: Are strategic decision processes structured?

by Dan Power

Editor, DSSResources.com

There are patterns, regularities and repetitive actions in decision processes that create observable structures that can be studied and improved using computing technologies. Managers often assume that important or strategic organizational decisions are unstructured because they occur infrequently, goals are often ambiguous, and every situation seems different. Both research and our experiences in organizations suggests that past behavior and training of participants actually creates structure and predictable patterns in strategic, unstructured decision situations. What is the structure of unstructured decisions?

Mintzberg, Raisinghani, and Theoret (1976) answered this question and developed a descriptive model of strategic decision processes that we can call the MRT model. In general, they identified general phases and activities in a strategic decision process. Also, they categorized unstructured decisions by (a) the stimuli that evoked them, (b) their solutions, and (c) the process used to arrive at them. They defined important and strategic decisions as novel, complex and open-ended.

According to Mintzberg et al., decisions may be categorized as opportunity decisions, those initiated on a purely voluntary basis, to improve an already secure situation such as a financially healthy firm that intentionally finds and purchases a company. At the other extreme are crisis decisions, where an organization responds to intense pressure. Here a severe situation demands immediate actions, for instance, seeking a merger to avoid bankruptcy or dealing with a defective product. Thus, opportunity and crisis decisions may be considered as forming the two ends of a continuum. Problem decisions are then defined as those that fall in between, stimulated by milder pressures than crises. For example, when a seller of an asset approaches a potential buyer.

Also, decisions are classified by the type of solution. First, the solution may be fully-developed at the start of the process which happens when a senior executive in a company approaches a potential buyer of that company. Second, the solution may be found fully-developed in the environment during the search process, as is the case when a firm plans and executes a search for acquisition prospects. Third, custom-made solutions may be developed especially for the decision situation. For example, only part of a company or selective assets may be purchased. Finally, the solution may combine ready-made with the possibility of custom-made features, ready-made solutions are modified to fit particular situations.

There are a number of descriptive process models where decision-making activities are grouped into discrete phases or stages. In these models certain phases and tasks occur predictably; there

may be cycling among phases in a decision process and decision making activities may be repeated in the same overall decision process; activities are not necessarily continuous; activities occur across levels in the organization hierarchy, managers at different levels may participate in the same process; and some control mechanism determines what activities occur and when (for example, managers, policies and procedures are control mechanisms).

In the MRT descriptive phase model, a decision process has three ordered phases: 1) identification, 2) development, and finally 3) selection. The identification phase comprises two routines: decision recognition, in which opportunities, problems, and crises are recognized and evoke decision activity; and diagnosis, in which mangers seek to comprehend the factors that initiate the process and determine cause-effect relationships for that particular decision situation.

 According to Mintzberg et al., the most important part of the decision-making process is the set of activities that leads to the development of one or more solutions to a problem or crisis or that elaborates an opportunity. Development activities are described in terms of two basic routines, search and design. Search is evoked to find ready-made solutions; design is used to develop custom-made solutions or to modify ready-made ones. Search is often support by information technology.

 Selection is logically considered to be the last step in the decision process: however, because the development phase frequently involves a series of subdecisions, each requiring at least one selection step, a decision process could involve many selection steps. For example, many subdecisions occur during an acquisition decision process, e.g., to make contact, to make an offer. Also, in strategic hiring subdecisions are often made.

 In the MRT model, selection is best described in terms of screen, evaluation-choice, and authorization, it is typically a multistage, iterative process, involving a "progressively deepening" investigation of alternatives. Two patterns of the three routines seem to occur. First, the selection routines are applied sequentially to a single choice. Screening is used to reduce a large number of ready-made alternatives to a few feasible alternatives and to select a course of action; finally, authorization is used to ratify the chosen course of action at a higher level in the organizational hierarchy. In the second pattern, a single selection step is itself multistage or nested. All alternatives may be evaluated in a general way, then in succeedingly more intense ways, or one choice can be subject to authorization at successively high level in the organization.

 According to MRT, the evaluation-choice routine uses one of three modes: judgment, bargaining, and analysis. In judgment, one individual makes a choice using explicit and implicit procedures that he/she may not understand; in bargaining, a choice is made by interacting decision makers with partially conflicting goal systems, each exercising his/her independent judgment; and in analysis, factual evaluation is carried out, generally by specialists, followed by managerial choice using either a judgment or bargaining approach. Managers are the decision makers in strategic decision processes.

Judgment according to Mintzberg et al., seems to be the favored mode of selection. They speculate that judgment is used because it is the fastest, most convenient, and least stressful of the three; they feel this mode is especially suited to the kinds of data found in strategic decision situations. Bargaining is also common.

The MRT model describes three routines that support decision processes: 1) decision control; 2) communication; and 3) political routines. Controlling a decision process can involve monitoring progress by gathering data about outcomes, progress or satisfaction. Also human control occurs during meetings and while reviewing decision related facts and outcomes. Communication and collaboration are an important part of organizational decision making in most organizations. Few organizations encourage autocratic decision behavior. Information technologies are used to support communication in strategic decision making, but there is a bias in favor of face-to-face decision meetings. Finally, political behavior does occur in decisions situations and it may be difficult to detect or change. Some argue that political behavior may actually be necessary to resolve some allocation decisions.

A number of dynamic factors associated with decision processes are also part of the MRT model: 1) interruptions caused by environmental forces; 2) timing delays and speedups; 3) feedback delays while waiting for information; 4) comprehension cycles to understand and process information; and 5) failure recycles that occur when problems are encountered.

Do you agree with the MRT model? If so, which phases and routines and which strategic decisions are most likely to benefit from computer support?

References

Mintzberg, H., D. Raisinghani, and A. Théorêt. (1976) "The structure of 'unstructured' decision processes." Administrative Science Quarterly, 21, 246-275.

Power, D.J. (1982) Acquiring Small and Medium-sized Companies: A Study of Corporate Decision Behavior, Ph.D. Thesis, University of Wisconsin-Madison, pp. 56-60.

Author: Daniel Power
Last update: 2009-10-11 03:57