

### Chapter 3 Decision Makers and Processes

1. Compare and contrast four major kinds of decision makers that you are likely to encounter in an organization.

a. Individual - May be a person (may vary in terms of training, experience, cognitive skills, intelligence and knowledge)  
or computer - factory automation, robotics, structured, programmable decisions in established, operational control contexts.

*common traits* - can accept messages stated in some language  
- possesses a reservoir of knowledge

b. Distributed, Multiperson - May be team, group or organization.  
*common trait* - No formal structure of authority.

Team - Unilateral decision  
Has deciding participants and supporting participants

Group/Organization - negotiated decisions  
Group - comparable authority, meetings  
Organization - unequal authority, highly structured coordination

2. Describe the phases you would go through in a decision-making process.

- a. Intelligence - collecting, organizing knowledge  
alertness to occasions for decision
- b. Design - identification, examination of possible courses of action  
evaluation of expected outcomes for these
- c. Choice - applies authority to make selection, in face of internal/external pressures

3. Explain the relationship between problem solving and decision making.

Problem solving is an activity directed toward satisfying some sensed need or emphasizes thought process that precedes terminal choice

Making a decision involves the solving of problems: (or in the course of solving a problem a decision might be made)

For structured decisions the answers are well-known

For unstructured decisions, they are not and they require exploration, ingenuity and sometimes lead to dead ends.

4. Identify common strategies that are used in guiding decision-making processing.

- a. **Optimizing:** select the course of action with the highest payoff/utility  
cost/benefit of all alternatives  
costly to perform  
can't adequately measure utility

b. **Satisficing:** select the course of action "good enough" to meet minimal set of requirements.

all alternatives not considered  
limited time, effort, money to make decision  
alternatives considered sequentially

c. **Elimination-by-aspects:** narrowing process, eliminating alternatives that fail with respect to one aspect.

may eliminate one that is “overall” superior to others in all but a single aspect

d. **Incrementalism:** “muddling through” or “putting out fires”  
successive comparison of alternatives to current course, to find ways of removing shortcomings of present approach

e. **Mixed scanning:** scanning: search, collection, processing, evaluating, weighing of information

degree varies with importance of decision

list the alternatives and reject those with “crippling objection”

continue until one alternative remains

\*\* Knowledge is raw material, work in process and the finished good of decision making.

5. Describe limitations that managers encounter in making decisions.

a. Cognitive limits - human capacity for processing contents of immediate memory is limited to a maximum of 7 variables (handled simultaneously).

- small long term memory

- forgetting, erroneous recall

- inundation or scarcity debilitation

- erroneous processing

b. Economic limits - humans are expensive

c. Temporal limits - human processing speeds are limited (increased pressure may cause decision maker to use an unwanted strategy).

6. Discuss decision support needs and characteristics for various kinds of decision makers and decision making strategies.

a. Decision makers need systems that solve problems that arise in the process of decision making.

b. Systems that extend knowledge management capabilities

c. Systems that coordinate distributed coordinated decision making

d. Systems that offer advice, expectations, analysis

\*\* Above are interactive in nature