

Dr. Simon sees future business organizations as "... a complex man-machine system in which executives and other white-collar workers collaborate with computing machines in processing information and making the decisions, both routine and novel -- for conducting business." (from cover)

The executive's job can largely be defined in terms of decision making. There are three kinds of activities in decision making:

1. Intelligence activity. Finding occasions for making decisions.
2. Design activity. Finding possible courses of action.
3. Choice activity. Choosing from among the possible courses of action.

He admits that this formula is close to John Dewey's approach to problem solving:

1. What is the problem?
2. What are the alternatives?
3. Which alternative is the best?

The ability to work through these steps (either model) is a learned process.

There are two types of decisions (actually the two extreme points on a continuum.

- X A. Programmed. "Detailed prescription or strategy that governs the sequence of responses of a system to a complex task environment." These decisions are repetitive and routine, they call for a definite procedure.
- X B. Nonprogrammed. No specific procedures are available to deal with these situations. You must fall back on your general capacity for problem-oriented action. The solutions are not structured, not cut-and-dry, the nature and structure of your solution is elusive. Novelty is needed here.

He then discusses traditional and new ways of making decisions. See chart.

Our traditional ways of dealing with Nonprogrammed decisions are to ask: What is the problem? Then we select experts to solve the problem. Thirdly we usually have established special organizational units to carry on. This approach generally has not worked because we have not understood thinking, problem solving, and learning. Here we can apply Gresham's Law of Planning: "Programmed activity drives out nonprogrammed" If an executive has only a limited amount of time he will concentrate on the programmed activities.

New techniques for Programmed Decisions emphasize Operations Research. This uses high powered mathematics (computers) and led us to the Systems Approach.

The Systems Approach is a frame of mind, or "...designing the components of a system and making individual decisions within it in the light of the implication of these decisions for the system as a whole."

* We use Heuristic approaches to solve Nonprogrammed decisions. Two Ways:

- A. We increase the problem-solving capability of humans in nonprogrammed situations. Here he reiterates Youngs steps to producing ideas.
- B. Use computers to aid in problem solving. An example is the program called the General Problem Solver which reasons in terms of ends-means, goals-subgoals. It reproduces processes observable in the behavior of laboratory subjects to explain the organization of these processes.

In his last chapter the author discusses the future of business. He approaches issues of automation and unemployment, pace of automation, composition of the labor force, routinization of work, organizational design.