

THE PROCESSING OF CRISIS AND NON-CRISIS STRATEGIC ISSUES

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ABSTRACT

This paper asserts that organizations process different types of strategic issues in systematically different ways, proposing that organizational decision-makers expend greater resources, centralize authority and generate a greater volume of causal explanations during the processing of crisis versus non-crisis strategic issues. Data from comparative tracings of several crisis and non-crisis issues in a single organization lend preliminary support to the propositions. By conceptualizing the process of issue resolution both from an instrumental and symbolic perspective, this type of response to crisis issues can be interpreted. The theoretical and practical implications of the findings are discussed.

INTRODUCTION

Decision-makers in organizations face a wide range of strategic issues (Ansoff, 1980; King, 1982). These issues represent developments or trends with the potential to impact the organization's strategy and its effectiveness. By their very nature, strategic issues are ambiguous and ill defined, complicating the process of issue diagnosis and making more difficult the task of resolving the issues (Dutton, Fahey and Narayanan, 1983).

The process of strategic issue resolution becomes even more difficult when issues represent crises, i.e. an issue is critically important, and there are additional elements of time pressure and uncertainty associated with it. The resolution of high crisis issues may be the most difficult to accomplish, yet decision-makers as individuals and the organization as a whole stand to gain the greatest amount from resolving these types of issue. Diverting a threat or capitalizing on a major opportunity can produce significant economic gains in an organization, as well as confer heightened status and power to top-level decision-makers. However, despite the existence of high payoffs, case studies (e.g. Holsti, 1971; Starbuck, Greve and Hedberg, 1978) and larger sample

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comparative studies (e.g. Brouillette and Quarantelli, 1971) suggest that organizations experience information processing and control-related effects in the wake of crisis issues that militate against effective adaptation (Staw, Sandelands and Dutton, 1981; Hall, 1984).

The purpose of this paper is to describe how crisis strategic issues are processed differently from non-crisis issues in organizations. In particular, it will be argued that, when confronting strategic issues representing crises, decision-makers increase the level of resources expended on an issue, enhance control over issue resolution and increase the level of issue-related explanation. These effects are important as they help to explain the extent and type of responses organizations elicit in the wake of different types of strategic issues. Consistent with a decision or issue-based view, it is the patterning of strategic issue responses over time that underlies the strategy formulation process (Mintzberg, 1978; Frederickson and Mitchell, 1984).

This article presents the results of an intensive study of five strategic issues processed by a single organization over a 5-year time period. The results of this exploratory study underline the importance of the crisis *v.* non-crisis distinction, as well as provide support for a contingency approach to strategic decision processes. Consistent with what other researchers have argued, the study suggests that organizations have repertoires of processing modes that are employed when faced with different types of strategic issues (Alexander, 1983; Astley, Axelsson, Butler, Hickson and Wilson, 1982; Butler, Astley, Hickson, Mallory and Wilson, 1979; Fahey, 1981; Mintzberg, Raisinghini, and Theoret, 1976). The discussion of the research findings is followed by the consideration of theoretical and practical implications.

Defining Crisis Issues

The concept of 'crisis' associated with a stimulus or decision has been defined in a variety of ways (Milburn, Schuler and Watman, 1983). In more cases than not, its meaning has not been specified (e.g. Smart and Vertinsky, 1977). Instead researchers assume that a popular understanding of the construct is sufficient (Billings, Milburn and Schaalman, 1980). Crisis is frequently used interchangeably with the notion of threat or adversity. Crisis implies a perception that an individual or set of individuals faces a potentially negative outcome unless some type of corrective action is taken.

Crisis can be seen as a composite perception based on several different dimensions of an issue. In particular, the perceived importance, immediacy, and uncertainty of an issue all contribute to how threatening an issue is perceived to be. The dimensions of importance, immediacy and uncertainty, and their relationship to a perceived crisis, have both theoretical and empirical support in the literature. For example, in a study designed to test a model of crisis perception, researchers posited and found that the perceived value of possible loss, perceived time pressure and perceived probability of loss were all important elements contributing to the extent of perceived crisis (Billings

et al., 1980). The role of these dimensions in mediating perceptions of an issue as a crisis find support in the areas of international crisis, public disaster, human stress, and environmental adversity (Billings et al., 1980; Brouillette and Quarantelli, 1971; Hermann, 1963; Holsti, 1971; Janis and Mann, 1977; Khandwalla, 1972; Lippett and Schmidt, 1967; Lentner, 1972; Milburn et al., 1983; Paige, 1972; Robinson, 1972, Turner, 1976).

The Impact of Crisis

Strategic issues which are perceived as crises are hypothesized to be dealt with differently to those which are not. Research on the impact of threat and crisis (e.g. Withey, 1962; Smart and Vertinsky, 1977; Turner, 1976; Billings et al., 1980; Staw et al., 1981) establishes the basis for several propositions.

(1) *Crisis and resources*. The existence of limited resources in terms of time and people (March and Olsen, 1976) makes it imperative that organizational decision-makers process information selectively and prudently. At a strategic level, decision issues must be sorted into deferred or action categories (Nutt, 1979), active or inactive piles (Cyert and March, 1963) or active, monitored or passive groups (Arrow, 1974).

Strategic issues represent agenda items which are prioritized in various ways (Dutton, 1986). Limits on decision-makers' time and attention guarantee that all issues will not be attended to equally. Threatening issues act as catalysts to action by raising an issue's priority. Rationally, crisis issues constitute high-priority items because of the high organizational cost of not resolving them. From a political and symbolic perspective, resolving crisis issues legitimates the effectiveness of the dominant coalition. Each of these incentives to taking action with respect to crises will be considered separately.

The costs to an organization facing crisis are reflected in many ways, including lost financial and personnel resources, damaged internal and external relations, and drained emotional energies. While diverting threats consumes emotional resources, merely being aware of an existing crisis depletes the reserve of emotional energy available in the organization. Costs intensify as an issue becomes more important, immediate and uncertain, and as these costs rise, incentives to take action to divert, smother, or solve the crisis increase.

Crises also induce action because of their political implications. When an organization faces a crisis, the persons charged with responsibility for organizational action - i.e. the dominant coalition (Thompson, 1967) - face the possibility of a legitimation crisis (Habermas, 1975). The onset of a crisis, even if not perceived as current management's responsibility, raises questions about its effectiveness and has been offered as one explanation for administrative turnover during adversity (Gamson and Scotch, 1964). Crises threaten the base of organizational power and control, questioning how well dominant elites have achieved and explained results (Hage, 1980; Pfeffer, 1981).

The spur to take action in the wake of crisis is increased by the potential symbolic value of resolving a crisis effectively. Management can earn substantial

idiosyncrasy credits by diverting a crisis. Witness the almost heroic status of the President of Chrysler Motors who navigated the organization during its most recent financial crisis. In addition, successful action in the wake of crisis preserves and enhances the view of the organization as effective and autonomous in its environment. As Staw (1980) has argued, organizations operate with pressures for effectiveness and rationality similar to those facing individuals. Accordingly, action to divert or solve a crisis can effectively alleviate some of these pressures. Thus one would expect more resources to be expended in action to alleviate a crisis than a non-crisis issue.

Based on these arguments the following relationship is proposed:

P₁: The more an issue is perceived to be a crisis, the greater the resources devoted to resolve the issue.

The comparative tracing of the processing of crisis and non-crisis strategic issues in a large, decentralized organization, hereafter called Capital Corporation, provides an opportunity to explore the usefulness of this proposition in distinguishing between the processing of the two issue types. Capital Corporation instituted a strategic issue management system in 1976 to track issues deemed significant for the organization's success. At the time the study was initiated in 1981, this process had identified a population of 38 strategic issues. From these 38, a sample of 12 issues was selected to study the general process of strategic issue resolution. The sample of 12 resulted from the purposive selection of issues thought to vary along the crisis dimensions while, at the same time, having archival records that were sufficiently complete to construct an in-depth issue history. A single statement description of the 12 issues is provided in table I.

Twelve issue histories that included tracings of the changes in an issue's framing, participants, information, etc. as they took place over a 5-year time period were constructed using archival record data and interviews with key individuals involved in the processing of each strategic issue. The archival records provided a rich 'real-time' database for tracing the unfolding of the strategic issues over time, while providing a rare opportunity to collect unobtrusive measures of important process characteristics. At the same time, interviews with key informants for the issues provided elaboration and retrospective data on the process.

Five strategic issues were selected from the set of 12 issues histories, to contrast the processing of crisis and non-crisis issues. The identification of crisis and non-crisis issues was based on judgements of issue informants i.e. individuals identified as significantly involved in each issue. Each informant was asked to rate the issue (at the time of its initiation) in terms of its immediacy, uncertainty and importance. The scores on these ratings (each crisis dimension was measured on a 7-point scale) were multiplied to create a composite crisis score for each strategic issue. The use of a multiplicative score was based on the

Table I. Description of the twelve strategic issues and their crisis scores

	<i>Issue</i>	<i>Crisis^a score</i>	<i>Description</i>
Non-crisis issues	A	26.2	Questions the investment necessary to build a commercial plant for the Recreation Equipment Division.
	B	12.0	Should Capital Corporation organize to capitalize on the opportunities available from combining products from various divisions into a Hospital Services operation?
	C	9.2	What strategy should be pursued in specialty products based on its position in the petrochemicals market?
Crisis issues	D	162.0	How can returns be improved in Capital Steel to meet Capital Corporation's goals considering the high investment requirements?
	E	151.2	What is the strategy for the industrial portion of Terra Products?
Intermediate issues	F	81.1	What should be done to take full advantage of the Pearlton Joint opportunity?
	G	^b	Should Capital Corporation's Technical Products be sold or be joint ventured with a firm in the technical field?
	H	61.1	What should Capital Corporation's policy be with respect to exploring bulk processing?
	I	60.2	How much investment does Capital Corporation want to make in computer services and where should the emphasis be?
	J	86.6	Examining the switching of the strategy in a division from growth to profitability.
	K	77.4	What should Capital Corporation's reaction be to the specialized coating opportunity?
	L	90.0	In Petrochemicals Group, what strategy should be followed in the face of falling margins and greatly increased capital costs?

Notes: ^a A high score indicates the issue is perceived to be more important, uncertain and immediate, i.e. more like a crisis. Score is based on the multiplication of the 3 ratings on each of the crisis dimensions. The possible range for the crisis score was from 1 (1x1x1) to 343 (7x7x7).

^b No score was computed for this issue as the only informant did not feel knowledgeable enough to make this judgement.

theoretical assumption that the various dimensions of crisis magnify one another in creating a threat to an organization. Some support for this argument was evidenced in the spearman rank correlations between the issue dimensions. With the exception of immediacy and uncertainty ($r = 0.26$), all dimensions were positively related to one another above the 0.05 level of significance.

The scoring procedure clearly identified two crisis and three non-crisis issues, evidenced by differences in the average crisis scores for the two issue types as presented in table I (\bar{X} crisis scores for issues = 156.6, for non-crisis issues \bar{X} = 15.8). The seven issue histories with intermediate scores were dropped from further analysis, while five issue histories form the key contrasts used for the analysis in the remainder of this article.

Across the five issues used for comparison purposes, 14 different informants rated the issues on the three dimensions. Because informants judged only a single issue, possible measures of judging reliability between raters were limited. However, by averaging the level of agreement across informants within any one issue, some indication of inter-rater reliability could be obtained. Because the research focused on identifying and contrasting the processing of high and low crisis issues, the 7-point scales used to measure the crisis dimension were collapsed into three categories (1, 2, 3 = 1; 4 = 2; 5, 6, 7 = 3). The level of agreement was computed across all possible pairs of informants for each issue dimension within each issue. This procedure revealed an average of 62 per cent agreement on the issue dimensions across the 14 informants.

The five strategic issues that were selected for in-depth study are described more extensively in table II. In general, Issues A, B, and C (the non-crisis issues) represented narrowly defined issues and issues that were triggered by a clearly identifiable stimulus, e.g. a drop in profits or an acquisition offer. In contrast, Issues C and D (crisis issues) were generally more ill-defined and ambiguous, and the 'issue triggers' were more difficult to pinpoint. While all of the issues were 'strategic' in the sense of being important for Capital's future, the difference in crisis scores suggests that decision-makers had no trouble sorting the issues along some type of crisis dimension. The question remains, did this sorting result in different forms of strategic issue processing?

By comparing the level of resources expended for the two types of issue, one can examine evidence of differences to support the first proposition. The sample size of five can shed only preliminary light on the strength of this relationship. It will be future researchers' task to subject the proposition to a large-scale empirical validation.

Although there were no data available for comparing the dollar value of resources expended on each issue, there was a tendency for crisis issues to consume more time and energy in terms of the expenditure of human resources for their resolution. Evidence of a greater resource commitment was the average number of task group reports generated per year during the processing of crisis issues (\bar{X} = 0.57 for crisis and \bar{X} = 0.44 for non-crisis issues). The task group reports made by individuals charged with responsibility for an issue were tremendous consumers of participants' time and energy. The reports were presented in both written and oral form to the top executive committee of the company (the PEC). Thus the production and execution of the task group reports consumed critical scarce resources for the organization, and distinguished between the processing of crisis and non-crisis issues.

Table II. Crisis and non-crisis issue descriptions

<i>Issue ID</i>	<i>No. of informants</i>	
Non-Crisis Issues:		
A	2	This issue concerned the justification and details for the building of a commercial plant within the Recreational Equipment Group of Capital Corporation. Two key questions nested within the issue were: what to do about building capacity for the markets, and where to locate a new plant.
B	2	Issue involved the development of a new venture formed from the combination of services of several groups in Capital. Major questions involved in the issue were: what to do about Hospital Building and Services, what areas to concentrate on, what type of management to employ, how to distribute profits to participating divisions, what type of organizational arrangement to employ.
C	3	Concerned how to modify an SBU's strategy within the Petrochemicals Group. In particular, the issue focused on how to grow Specialty Products i.e. whether or not to diversify through internal development or acquisition; and how to reduce the operating costs of this group.
Crisis Issues:		
D	2	Centered on defining an acceptable strategy in Capital Steel that produced an acceptable profit return. Raised questions about the existence of this division as well as the level of commitment to the entire steel machinery manufacturing business that, despite recent attempts to diversify, had historically been the core business of Capital.
E	6	Concerned with performance of Terra Products Group relative to its investment demands. The issue had two phases, Phase I focused on critically evaluating Terra's entire strategy. Phase II focused on how to improve the performance of Terra Products, primarily examining options related to marketing and organizational design.

The issues also varied in terms of the actual number of individuals extensively involved in their resolution. Although the crisis issues and non-crisis issues did not significantly differ in the number of persons involved in the issue task groups, the task groups for the crisis issues involved individuals who were higher in the corporate hierarchy and consequently were more 'expensive' in terms of the costliness of their time and attention. Of course the involvement of higher level individuals in the processing of crisis issues may also have reflected the desire for top level management to keep a tighter control over crisis issues – a possibility which is explored below.

(2) *Crisis and the constriction in control.* In the wake of crisis, the power to act and the ability to act quickly are critical requirements for diverting, minimizing or resolving a threat. The finding that organizations undergo a type of mechanistic shift (Burns and Stalker, 1961) in the wake of a crisis probably reflects this relationship. The mechanistic shift is seen in a restriction in the participation in decision-making, an increase in formalization and a greater standardization of procedures.

The increase in centralization is the best documented effect of threat on organizational structure. Research done on the effects of foreign policy crisis (e.g. Holsti, 1971) and on adversity's impact on entire organizations (e.g. Khandwalla, 1972; Rubin, 1977), demonstrates a decrease in the amount of participation in decision-making. The constriction in control reflected by the reduction in participation is undoubtedly the result both of top level decision-makers taking control, and lower level members in an organization voluntarily giving up their autonomy (Staw et al., 1981). On the one hand, top decision-makers want to enhance their ability to act quickly and decisively in the wake of crisis. On the other hand, lower level members want to disassociate themselves with any responsibility or blame in case resolution attempts fail. Thus the simultaneous taking of control at the top and giving up of control at the bottom of the organization produces centralization of decision-making during crisis. These arguments form the logic for the following proposition;

P₂: The more an issue is perceived to be a crisis, the greater the centralization of authority by top level decision-makers in tasks related to the issue.

Capital Corporation's records which were generated during the processing of strategic issues provided an opportunity to examine Proposition 2 using unobtrusive indicators of issue processing centralization. The processing of strategic issues was monitored in varying degrees by the top executive committee (the PEC). More centralized issue processing was evidenced by more extensive monitoring of task group activities by the PEC. Monitoring limited the discretion of the task group, constricting their control over how to resolve the issue.

The processing of strategic issues in Capital Corporation generated five different types of *corporate*-initiated communications: (1) the formal description of an issue; (2) intra-corporate memos; (3) required task groups reports; (4) the PEC's response to the task group presentations; and (5) corporate-division memos. Corporate-initiated communication was interpreted as monitoring attempts which limited the discretion of the task group. Consistent with Proposition 2, during the course of processing of crisis, as opposed to non-crisis strategic issues, one expects to see more corporate-initiated acts.

A comparison was made of the average number of corporate-initiated communications, per month, during the lives of crisis and non-crisis issues. Despite the formal strategic issue system in place in Capital which worked to standardize communication patterns, the issues were monitored differently ($\bar{X} = 0.40$ for crisis and $\bar{X} = 0.27$ for non-crisis issues).

On average, crisis issues were monitored more frequently suggesting that, within Capital, top-level management constricted their control during the processing of crisis as opposed to non-crisis issues. This relationship gained further support from the interview data where, in an extreme case, division management was not even aware of the existence of the issue until two years

after it had been formally identified by the PEC. Corporate level control over Issue D was so tight that it eliminated the discretion of lower level participants by keeping them unaware of its status as an issue. Interviews with PEC members revealed that there was considerable fear about the potential reaction of division level management to its recognition as an issue. The mere recognition of Issue D implied questions about the level of commitment to one of Capital's major businesses, demanding explanations and answering questions that the PEC felt ill-equipped to handle.

(3) *Crisis and explanations*. By definition, crises potentially have a major impact upon the organization. As discussed earlier, crisis issues call into question the legitimacy of the dominant coalition. This effect, as well as the uncertainty surrounding a crisis situation, creates pressures for explanation or accounts of why the crisis has occurred, and the actions necessary to resolve it. The pressures for explanation are felt by those associated with a crisis issue even if they are not responsible for its onset. Explanation is necessary to assuage fears, vent anxieties and help understand the meaning and effects of the issue. As a result one would expect that more resources would be spent in the explanation of a crisis than a non-crisis issue: why it happened, who was involved, what will happen, etc.

Organizations strive to be rational (Thompson, 1967). The forces to be rational become more pronounced when there appears to be a loss of organizational control. Thus, pressures for explanation are strongest when there is a discrepancy between actions and expectations of rationality (Staw, 1980). This type of discrepancy is likely to exist when an organization faces a crisis-like issue. For those in power, explanation is a way of preserving a rational appearance in the wake of evidence to the contrary. Explanations act as a form of aligning actions which serve to 'restore or assure meaningful action in the face of problematic situations' (Stokes and Hewitt, 1976, p. 838). For those not in power, but affected by an issue, explanation is a way of maintaining credibility and justifying resources when credibility and resources are scarce commodities.

Crisis-like issues are also confusing to those who face them. The absence of information surrounding the issue prompts a search to understanding it. Attempts at understanding produce various forms of explanations or accounts (Scott and Lyman, 1968). These accounts may take the form of causal explanations of what brought about the crisis, or they may be instrumental explanations of how to resolve it. In most cases there is no clear right or wrong answer to what caused a crisis issue or how to resolve it. As a result, crisis issues are laden with multiple explanations or attempts at interpretation, each competing to become the accepted account. Using this argument, the occurrence of much explanation during crisis issues is the product of explanatory battles fought between various individuals or parties who have a stake in the issue. On the basis of this logic the following proposition is made:

P₃: The more an issue is perceived to be a crisis, the greater the incidence of argumentation or explanation associated with it.

At the same time, the forum for explanation is restricted in the wake of crisis. As argued previously, the zone of discretion is limited in crisis situations, as participation is limited to higher level managers. Restricted decision-making participation means access is limited to arenas for explanation. The time restrictions present during the processing of crisis issues further constrict the opportunities for explanation. During the heat of a crisis, these time pressures may further restrict attempts at explanation. This rationale supports the argument that crisis and explanation will be negatively related. The data generated in this exploratory study provide a basis for examining these competing hypotheses.

The actual data on each issue provided an opportunity to compare explanation for the two types of issue. One indicator of explanation is the frequency of occurrence of causal statements generated during a task group presentation. Causal statements represent attempts to buttress the line of reasoning employed in the communication surrounding a strategic issue. On this basis, the average number of causal statements per line of a task report was used as another approximator for the level of explanation associated with a strategic issue.

Causal statements were coded in a way similar to the technique used by Axelrod and his colleagues for the extraction of cognitive maps of political elites (1976). However, instead of combining the causal statements into an entire cognitive map of an issue, single and explicit cause-effect relationships were extracted from task reports presented for each. Each causal statement was coded in the form of a cause concept/linkage/effect concept (Axelrod, 1976), preserving the wording of the original text where possible. In counting the number of causal statements for an issue, each cause-effect link was treated uniquely.

An approximation of the amount of causal explanation was based on the average number of unique cause-effect statements generated per page of a task group report. For each issue, the total number of causal relationships was computed and then divided by the number of pages contained in a task report. The average number of causal statements per page of a task report was then used to compare the two issue types. Table III compares explanation volume across the two issue types, as well as contrasting the other process dimensions discussed previously.

As the contrast suggests, some support for the proposed relationship between the amount of explanation and the crisis character of a strategic issue is evident. The average number of causal statements contained per page of a task group tends to be greater for crisis strategic issues ($\bar{X} = 4.8$ for crisis and 3.7 for non-crisis issues). As with the previous contrasts, the differences between crisis and non-crisis issue processing are in the expected direction, although with such a small sample one must be cautious in drawing conclusions. However, other evidence during the processing of the issues adds confidence in this finding.

Table III. Summary of processing contrasts for crisis and non-crisis issues

	<i>Crisis issues (D and E)</i>	<i>Non-crisis issues (A, B, C)</i>
<i>Level of resource expenditure</i>		
Average number of group task presentations per year	0.57	0.44
<i>Constriction in control</i>		
Average number of corporate-initiated acts per year	0.40	0.27
<i>Amount of explanation</i>		
Average number of causal statements per page of task group report	4.8	3.7

The two crisis issues, while generating more causal explanation, were also marked by greater incidence of conflict. For both crisis issues there were extended exchanges between the PEC and the task force on the adequacy of the task force's handling of the issue. This conflict was not evident during the handling of the non-crisis issues.

Limitations of the Study

The intensive study of issue processing at Capital suffers all the disadvantages of a single case study (Yin, 1981). The ability to eliminate alternative explanations is obviously limited, given the *N* of 1 used for the study (Dukes, 1965). The external validity of the study is also limited given the highly formalized issue management process in place at Capital.

At the same time, the formalized issue process allowed this researcher to overcome some of the difficulties that typically plague decision-making research (Schwenk, 1982). By combining real-time data in the issue process with retrospective reconstructions from interviews, a more complete, less biased view of the process emerged. The rich descriptions and longitudinal data provided a basis for suggesting why organizations expend more resources, constrict control and generate more explanation in the wake of crisis issues.

THEORETICAL AND PRACTICAL SIGNIFICANCE OF THE STUDY

The arguments for the proposed differences between the processing of crisis and non-crisis issues, as well as the case study evidence suggest that organizations employ different means for processing different types of strategic issues. These findings provide initial support for a contingency decision-process perspective that argues that distinctly different types of issues will be processed differently by an organization (Frederickson, 1983). Further, the results suggest

that the crisis character of an issue – i.e. judgements about the combined importance, immediacy, and uncertainty of an issue – is a meaningful criterion that decision-makers respond to in sorting issues into active and less active piles (Arrow, 1974). As one of the few studies that examines the processing of multiple issues in a single organization (although Astley et al., 1982 is an exception), this study adds further support to the argument that organizations are ambidextrous with respect to issue or decision processing (Duncan, 1976).

Implications for Studies of Organizational Crises

However, more significant than its support of the contingency view on issue processing are the study's implications for understanding organizational responses to crises. One could argue that Capital Corporation elicited a very instrumental and rational response to its strategic issues by dedicating more resources to the more immediate, important and uncertain issues. At the same time, Capital clearly constricted control over the resolution of these issue types, restricting the amount of issue-relevant information that could be processed. Where a greater amount of information from the lower ranks is necessary for designing an effective resolution, this constriction could prove harmful, mitigating the positive effects of greater resource expenditure on crisis issues.

However, if one adopts a view of issue processing that emphasizes the importance of symbolic as well as instrumental action, the constriction in control and dominance of explanation during crisis issues becomes more sensible. A symbolic and interpretive view of strategy formulation highlights the fact that top management must preserve the illusion of control and meaningful action in the eyes of key internal and external constituencies (Chaffee, 1985; Pfeffer, 1981; Smircich and Morgan, 1982). Within this depiction of strategy formulation, decision or issue resolution processes represent arenas in which decision-makers can demonstrate this competence (March, 1981). Further, it is during the processing of crisis issues that top decision-makers have the greatest opportunity or suffer the greatest risk of demonstrating symbolic leadership. As a result, one might argue that it is in the face of these types of issue that top decision-makers try to maintain control and to legitimate this control through heightened explanation. From a symbolic-interpretive viewpoint on strategy, behaviour elicited during the process of issue resolution may be seen as more important than the actual issue resolution outcomes.

By imposing a symbolic-interpretive lens on the issue resolution process, the constriction in control and greater explanation present during the processing of crisis issues is rational. Significant constituencies internal and external to the organization judge the effectiveness of issue resolution and decision-makers against the backdrop of an array of issues and other decision activators. Accordingly, to evaluate the effectiveness of an issue resolution process, these constituencies consider the entire set of strategic issues or decisions that decision-makers are involved in, while also considering the instrumental and symbolic value of actions taken during the resolution of any one issue. For those who

study organizational responses to crises, these observations suggest that a mechanistic response to crisis may be perfectly rational from a top decision-maker's perspective as it is an important ingredient in preserving the image of legitimate control.

Implications for Strategic Decision-Making Processes

The study also sheds light on a number of questions that are of interest to strategic decision-making researchers. For example, in a recent review of strategic decision-making processes, Fredrickson (1983) delineates a set of six high-priority questions for strategic process researchers: (1) What are the motives for initiation of strategic decisions? (2) What is the role of goals in decision processes? (3) How does the relationship between means and ends affect the process? (4) What model best captures the strategic choice process? (5) What is the role of analytic comprehensiveness in the strategic decision process? (6) How and to what extent are strategic decision processes integrated across decisions? Although the methodology of this research is limited in terms of being based on a single, large decentralized organization, its findings provide insights into a subset of these questions.

(1) *Motives for initiation.* Within this study, the initiating triggers for crisis and non-crisis issues were different. While non-crisis issues tended to be initiated by clearly defined stimuli (e.g. a performance drop or clear market opportunity), crisis issues began with very ambiguous triggers. However, despite this ambiguity, managers formed distinct impressions of the issues that allowed them to characterize the issue in terms of its importance, immediacy and uncertainty. These findings suggest that the process by which an issue is resolved is tied to judgements of issue characteristics that may be independent from an 'issue trigger'. The finding encourages future researchers to delineate the key issue attributes to which decision-makers pay attention in forming judgements about strategic issues that, in turn, may engage different types of decision processes for their resolution.

(2) *Relationship between means and ends.* According to rational or synoptic models of decision-making, decision-makers are supposed to identify means or alternatives following the delineation of ends or goals. Within strategic issue processing, this sequencing of means and ends was not evident. In fact new links between means and ends emerged throughout an issue's resolution as possible new causes of the issues were discovered. For example, in the processing of Issue D, the perceived causes of Capital Steel's profit problems were modified over time. Initially, the major cause of the issue was seen as unfavourable governmental policies that failed to protect domestic steel operations from the threat of imports. However, midway during the life of the issue, the diagnosis changed to one of business cyclicity - where Capital's overdependence on cyclical businesses was cited as the major cause of Issue D. The different diagnoses implied that different goals were in jeopardy, and different alternatives should be considered for resolving the issue. Therefore, this study suggests that decision processes

will be marked by different sets of means–ends interpretations that are related to the fluid diagnosis of an issue's causes.

(3) *Concept of choice*. The results of this study further shed light on the characteristics of issues or choice events that engage different types of processes. When issues are perceived as crises, the process of issue resolution more closely approximates a political model (Narayanan and Fahey, 1982), with top level management exerting major efforts to retain control. At the same time, the pressures to maintain legitimacy during the processing of crisis issues means that decision-makers and participants are motivated to cloak the political elements of the process with a rational dressing. In this study, the rational cloaking was evidenced by the relatively greater amount of explanation generated during the processing of crisis as opposed to non-crisis issues.

(4) *Analytic and integrative comprehensiveness*. The research suggests that elements of the comprehensiveness of a decision process may be further affected by the characteristics of the decision or issue at hand. The possibility of analytic comprehensiveness is enhanced in the case of crisis issue processing due to decision-makers' willingness to expend greater resources on these types of issues, and the retention of control at the top. However, the time pressures that are associated with these types of issues, and the pressures for explanation of how the issue appeared and how it would be resolved, make analytical comprehensiveness more difficult to accomplish.

Finally, the study suggest the importance of considering the entire portfolio of issues or choice points that face an organization in order to understand how an organization behaves. Even within this limited set of five issues, there was a cross-fertilization of ideas and people that moved the issues in particular directions. Thus, there is a natural dependence that exists across decisions or issues that makes integrative comprehensiveness or the linking of different decisions important in order to promote consistent and unified action. At the same time, the different processes employed in the wake of different types of issues makes this type of integration more difficult.

Implications for Practice

The support that was found for a contingency view on issue processes suggests that systems employed by organizations to manage strategic issues (Brown, 1981) or to accomplish decision-making should be tailored to different types of issues. For example, managers may want to design special routines or forums for airing alternative views of an issue's causes, or the means and ends for resolution in the case of crisis issues. Further, despite the symbolic gains of centralized processing for crisis issues, managers may want to build in counter-tendencies to increase levels of information processing in the wake of crisis issues (Staw et al., 1981). At the least, the research suggests that decision processes should not be expected to be universal across decision events or across the full range of strategic issues.

Methodological Gains

On the methodological side, the study of issue processing in Capital affirms that documentary evidence can be usefully employed to understand patterns of strategy formulation (Huff, 1981). For example, the analysis of causal statements contained in the task group reports provided a means for dissecting the construction of meaning which took place during the life of an issue. Where these changes in meaning reflect alterations in strategic assumptions, a new avenue for studying emergent strategies has been discovered (Mintzberg, 1978).

In conclusion, there is preliminary evidence that strategic issues of different types are processed in different ways. Research in another organization, the use of a larger number of issues, or different approaches for measuring the process constructs might each provide new leverage for the situationalist approach. Although the differences found were modest and based on a very limited sample size, the results from this study demand a more rigorous test of the propositions by future researchers.

NOTE

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