

# Organizations

Structures, Processes,  
and Outcomes

Tenth Edition

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# Chapter 6

## Decision-Making

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### OVERVIEW

In this chapter, we consider decision-making processes—in many ways, these processes lie at the very heart of understanding organizations. We begin by describing a line of work that has emphasized a view of organizations as systems of decision-making. In this context, we consider research that has identified some of the organizational and environmental factors that shape decision-making. We focus in particular on strategic decisions, those made at the top of organizations, since these decisions usually have the most profound effects on organizations. Decision-making is not easy, nor is predicting the outcomes of decision-making efforts.

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The aspect of organizations dealt with in this chapter can be illustrated best with two cases: the tragic launch of the space shuttle *Challenger*, which exploded so dramatically in 1986, killing all on board, and the similar deadly explosion of the second space shuttle, the *Columbia*, seventeen years later. Both launches were the result of complex organizational decision-making processes that were purposefully designed to prevent such tragedies, but which were affected by three important biasing factors (Vaughan, 1996, 1999):

1. different units' struggle to obtain scarce resources in a competitive environment;

2. an organizational culture in National Aeronautics and Space Administration (NASA) that contributed to the censoring of information;
3. a regulatory environment that was insufficient for the decision-making task.

No one intended for these tragedies to occur. The launch decisions were not made by stupid or uncaring people. They were made by people like you and me, who were trying to do the best they could. To understand how these decisions were made and why, we first need to understand generally the nature of decision-making in organizations.

## ORGANIZATIONS AS SYSTEMS OF DECISIONS

The broadest and most systematic efforts to analyze how decisions get made in organizations are represented in work by Herbert Simon and his students and colleagues. This tradition is sometimes referred to as “the Carnegie School” because much of the work was done at Carnegie-Mellon University, where Simon was a long-time faculty member.

### Bounded Rationality and Organizations as Hierarchies of Decisions

Simon’s (1957) early efforts to conceptualize decision-making in organizations grew, in part, from his skepticism toward prescriptive models of decision-making processes offered by economists. He argued that such models rested on a conception of “homo economicus” (or economic man) that had little basis in reality.

Homo economicus is characterized by the following: acting only in his self-interest, possessing full information about the decision problem, knowing all the possible solutions from which he has to choose as well as the consequences of each solution, seeking to maximize utility, having the ability to rank alternatives in order of likelihood of maximizing outcomes. (Zey, 1992:11)

As Simon (1957) pointed out, in contrast to these assumptions, real individuals have a very constrained cognitive capacity—that is, a limited ability to think of the range of possible options in a decision-making situation, to accurately anticipate what the consequences of those options will be, and to know how much they’ll actually value one consequence versus another. Thus, rather than being fully rational, as economic models assumed, Simon argued that individuals were characterized by “bounded rationality.” This concept implies that individuals typically are able to consider only a limited number of options in making decisions, and often select the first one that meets some minimal criteria, that are “good enough,” rather than searching for the very best option. Simon labeled this approach to decision-making “satisficing,” in contrast to the economic notion of optimizing. His explication of this view of decision-making contributed to his winning the Nobel Prize in Economics in 1978.

Given bounded rationality, Simon argued, individuals could achieve a greater degree of rationality in decision-making in an organization than they could if they acted on their own. This argument rests on a conception of organizations as a hierarchy of means-and-ends decisions. Individuals at the top of the hierarchy make broad decisions about general courses of action to be taken; these decisions define the ends that individuals at the next level will seek to achieve by making their decisions about more specific actions to be taken, actions that will become the means to achieving higher-level ends. A brief example may make this clearer. Suppose a person decides to make a profit by manufacturing widgets and that two main units need to be created to achieve this objective: manufacturing and marketing. The person recruits two others to be the heads of these two units and charges them with making decisions about how to efficiently manufacture the widgets and market them, respectively. The head of manufacturing decides that there are three tasks that need to be taken care of for efficient manufacturing: (1) obtaining supplies, (2) carrying out production, and (3) inspecting for quality. Thus, she gives three individuals under her command responsibility for making decisions about how to carry out each of these tasks. Each higher-level individual's decisions define the ends that the subordinates will concentrate on in making their decisions, and their decisions will provide the means for accomplishing the objectives of the higher-level members. The process of breaking broad decisions into a series of progressively narrower decisions and assigning these to different individuals or subunits is related to increases in the complexity of organizations, as we discussed in Chapters 2 and 3.

Because of this type of division of labor in decision-making, Simon believed that the decisions made in organizations are likely to reflect a broader and more thoughtful consideration of factors than if a single individual had to think through these alone—that is, to be more rational. Note that this conclusion rests on the assumption that all members of the organization share the general aim of making a profit through the manufacture and marketing of widgets. When one refers to rationality, it's necessary to specify the referent—that is, for whom or what something is rational (Storing, 1962).

### **Organizational Structure and Decision-Making**

Simon followed Chester Barnard's (1968) arguments that when individuals join an organization, they agree to accept the inducements that the organization offers them in exchange for which they will make contributions to the organization. This includes allowing the organization to dictate their behavior within some broad limits, or within their "zone of indifference," and using the criteria and standards set by the organization in making decisions on behalf of the organization. In this context, the aspects of formal structure discussed in Chapter 3 are important because they provide the mechanisms through which organizations shape and control individuals' decision-making (Perrow, 1986). In a series of analyses, Simon and his colleagues (Cohen, March, and Olsen, 1972; Cyert and

March, 1963; March and Simon, 1958) elaborated on the impact of formal structure on decision-making processes in organizations.

They note that the formal division of labor defines the relevant issues that an individual is expected to attend to in making decisions. For example, when the head of manufacturing makes decisions, she focuses on their impact on the production of widgets, rather than on their impact on marketing and distribution. This illustration suggests that as horizontal complexity increases, individuals generally will take a narrower, more specific set of issues into account in decision-making. Such specialization may allow them to be more efficient in making decisions, or more thorough in terms of considering specific factors, but it is likely to lead them to neglect other issues that may bear on the ultimate decision. Hence, there is a need for persons at higher hierarchical levels to review and to coordinate among the decisions made at lower levels.

Likewise, rules and regulations are important because they direct individuals' attention to certain criteria and considerations in making decisions. March and Simon (1958) discuss "performance programs," collections of rules that guide decision-making in particular areas. For example, a performance program for inventory decisions might contain the following rules: When inventory reaches a certain point, more stock should be ordered; to decide how much to order, the rate of sales over the past thirty days should be checked and used as a guide; at least three suppliers should be contacted to get competitive prices; and so forth. Higher levels of formalization thus allow individuals at lower levels of an organization to "make" decisions, leading to a greater degree of decentralization, because the criteria to be used are clear and help ensure standard outcomes. Similarly, the hierarchy of the organization is relevant to decision-making because it defines which decisions are directly related to other decisions.

### **Politics, Conflict, and Decision-Making**

Resting on more realistic notions of individuals' cognitive capabilities than economic models that assume full rationality, this portrayal of organizational decision-making provides an important and useful way of thinking about the connection between individual-level choices and actions, on the one hand, and organizational-level characteristics, on the other (Perrow, 1986). One drawback, though, is that it does not give much attention to the possibility that different members of the organization will have different aims and that an agreement to allow the organization to define the premises of their decisions does not imply that they completely ignore their particular aims and interests. Recognition of this point has led scholars to give more attention to the role of politics and conflict in decision-making.

Consistent with the notion that decision-making in organizations is affected by individuals' bounded rationality, political considerations are assumed to come into play because there is often uncertainty surrounding decision-making processes—uncertainty about which objectives are most important to an

		Preferences Regarding Possible Outcomes	
		Certainty	Uncertainty
Beliefs About Cause/Effect Relations	Certain	Computation	Compromise
	Uncertain	Judgment	Inspiration

**FIGURE 6-1 Decision Processes**

Source: James D. Thompson, *Organizations in Action* (New York: McGraw-Hill, 1967), p. 134.

organization and what means should be used to pursue a given objective. These core types of uncertainties were highlighted in the framework for thinking about different types of organizational decisions presented by Thompson (1967). As he noted, “decision issues always involve two major dimensions: (1) beliefs about cause/effect relationships and (2) preferences regarding possible outcomes” (p. 134). “Beliefs about cause/effect” refers to whether there is certainty about the outcome of an action choice. If we decide A, we are sure that B and only B will be the result—this is high certainty about cause and effect. “Preferences regarding possible outcomes” refers to the degree to which there is consensus about what the organization is or should be trying to achieve. (You may note the similarity between Thompson’s conception of factors that affect decision-making and Perrow’s conception of factors that affect technological uncertainty; we discussed the latter in Chapter 3.)

These basic variables in the decision-making process can operate at the conscious or the unconscious level. As an aid in understanding the process, Thompson suggests that each variable can be (artificially) dichotomized, as indicated in Figure 6-1. In the cell with certainty on both variables, a “computational” strategy can be used. In that case the decision is obvious. For example, in simple inventorying, when the supply of a particular item dwindles to a particular level, a computer reorders it automatically. Obviously, there is not likely to be conflict surrounding these decisions. The other cells present more problems and are thus more crucial for the organization.

When outcome preferences are clear, but cause and effect relationships are uncertain, Thompson suggests that organizational decisions require what he calls a judgmental strategy. This typically involves bringing a group of experts together to share their knowledge and to make recommendations. Where the situation is reversed and there is certainty regarding cause and effect but uncertainty regarding outcome preferences, decision-making requires a compromise strategy. This is exemplified by political arrangements where the members representing different interests and views make decisions by voting. Finally, when there is uncertainty on both dimensions, Thompson argued that an inspirational strategy for decision-making is needed, if indeed any decision is forthcoming. Although Thompson doesn’t precisely specify what is involved in an inspirational strategy, it presumably entails a significant effort to forge agreements between parties with different views—that is, skilled and diplomatic leadership (Thompson, 1967:134–135).

## STRATEGIC DECISION-MAKING

The higher one goes in an organizational decision-making hierarchy, the greater the uncertainty surrounding both cause and effect relations and preference outcomes. As Cyert and March (1963) and Perrow (1967) point out, high-level goals of an organization are usually so broadly stated—“providing the highest quality education for students,” “enhancing community health and well-being,” even “maximizing profits”—that it is difficult to get consensus on what they entail, let alone how best to achieve them. Consequently, decisions that would be described as strategic—big, high-risk decisions made at high levels of organizations that significantly affect organizational outcomes—are often fraught with uncertainty and, hence, potential conflict.

### Uncertainty and Strategic Decisions

Although we have a tendency to assume that decisions made at high levels of organizations reflect high levels of rationality, or careful consideration of the best means to achieve some given end, evidence suggests that this assumption is very problematic. A good example of this comes from an analysis of General Motors (GM) in the United States. GM was one of the first organizations to adopt a formal structure known as the “M-Form” (for multidivisional); in this form, separate divisions are created for different product lines and divisional heads are given responsibility for running these, much like independent organizations. Classic accounts suggested that this form was chosen for its high level of efficiency (Chandler, 1962). Instead, a more recent analysis suggests that, for most of its history, decisions about structure in GM were driven not so much by efficiency concerns as by efforts to obtain consensus among its managers (Freeland, 1997). This and other detailed accounts of strategic decision-making in organizations (Beamish, 2000; Clarke, 1989; Tickner, 2002) suggest that considerations other than efficiency and effectiveness often influence strategic decisions.

One approach to thinking about how such decisions are made is provided by the “garbage can” model of decision-making (Cohen, March, and Olsen, 1972). This model begins with the points noted by Thompson, that preferences and technology (cause and effect relations) are often unclear. In this context, Cohen and his colleagues argue that decisions are shaped by four more or less independent factors:

1. perceptions of current problems facing the organization;
2. potential “solutions,” ideas or actions that individual members of an organization wish to champion (e.g., the adoption of a new computer system, creation of a new office or function);
3. decision-making opportunities, meetings or committees that are assigned to make a recommendation for action;
4. participants, individuals who are present at decision-making opportunities.

The model suggests that, in an organization, decisions result from random combinations of these factors—conceived of as a large garbage can in which the factors are mixed. In other words, decisions are made in the context of particular decision-making opportunities (e.g., meetings) that may have been called to address a particular problem (which is nevertheless subject to redefinition), which are attended by certain individuals (but perhaps not all who were invited, because of scheduling difficulties), and the members may or may not bring current pet projects with them. Needless to say, this approach suggests that decision outcomes are very unpredictable. Other research, though, suggests some structural constraints that “put a lid on the garbage can” (Levitt and Nuss, 1989) and make decision-making somewhat more predictable than the image of garbage-can decision-making suggests.

### Constraints on Decision-Making

One constraint on decision-making, and thus on potential conflict surrounding decisions, is the existence of previous decisions that commit organizational resources to certain *courses of action* (Cyert and March, 1963). Such decisions are often embodied in organizational budgets and are psychologically as well as legally binding. By limiting options, these commitments serve to limit conflict over choices of action.

Although having the benefit of reducing conflict, such commitments can have negative consequences for organizational decision-making. Organizations committed to losing courses of action are apt to continue to make decisions that make matters even worse. These are called *escalation situations*. Escalation situations occur when organizational projects have little salvage value, when decision-makers want to justify their past behavior, when people in a project are bound to each other, and when organizational inertia and internal politics combine to prevent a project from being shut down (Staw and Ross, 1989). A classic example is the process by which a power company on Long Island, New York, persisted in a decision to construct a nuclear power plant in the face of fierce opposition. The power company “stuck to its guns,” or escalated, for twenty-three years. The cost of the project went from \$75 million in 1966 to \$5 billion when the project was abandoned in 1989 (Ross and Staw, 1993).

The *concept of social embeddedness* (Granovetter, 1985) suggests another factor that often constrains organizational decisions and thus limits conflict. The concept calls attention to the fact that organizations (as well as individuals) have enduring relationships with other actors and are part of ongoing social networks. These relations shape decisions both because they are an important source of information about different choices that may be made and because, in order to maintain the relations, organizations may have to take certain actions.

There are a number of studies that document the ways in which network ties shape the flow of ideas between organizations and thus affect organizational decisions (e.g., Beckman and Haunschild, 2002; Budros, 2002; Guler, Guillen, and MacPherson, 2002; Westphal, Seidel, and Stewart, 2001). For example, a study by Davis (1991) of business firms’ adoption of poison pills (legal arrangements that



make it difficult for other firms to acquire a given firm without the consent of its board) indicated that such adoptions were strongly affected by whether members of the board of a firm considering adoption were also on boards of other firms that had already adopted this arrangement. Davis (1991) concludes:

Part of the impact of ties to adopters can be explained with reference to the nature of boards as decision-making groups. When the board is faced with a decision, such as whether to adopt a poison pill, the opinions of those with relevant previous experience naturally will be given more weight. . . . Yet the evidence presented here indicates that the more a firm was tied to others that had adopted a poison pill, the more likely it was to adopt a pill itself (up to a point), a finding that suggests a normative element: The knowledge that several interlock partners had adopted poison pills provides information above and beyond the simple pros and cons of adoption that having one or two directors with prior poison pill experience would give. (pp. 607–608)

As this last point indicates, apart from their informational influence, social ties may affect organizational decisions because they make organizations more responsive to interorganizational norms. A study of the semiconductor industry examined the formation of a research-and-development consortium among highly competitive firms and found that individuals and firms in this consortium developed a “moral community” in which both made contributions to the industry without regard for immediate and specific paybacks (Browning, Beyer, and Shetler, 1995:113). Similarly, research on alliances between firms shows that repeated alliances lead to trust between organizations, which then becomes the basis for additional alliances (Gulati, 1995b).

Although such decisions may or may not be based strictly on economic calculations, they may yield positive economic outcomes. Research on the garment industry in New York City found that embeddedness, in the form of trust between and networks among garment firms, was related to higher survival rates; firms that relied solely on arm’s-length economic transactions were more likely to fail (Uzzi, 1996, 1997). On the other hand, a study of the migration of manufacturing plants from New York State between 1969 and 1985 (and there was a lot of migration) found that firms that had links to local communities in the form of material, social, and political ties were less able to make such moves, even when production costs could be considerably reduced. Not surprisingly, the less mobile firms were in more peripheral industries. Firms in core industries were more able to move (Romo and Schwartz, 1995).

Although strategic decisions in organizations may be constrained by the considerations described above, this is not to suggest that decision-makers are purely passive or that these factors necessarily make decision outcomes predictable. As the garbage-can model of decision-making suggests, *who* participates in decision-making processes is a critical factor that affects outcomes; this is not only because different participants see problems differently and bring different “solutions” with them to the table, but because they also have differing amounts of power. Thus, we need to consider how the distribution of power influences decision-making processes.

## STRATEGIES OF POWER AND DECISION-MAKING

In Chapter 4, we discussed the nature of power in organizations and some of the factors that influence its distribution in organizations. Authority, typically reflected by the positions individuals hold in an organizational hierarchy, is an important aspect of power. Thus, the opinions and aims of those with more authority often carry more weight in decision-making. But there are potential costs to making decisions under conditions of high uncertainty: decisions that turn out badly may affect decision-makers' credibility and their ability to exercise influence in later decision-making situations. "Well, it seemed like a good idea at the time." That phrase, which we have all used in our lives, also characterizes organizational decisions. The quality of decisions is judged over time. The forty-plus years of Soviet rule in Eastern Europe appeared to be successful decision-making on the part of the Soviets, until the late 1980s. The Ford Motor Company produced both the Mustang and the Edsel. Buying and selling subprime mortgages appeared to be a good investment strategy to many banks before the market collapsed in 2008. What appear to be successful, rational decisions at time 1 are often problematic at time 2. Because of this, those with authority to make strategic decisions, such as chief executive officers and high-level administrators, may resist making the decisions by themselves and leave such decisions to groups or committees (Jackall, 1988). Nonetheless, those in positions of authority have a number of ways to influence decision outcomes in ways that reflect their preferences.

### Agenda Setting

One key influence mechanism is through control of the agenda—defining what issues will be discussed and in what order (Bachrach and Baratz, 1962). Defining an agenda shapes not only what issues will be discussed, but what issues will *not* be discussed. Thus, in a meeting held to make decisions about a company's financial situation, workers' compensation levels may be included as an item for discussion, but compensation levels and pension packages for high-ranking managers may be omitted.

Moreover, research suggests that the order in which items and issues are discussed can have strong effects on decision outcomes. This is partly because, given a fixed amount of time for a meeting, items that are placed earlier on the agenda are likely to receive more time and attention; decisions made near the end of the meeting may be made more quickly and participants may have less inclination to debate them. Thus, in setting the agenda, individuals may put the issues that they wish to push through quickly *toward* the end. In addition, since decisions are made in a sequence, decisions that are made earlier may entail commitments that affect subsequent decisions, resulting in an escalation of commitment to a course of action (Pfeffer, 1981). Suppose in a college faculty meeting there are two issues to be discussed: changing required courses and staffing. If a department can persuade the rest of the college that a particular course should be

required, then it is in a position to argue for additional faculty lines (for faculty to teach this course) in the subsequent discussion of staffing.

### Controlling Information

Information is part of the communication process within organizations. As will be seen in Chapter 7, the communication process itself is almost guaranteed to withhold, expand, or distort information. And as noted in Chapter 4, control of information can be an important source of power and have clear effects on decision-making outcomes. Although top-level members of an organization usually have access to more information than lower-level members, which can provide them with more influence in decision-making, this is not always the case. As pointed out in Chapter 4, individuals or units that have more contact with organizations, groups, and individuals outside the organization that provide it with critical resources often exercise relatively high levels of power within an organization. By selectively providing information about these resource providers, those individuals or units determine what organizational actions are deemed appropriate and necessary for the continuation of resource support. March and Simon (1958) discuss this aspect of information transmission in terms of the “absorption of uncertainty.” Since securing resources from the environment is a major source of uncertainty in most organizations, those who broker information about key aspects of the environment “absorb” the uncertainty—and accrue influence within the organization.

Control of information from *within* the organization may also be becoming increasingly important, as more and more organizations employ sophisticated tools, including complex, electronically accessible databases containing data compiled by organizational members, as sources of information to be used in decision-making. Research suggests that organizational members who limit the amount of information that they make available through such databases, providing an appearance of quality and selectivity, are apt to be more influential (because the data they make available are given more attention) than those who provide a lot of information. This less-is-more strategy is particularly effective when many individuals are entering information in the database. Under these conditions, users of the database pay more attention to sources that appear to offer information more selectively (Hansen and Haas, 2001).

### Forming Coalitions

Another way in which decision-making outcomes are influenced is through the selection of individuals to participate in a decision-making group (Padgett, 1980). Selecting organizational members who are likely to form a coalition that will support a particular choice allows top-level managers to ensure that the decision they favor is likely to be recommended. In addition, inclusion of expert

outsiders, such as consultants, who may become part of the coalition, can increase the probabilities of this outcome (Bacharach and Lawler, 1980; Pfeffer, 1981).

Most strategic decisions are centered at the top of organizations, since that is where the power lies. At the same time, there are instances in which lower-level subordinates are brought into the process. As we have seen previously in Chapters 2 and 5, participation by subordinates has mixed consequences for the organization and the participants. The same is true of decision-making. Greater participation can actually be dysfunctional if the participants already feel satisfied or even saturated with their role in decision-making (Alutto and Belasco, 1972). Typically, though, bringing them into the decision-making process increases their acceptance of the decision that is made. A useful insight into participation in decision-making is that if a decision is important for the organization, a nonparticipative style is likely to be used; if the decisions are important for the subordinates in regard to their work, a more participative approach will be taken (Heller, 1973). If the organizational decision-makers believe that the subordinates have something to contribute to the decision or its implementation, then participation is more likely.

## SUMMARY AND CONCLUSIONS

Decision-making involves both substance and politics and both economic and socially embedded rationality. It also involves limited rationality in all issues. Nonetheless, we plunge ahead. When and if we are participants in decision-making, we do try to do the best we can. To return to our theme, decisions rarely, if ever, provide perfect solutions and they never last over time, but we continue to make them.

Since information is central to decision-making, and since communications allow information to flow, we will now examine this process in organizations.

## EXERCISES

1. Describe the decision-making processes in your two organizations. What are the issues? Who participates?
2. Describe the forms of rationality present in decision-making in your two organizations.