how resources have been used and to reconstruct the sequence of organizational rules and actions that produced particular outcomes" (Hannan & Freeman, 1984, p. 153). According to one set of theorists, an organization's ability to deal with these pressures for accountability determine organizational survival (Hannan & Freeman, 1984). SIM systems can bestow legitimacy on decisions to ignore some issues and to take action on others, enhancing the "probability that powerful collective groups will endorse an organization's actions" (Stinchcomb cited in Hannan & Freeman, 1984, p. 158). Thus, SIM systems foster

adaptation by helping to solve an organization's problems of reducing equivocality and preserving accountability.

First, this paper describes the different forms and functions of SIM systems in organizations. The focus is intentionally descriptive, aiming at developing a logic for predicting the emergence of specific forms of SIM systems, something that existing prescriptive models have not done effectively.

Second, this paper develops a set of propositions for predicting what form SIM systems will take and what function they will serve based on the organization's need for information and the pressures placed on the organization for accountability. It is argued that organizations in different environmental contexts and with different internal structures, for example, will have different forms of SIM systems serving different functions because of varying informational (i.e., information richness) and political (i.e., accountability) problems. The propositions developed serve as invitations for future research.

Forms of Strategic Issue Management Systems

SIM systems have taken a variety of forms. For example, in some organizations they are very large and formalized. Sperry Corporation and Connecticut General Insurance Company have large SIM systems, involving both staff and line personnel in identifying and responding to strategic issues (Brown, 1981). In other organizations SIM systems involve no more than the informal identification of issues by senior level executives.

SIM systems can be distinguished one from another in terms of the types of issues most likely to be detected and legitimated, and in terms of their level of active involvement in the strategic adaptation process. Thus, the types of issues a SIM system tracks and the scope of activities involved form the basis for a typology of SIM systems.

Types of Issues

Organizations face two types of strategic issues originating inside or outside the organiza-

tion's boundaries. Decline in employee satisfaction or the development of a new technology by an organization's research and development (R&D) group represent *internal* strategic issues. Such issues are classed as strategic because they can alter the organization's performance if left unnoticed or unaddressed. They are distinctly internal because the locus for their occurrence is within the organization's boundaries

Some forms of SIM systems are designed exclusively to monitor and respond to internal issues. Those who see SIM systems as part of the budgeting process come closest to this internal view. In this form of SIM system, internal issues often are triggered by deviations in the organization's or some subunit's performance from targeted performance goals. For example, in one study of a large diversified organization, where the SIM system was aligned closely with the organization's budgeting process, the majority of the issues detected were internal (Dutton, 1987). In this case, issues such as declining subunit performance dominated the strategic issue agenda.

In contrast, *external* strategic issues emanate from sources outside the organization's boundaries. For example, competitor actions, political unrest near an organizational site, or changes in regulatory rules represent potential external strategic issues.

A SIM system that tracks external issues is consistent with the views of those who see SIM systems as synonymous with environmental scanning or as an activity affiliated with the public affairs function (Fleming, 1980). SIM systems, when viewed as an activity of public affairs units, identify significant public policy issues and respond to them before they are crystallized into legislative action (Arcelus & Schaeffer, 1982).

Scope of SIM Systems' Activities

SIM systems also can be classified by the type of activities they perform. On the one hand, SIM systems may be *passive*, making little, if any, direct effort to alter internal processes or external forces. On the other hand, SIM systems may be *active*, designed to aggressively shape strate-

gic decision outcomes or environmental forces (Ottensmeyer, 1982).

Passive SIM systems collect and transmit information about events and developments that potentially could affect an organization's strategy or performance. In some cases this collection process may be highly formalized. For example, some organizations use elaborate polling processes to collect information about top decision makers' perceptions of strategic issues, so that monitoring activities can be better focused (Moore, 1979). In other cases, managers of SIM systems' processes use informal discussions or the "gut feel" of top managers to identify issues requiring attentional investment.

Identifying issues is only one activity of the passive SIM system. Strategic issues do not come to the attention of top decision makers in pre-packaged form (Dutton, Fahey, & Narayanan, 1983). Instead, participants in a SIM system filter and evaluate issue-relevant information. In the process, the participants construct the meaning of issues by labeling them in particular ways. For example, a technological development in an industry may be interpreted as a threat by one firm, while another may construe the same development as an opportunity (Dutton & Jackson, 1987). Thus, those who manage the SIM systems' process may act as interpreters and packagers of strategic issues. They focus attention on particular aspects of an issue that, in turn, have particular meanings for organizational members (Daft & Weick, 1984). In this way, SIM systems represent organizational structures and processes for formulating organizational problems and opportunities (Lyles & Mitroff, 1980).

The interpretive roles of SIM systems can confer power on SIM systems' participants. These participants may gain considerable internal power because of their roles in attending to strategic contingencies of an organization (Hickson, Hinings, Lee, Schneck, & Pennings, 1971), in establishing decision premises, controlling the alternatives generated, or determining what information is available about those alternatives (Pfeffer, 1981).

SIM systems include activities far broader and more intervening than those described thus far. They may include overt attempts by organizational members to alter the course of an issue's development. For example, some designers of SIM systems argue that effective strategic issue managers should use personal contact with public officials or others to alter the speed and direction of the development of external strategic issues (Arrington & Sawaya, 1984). A focus on influencing an issue's life cycle or intervening at a critical point in an issue's development illustrates further the more active roles that SIM systems can incorporate (Molitor, 1980).

Included in the most active SIM systems are the designing and implementing of issue responses. Issue responses may vary from internally circulated status reports that develop and document organizational positions on strategic issues, to lobbying efforts designed to alter the force and complexion of an issue.

Considering simultaneously the scope of SIM systems' activities and the types of issues that SIM systems are designed to address results in the identification of four distinct forms of SIM systems, as shown in Figure 1.

Collectors are designed to detect internal strategic issues and adopt a passive set of activities for SIM systems' participants. *Antennae* perform passive roles, but focus on external issues. Active SIM systems designed to monitor and act on internal issues are termed *Activators*. Finally, systems that perform active roles in the external realm are called *Interveners*.

The four forms of SIM systems summarize the alternative views of this activity that have been identified in the literature. As alternative forms of SIM systems they also provide a means for identifying when SIM systems approximate other activities designed to facilitate organizational adaptation.

Collector and Activator forms of SIM systems most closely resemble information systems, budgeting systems or planning systems that focus on the identification of internal business-level issues, often as a means of corporate control

		Issue Source	
		Internal	External
Activity Scope	Passive	Collector	Antenna
	Active	Activator	Intervener

Figure 1. Forms of strategic issue management systems.

(e.g., Lorange & Vancil, 1977; Rhyne, 1985). Antennae systems approximate traditional environmental scanning activities, involving the identification of external threats and opportunities (Fahey & King, 1977). When the identification of external issues also involves active attempts to alter the issues themselves, then the SIM system becomes an instrument for an organization's use in seeking greater control of its environment (Pfeffer & Salancik, 1978)—an Intervener. Finally, when the SIM system involves the full spectrum of issues and activities possible in the identification, interpretation, and response to issues, it most closely resembles what Ansoff (1980) has called strategic issue management.

As this typology reveals, SIM systems may emerge in a variety of forms. The probability that any one form of SIM systems will emerge depends, in part, on the function that SIM system serves in an organization. Some alternatives are considered below.

Instrumental and Symbolic Functions of SIM Systems

SIM systems can perform two distinct functions in an organization. One function is captured by viewing SIM from an instrumental

perspective. This view is based on the assumption that decision makers can, will, and must monitor their internal and external environments to more effectively align organizational capabilities and resources with threats and opportunities (Christensen, Andrews, Bower, Hamermesh, & Porter, 1982). From this view, SIM systems are seen as aiding the organization in adapting to environmental trends and stakeholder shifts (Chaffee, 1985). By design, SIM systems act as critical scanners or sensors and transmitters of information, and in some cases, active designers of issue responses.

In contrast, SIM systems may be construed as serving a symbolic function. From this view, decision makers create and communicate shared meanings for organizational members through the structures and processes they design (Chaffee, 1985; Ranson, Hinings, & Greenwood, 1980; Smircich & Morgan, 1982). When viewed in this way, SIM systems are active interpreters that sort and extract meaning within the organizational context (Daft & Weick, 1984). They act as processes that produce, manage, and resolve meanings for strategic issues, serving to preserve an image of legitimacy, control, and effectiveness (Feldman & March, 1981; Meyer, 1984). Detecting, interpreting, or responding to strategic issues has symbolic value because it can convey an image of rational and effective organizational decision making to important organizational constituencies (Feldman & March, 1981).

Considering the processes and outputs of a SIM system when viewed from each theoretical light aids in further distinguishing these two functions of SIM systems. "Processes" are the sequence of activities incorporated in a particular SIM system's form while "outputs" are the products generated by a SIM system. The four different views of SIM systems produced by the different functions (symbolic and instrumental) and aspects (processes and outputs) of SIM systems are summarized in Figure 2. Each view implies a different set of criteria for judging the effectiveness of the SIM system. These criteria also are summarized in Figure 2.

		Output	Process
		Function of Strategic Issue Management	Instrumental
	Symbolic	Detailed issue knowledge Multilevel issue portfolio Causal maps of issues Issue dissensus	Legitimacy of decision making Perceived decision-maker control Responsiveness image

Figure 2. The functions of SIM systems.

Instrumental Functions

Focus on Output. This view implies that SIM is a system that generates accurate, complete, and efficient identification of strategic issues. Effective identification is followed by the timely and accurate transmission of appropriate information about response strategies to decision makers.

This perspective—dominated by an instrumental view of strategy and a focus on SIM systems' outputs—typifies prescriptive treatments of SIM systems. For example, SIM systems' units can be judged by their ability to detect a strategic issue early in its life cycle (Foresight Task Force, 1983) and to produce information perceived as relevant and timely to decision makers (Lenz & Engledow, 1986) so that CEOs are neither blinded nor surprised by the consequences of issues

(Ansoff, 1980). The focus on outputs as opposed to the process of SIM systems is illustrated by a concern with an accurate definition of issues and the soundness or suitability of organizational responses (Arrington & Sawaya, 1984; Brown, 1981).

Focus on Process. Understanding SIM systems from an instrumental view can be expanded by considering its process implications. Activities taking place as part of a SIM system may generate an awareness of issues among decision makers that is often underestimated. Because certain strategic issues become designated as "issues" means that they will have currency in the vocabulary of SIM systems' participants and to persons with whom SIM systems' participants communicate. For example, the Port Authority

of New York and New Jersey (PA) adopted a SIM system and implemented it in conjunction with its strategic planning process. Through a series of several group meetings, five issues were identified and agreed upon as consensual strategic issues. Subsequently, the phrases describing these issues became common rationales for granting certain resource allocations, and denying others, within the Port Authority. In this case, the simple process of identifying and agreeing on a set of strategic issues provided a basis for communication and established a common ground for justifying investments and divestments in other PA projects.

The process of SIM systems also establishes norms that make it legitimate and valued to articulate emerging threats and opportunities. An active SIM system's process can build an organizational climate receptive to whistle-blowing, where members are comfortable with expressing fears about product deficiencies or potential legal liabilities that formerly might have gone unnoticed or intentionally ignored. From this perspective, a SIM system's process is valuable for transforming an organizational climate into one that supports issue raising—an effect that is independent of its ability to identify, in a timely and efficient manner, the "correct" strategic issues or to generate the "correct" issue responses.

Symbolic Functions

Focus on Outputs. The symbolic function of SIM systems emphasizes its critical role in producing interpretations and symbols that preserve the image of decision makers' organizational control. From this view, the most important outputs of SIM systems are the labels given to strategic issues, not the actions taken to resolve them (Dutton et al., 1983). According to Weick and Daft (1983), interpretive systems help overcome the limits on understanding that result from the bounded rationality of individuals and promote variety in interpretations by preserving alternative views of the world.

In the Port Authority example cited above, success of the SIM system's process was evidenced

by its role in facilitating communication and a general awareness of the importance of issue raising. Consistent with its symbolic function and focusing on outputs, SIM helped to encourage causal analysis of the issues and their relationship to one another, as well as explicit consideration of the different consequences implied by considering issues at different levels of abstraction. These multiple interpretations of the issue helped convince the participants of their heightened understanding of the issue—an effect that was independent of whether or not any single issue was more effectively resolved.

When applied to SIM systems as examples of interpretation systems, these criteria imply that SIM systems that store more information and preserve dissensus about issues and relevant courses of action are more effective ones. Weick and Daft (1983) suggested that a more effective SIM system is one in which: (a) the knowledge about issues is very detailed; (b) strategic issues are analyzed at multiple levels of abstraction; (c) issue understandings are built on dense causal linkages; and (d) dissensus about the meaning and significance of issues is rewarded rather than punished.

Focus on Process. From this vantage point, the critical activity of the SIM system is the legitimacy the process bestows upon organizational decisions (Feldman & March, 1981). SIM systems help to resolve the dilemma of accountability that faces decision makers by furnishing routines and documentation that allay fears about the legitimacy of organizational action. Thus, the implementation of a SIM system may reflect decision makers' desire to give off the "right" symbols to external observers, as well as presenting symbolic messages to insiders, especially those representing powerful interests or sectional claims (Ranson et al., 1980; Pfeffer, 1981).

This function of SIM systems became very clear to the authors as they interviewed participants in SIM systems in a variety of organizations. Without fail, participants would cite a vivid success story where detection and action on an issue through the SIM system's process saved the firm substantial costs or permitted them to capitalize

on a newly emerging opportunity. Such stories were effective transmitters of the value the participants and their organization placed on being "in control."

SIM systems, thus, may serve as rituals for preserving the illusion of effectiveness and control in an organization to important internal and external constituencies. The simple presence of a formal SIM system may convey a sense of organizational potency or potential mastery over its environment. Thus, larger and more formalized SIM systems' units may be more successful than smaller, less formalized ones, not because their processes and outputs contribute to more effective issue identification and resolution, but because of the *image* of responsiveness and control this type of SIM system creates.

Forms, Functions, and Contexts of SIM Systems

The typologies of forms and functions of SIM systems provide a basis for describing how these processes and structures vary across organizations. For example, why has the Port Authority of New York and New Jersey adopted a Collector form of SIM while ALCOA Corporation implemented an Intervener form? Do these forms fulfill an instrumental function in some organizations, and symbolic role in others?

To answer these questions, one must first recognize that organizations must deal with two major problems in their efforts to adapt: reducing the equivocality of information and satisfying needs for accountability. Different organizational contexts impose different demands on organizations in terms of the level and type of equivocality and accountability problems. These problems, in turn, create pressures that can be resolved by implementing different forms of SIM systems that serve different functions. The major proposition developed by this logic is that an organization's context affects pressures for accountability and information richness demands that determine the form and function of SIM systems. Specific propositions and the theoretical logic that underpins them are elaborated below.

Equivocality, Information Richness, and the Form of SIM Systems

Organizational decision makers are bombarded by a vast array of emerging developments and trends that may or may not have implications for an organization's ability to survive and prosper (Dutton et al., 1983). Information about these issues is equivocal, that is it is subject to various conflicting interpretations. The variety of interpretations of the 1973 oil crisis by decision makers in the automotive industry is one example of the equivocality of external environmental events (Dutton & Duncan, in press).

As the equivocality of information increases in an organization, the demands for using information media that preserve information richness increase (Daft & Lengel, 1984). Information richness is defined as the potential information-carrying capacity of a particular communication medium (Daft & Lengel, 1984, p. 196). Information media such as face-to-face communication transmit richer information than more formal media such as computer output or formal documents (Daft & Lengel, 1984). Also, the level of information richness is determined by the complexity of organizational phenomena. Where organizations face complex problems and tasks are unanalyzable, richer media are needed to process information (Daft & Lengel, 1984).

When applied to SIM systems, this logic suggests that as information equivocality increases in an organization, demands for information richness also increase. As demands for information richness increase, the form of the SIM system is expected to become more active. More active SIM systems embody a range of activities that include the use of face-to-face communication to try to alter the underlying forces behind issues. Thus, financial service organizations involved in active lobbying efforts to affect the direction and speed of deregulation illustrate active forms of SIM systems, devised to deal with higher demands for information richness than are present in other environmental contexts.

What organizational contexts create greater information equivocality problems and greater

demands for information richness? Environmental conditions such as greater environmental uncertainty, and organizational structures that embody greater levels of differentiation (Lawrence & Lorsch, 1967) confront decision makers with greater information equivocality. Thus, it is proposed that

- P1 *In environments with greater uncertainty and in organizations with greater internal differentiation, more active forms of SIM systems will evolve*

Pressures for Accountability and the Function of SIM Systems

Pressures for accountability are more severe in certain organizational contexts than in others. For example, organizations in the chemical or airline industries have been intensely scrutinized by internal and external constituencies because of recent large-scale disasters. The loss of life in these disasters has put pressure on decision makers to justify and legitimate previous and future decisions. When pressures for accountability are intense, individuals engage in more intensive information search and vigilant information processing (Tetlock, 1985). Further, where accountability pressures are great, it is expected that the symbolic use of language and other devices to legitimate and rationalize current and future courses of action will be greater (Edelman, 1964; Pfeffer, 1981).

Pressures for accountability translate into more active SIM forms, where there is greater and more extensive information collection and analysis. More pressure for accountability also makes the symbolic roles of the SIM system more prominent. In these contexts, because a SIM system exists, is large, and is formalized may symbolize that the organization is responsive to its environment.

A number of conditions increase pressures for accountability and enhance the probability that a SIM system will function symbolically as opposed to instrumentally. When an organization produces information-loaded outputs (e.g., education), undertakes substantial risk in carrying out its mission (e.g., chemical producers, nuclear

power enterprises), has long-term relationships with its employees or clients, or exists for political purposes, then pressures for accountability are more intense (Hannan & Freeman, 1984, p. 153) and it is likely that the symbolic functions of SIM systems will predominate. In addition, as Edelman (1964) has argued, the symbolic use of language, or in this case SIM systems, is more likely to flourish when problems are poorly defined or understood. Thus, some of the same contexts that create demand for the information richness, as described above, foster the symbolic use of SIM systems. Based on this logic, it is proposed that.

- P2A. *The greater the environmental uncertainty, the more active the form and the more symbolic the function of the SIM system*
- P2B. *The greater the pressures for accountability, the more active the form and more symbolic the function of the SIM system*

Discussion and Implications

Increasingly, formal SIM systems are being implemented in organizations today (Chase, 1984). While the seeds for current SIM approaches were planted in the early 1960s ("Issue Management," 1981), these systems were legitimated and publicized through the emergence of a strong proponent for SIM (Ehling & Hesse, 1982). Howard Chase gave the function its name in 1975 (McNamee, 1983), published articles in prominent journals in 1977 (e.g., "Public Issue Management: A New Science"), and was instrumental in forming a professional association, the Issues Management Association, in 1982, which has attracted over 400 members by 1986. Further recognition of the importance of SIM systems are shifts in the structural location of SIM units, exemplified by movement from "small staffs of low-level public affairs and public relations departments to board-level locations" ("Issues Management," 1981). This trend toward greater power and legitimacy is consistent with the heightened awareness and perceived legitimacy of both environmental scanning units (Diftenbach, 1982; Stubbart, 1982) and public affairs units (Post, Murray, Dickie, & Mahon, 1982).

This paper has provided a rationale for the growing popularity of formal SIM systems, judged in terms of the extensiveness of their use and internal power. SIM systems house a set of processes and routines that help to deal with two fundamental organizational problems: information equivocality and accountability pressures. Solving both of these problems helps to assure organizational adaptation and survival.

However, the paper also suggests that these problems do not confront all organizations equally. Rather, different environmental contexts (e.g., uncertainty) and structural configurations (e.g., differentiation) pose different levels of equivocality and accountability pressures. The form and functions of SIM systems are expected to vary across organizations in accord with these different pressures. Propositions were developed to encourage empirical research on this important question.

The description of the range of activities embedded in different forms of SIM suggests that these systems have the potential to play critical roles in an organization's problem (or issue) sensing, problem (or issue) formulation, and issue response activities. Thus, SIM systems represent a set of structures and processes that organizations adopt to manage critical activities. By studying the forms and functions of SIM systems, researchers in organization theory and strategic management can gain a better understanding of the processes of sensing (Kiesler & Sproull, 1982), formulating (Lyles & Mitroff, 1980), and interpreting (Daft & Weick, 1984) issues and their relationship to organizational adaptation and stability.

At a practical level, the discussion of the different forms or functions of SIM systems expands users' understanding of the range of activities SIM systems can incorporate, and the spectrum of roles such systems can serve. Current treatments have depicted the forms of the SIM system in a restricted way, focusing on its instrumental

function and on, what the present authors term, an Antennae design. From a practitioner's perspective, this paper encourages consideration of the full range of activities that SIM systems can incorporate and urges designers of formal SIM systems to consider the constraints imposed on design options by the pressures in its particular organizational context.

Notably absent from the content of this analysis are prescriptions for how SIM systems should be designed. Given the wide range of potential functions of SIM systems, any prescriptions should be tailored to the function (symbolic or instrumental) and aspect (processes or outputs) of particular interest to the designer of SIM systems. For example, whether a SIM system should be designed to monitor internal or external issues, or to include active or passive roles depends upon whether an organization's effectiveness is more closely tied to its instrumental or symbolic performance.

The difficulty in making universal prescriptions about appropriate SIM system design was revealed in a recent study of the environmental scanning practices of "leading-edge" firms (Engledow & Lenz, 1985). This study revealed that: (a) organizations experiment with their different forms of environmental scanning activities; and (b) forms that evolve serve a variety of purposes. Results from this study as well as more general discussions of issues management (Zentner, 1984) call for greater development of the theoretical rationale for what SIM systems' forms and functions are likely to evolve, as a necessary precursor to prescriptions about how SIM systems should be designed.

The understanding of SIM systems is at a beginning point. Scholars and managers operate from a limited base of systematic knowledge; they have more questions than answers. However, the multiple and critical functions served by these systems provide a compelling rationale for research that fills this empirical void.

References

- Ansoff, I (1980) Strategic issue management *Strategic Management Journal*, 1, 131-148
- Arcelus, F , & Schaeffer, N V (1982) Social demands as strategic issues Some conceptual problems. *Strategic Management Journal*, 3, 347-357
- Arrington, C B , & Sawaya, R N (1984) Managing public affairs Issue management in an uncertain environment *California Management Review*, 26(4), 148-160
- Brown, J K (1981) *Guidelines for managing corporate issues programs* New York The Conference Board.
- Camillus J C., & Datta, D. K. (1984, August) *Designing sensitive systems Integrating strategic planning and issues management* Paper presented at the Academy of Management Meeting, Boston
- Chaffee, E. E. (1985) Three models of strategy. *Academy of Management Review*, 10, 89-99
- Chakravarthy, B S (1982) Adaptation A promising metaphor for strategic management *Academy of Management Review*, 7, 35-44.
- Chase, W H (1984) *Issue management Origins of the future* Stamford, Connecticut IAP
- Child, J (1982) Organizational structure, environment and performance The role of strategic choice *Sociology*, 16, 1-22
- Chrntensen, C R , Andrews, K R , Bower, J L , Hamermesh, R G , & Porter, M E (1982) *Business policy Test and cases*. Homewood, IL Irwin.
- Daft, R L , & Lengel, R H (1984) Information richness A new approach to managerial behavior and organizational design In B M Staw and L Cummings (Eds), *Research in organizational behavior* (Vol 6, pp 191-234) Greenwich CT JAI Press
- Daft, R. L , & Weick, K (1984) Toward a model of organizations as interpretation systems. *Academy of Management Review*, 9, 284-296
- Diffenbach, J (1982) Influence diagrams for complex strategic issues *Strategic Management Journal*, 3, 133-146.
- Duncan, R B , & Weiss, A (1979) Organizational learning. Implications for organizational design In B Staw (Ed), *Research in organizational behavior* (Vol 1, pp 75-124) Greenwich, CT. JAI Press
- Dutton, J E (1987) Perspectives on strategic issue processing Insights from a case study In R Lamb & P Shrivastava (Eds), *Advances in strategic management* (Vol 5) Greenwich, CT JAI Press
- Dutton, J. E , & Duncan, R. B (in press) Strategic issue diagnosis and the creation of momentum for change. *Strategic Management Journal*
- Dutton, J E , Fahey, L , & Narayanan, V K. (1983) Toward understanding strategic issue diagnosis *Strategic Management Journal*, 4, 307-323
- Dutton, J E , & Jackson, S. B (1987) Categorizing strategic issues: Links to organizational action *Academy of Management Review*, 12, 76-90
- Edelman, M (1964) *The symbolic uses of politics* Urbana, IL University of Illinois Press.
- Ehling, W P , & Hesse, M. B (1982) The use of 'issue management' in public relations *Public Relations Review*, 18-35.
- Engledow, J L , & Lenz, R. T (1985) Whatever happened to environmental analysis? *Long Range Planning* 18(2), 98-106
- Fahey, L , & King, W. R. (1977) Environmental scanning for corporate planning. *Business Horizons*, 20(4), 61-71
- Feldman, M. S , & March, J G. (1981) Information in organizations as signal and symbol. *Administrative Science Quarterly*, 26, 171-187.
- Fiol, M , & Lyles, M. (1985) Organizational learning. *Academy of Management Review*, 10, 803-813.
- Fleming, J E (1980) Linking public affairs with corporate planning *California Management Review*, 23(2), 35-43
- Foresight Task Force. (1983) *Foresight in the private sector. How can government use it?* Prepared for use on Energy and Commerce, U. S House of Representatives
- Hannan, M T , & Freeman, J. (1984) Structural inertia and organizational change. *American Sociological Review*, 49, 149-164
- Hedberg, B (1981) How organizations learn and unlearn. In P. Nystrom & W Starbuck (Eds.), *Handbook of organizational design* (Vol. 1, pp 3-28) New York: Oxford University Press
- Hickson, D J , Hinings, C R , Lee, C A., Schneck, R. E., & Pennings, J M (1971) A strategic contingencies theory of intraorganizational power *Administrative Science Quarterly*, 16, 216-222.
- Issues management Preparing for social change (1981, October 28) *Chemical Week*, pp 46-51
- Kiesler, S. S , & Sproull, L (1982) Managerial response to changing environments Perspectives on problem sensing from social cognition *Administrative Science Quarterly*, 27, 548-570

- King, W. R. (1982) Using strategic issue analysis. *Long Range Planning*, 15(4), 45-49
- Lawrence, P. R., & Lorsch, J. (1967) *Organization and environment: Managing differentiation and integration*. Boston: Harvard University Press
- Lenz, R. T., & Engledow, J. L. (1986) Environmental analysis units and strategic decision making: A field study of selected 'leading-edge' corporations. *Strategic Management Journal*, 7(1), 69-89
- Lorange, P., & Vancil, R. F. (1977) *Strategic planning systems*. Englewood Cliffs, NJ: Prentice-Hall
- Lyles, M., & Mitroff, I. (1980) Organizational problem formulation: An empirical study. *Administrative Science Quarterly*, 25, 102-119
- McNamee, M. (1983, May) Scouting the future for danger. *USA Today*, p. 16
- Meyer, A. D. (1984) Mingling decision-making metaphors. *Academy of Management Review*, 9, 6-17
- Molitor, G. T. (1980) Getting out in front of impending issues. In F. Feather (Ed.), *Through the eighties: Thinking globally*. Washington, DC: World Future Society
- Moore, B. H. (1979) Planning for emerging issues. *Public Relations Journal*, 35(11), 42-46.
- Normann, R. (1985) Developing capabilities for organizational learning. In J. Pennings & Associates (Eds.), *Organizational strategy and change* (pp. 217-248). San Francisco: Jossey-Bass
- Ottensmeyer, E. (1982) *Strategic organizational adaptation and the regulatory environment*. Unpublished doctoral dissertation. Bloomington, IN: Indiana University
- Pfeffer, J. (1981) Management as symbolic action: The creation and maintenance of organizational paradigms. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 3, pp. 1-52). Greenwich, CT: JAI Press
- Pfeffer, J., & Salancik, G. (1978) *The external control of organizations: A resource dependence perspective*. New York: Harper & Row
- Post, J. E., Murray, E., Dickie, R., & Mahon, J. (1982) The public affairs function in American corporations: Development and relations with corporate planning. *Long Range Planning*, 15(2), 12-21.
- Ranson, S., Hinings, B., & Greenwood, R. (1980) The structuring of organizational structures. *Administrative Science Quarterly*, 25, 1-17
- Rhynes, L. C. (1985) The relationship of information usage characteristics to planning system sophistication: An empirical examination. *Strategic Management Journal*, 6, 319-337.
- Smircich, L., & Morgan, G. (1982) Leadership: The management of meaning. *Journal of Applied Behavioral Science*, 18, 257-273
- Stubbart, C. (1982) Are environmental scanning units effective? *Long Range Planning*, 15(3), 139-145.
- Tetlock, P. E. (1985) Accountability: The neglected social context of judgement and choice. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 7, pp. 297-332). Greenwich, CT: JAI Press
- Thompson, J. D. (1967) *Organizations in action*. New York: McGraw-Hill.
- Weick, K. E. (1979) *The social psychology of organizing*. Reading, MA: Addison-Wesley
- Weick, K. E., & Daft, R. L. (1983) The effectiveness of interpretation systems. In K. S. Cameron & D. A. Whetten (Eds.), *Organizational effectiveness: A comparison of multiple models* (pp. 71-93). New York: Academic Press
- Zentner, R. (1984) Issues and strategic management. In R. B. Lamb (Ed.), *Competitive strategic management* (pp. 634-648). Englewood Cliffs, NJ: Prentice-Hall

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