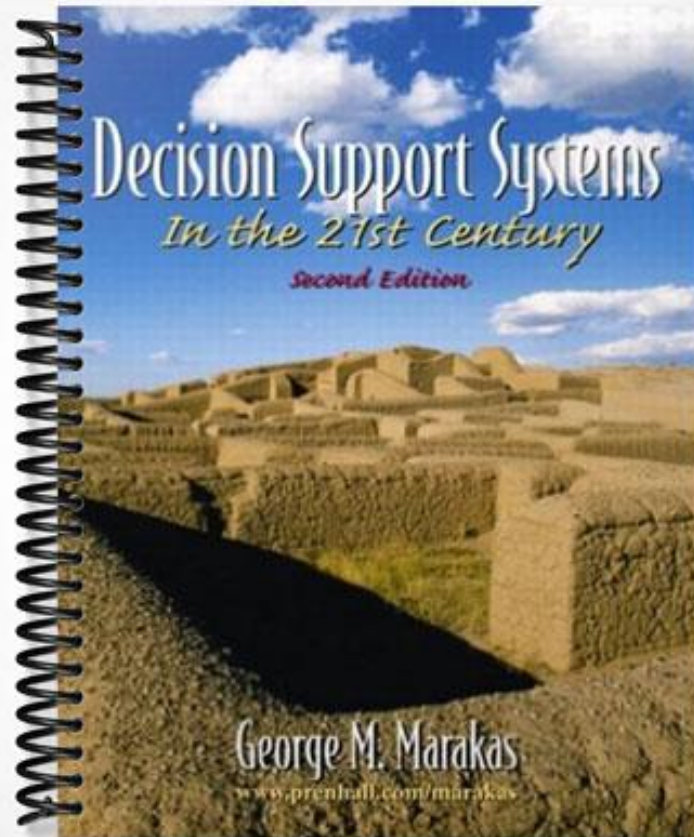


TEST BANK



Decision Support Systems
In the 21st Century

Second Edition

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Chapter 2

Decisions and Decision Makers

True-False Questions

1. The decision maker is considered both an element and participant in the decision.
Answer: True **Difficulty: Easy** **Reference: p. 35**
2. All decisions in an organization are ultimately made by a single individual.
Answer: False **Difficulty: Medium** **Reference: p. 38**
3. A problem is defined as the perception of a difference between the current state of affairs and a desired state of affairs.
Answer: True **Difficulty: Easy** **Reference: p. 36**
4. A typical decision is often made using the exact order suggested by a normative model of decision making and tends to use all of the steps contained in the model.
Answer: False **Difficulty: Medium** **Reference: p. 35**
5. Two examples of group decision making are organizational committees and juries.
Answer: True **Difficulty: Easy** **Reference: p. 39**
6. The manner in which a decision is made is referred to as decision style.
Answer: True **Difficulty: Easy** **Reference: p. 41**
7. Decision style is affected by the perception of the problem.
Answer: True **Difficulty: Medium** **Reference: p. 41**
8. The reason there are so many different types of DSSs is that there are many different types of decisions.
Answer: True **Difficulty: Easy** **Reference: p. 37**
9. Policies and procedures can affect organizational decision making.
Answer: True **Difficulty: Easy** **Reference: p. 48**
10. Simon proposed to classify problems from procedural to non-procedural.
Answer: False **Difficulty: Medium** **Reference: p. 50**
11. Programmed decisions are more difficult to automate in a DSS than non-programmed decisions.
Answer: False **Difficulty: Easy** **Reference: p. 51**
12. When conflict exists in either goals or approaches to the decision then Delbecq would classify that as the need for a creative decision.
Answer: False **Difficulty: Hard** **Reference: p. 55**
13. When a novel approach is needed to handle the complexity of the problem, then Delbecq would classify that as the need for a negotiated decision.
Answer: False **Difficulty: Hard** **Reference: p. 54**

14. Mintzberg classifies adaptive activities as characterized by high risk and motivated by the proactive and reactive considerations.
Answer: False **Difficulty: Hard** **Reference: p. 55**
15. According to Thompson, his classification scheme differentiates decisions based upon the type of activities with which the decision is most associated.
Answer: False **Difficulty: Medium** **Reference: p. 55**
16. The most clear-cut phase in the decision making process is the design phase.
Answer: False **Difficulty: Hard** **Reference: p. 58**
17. Simon referred to the process of search-limiting strategies as inferencing.
Answer: False **Difficulty: Medium** **Reference: p. 61**
18. Symptoms of a problem are identical to the problem itself.
Answer: False **Difficulty: Easy** **Reference: p. 63**
19. Stereotyping is a common perceptual block.
Answer: True **Difficulty: Easy** **Reference: p. 67**
20. The tendency to view alternatives as mutually exclusive events is a bias of individual decision makers.
Answer: True **Difficulty: Medium** **Reference: p. 73**

Multiple Choice Questions

21. Which of the following is not part of the decision-making process?
- Stimulus
 - Alternative selection
 - Decision maker
 - All of the above are part of the decision making process.

Answer: d **Difficulty: Easy** **Reference: pp. 36-37**

22. Which of the following is not a category of decision makers within an organization?
- Individual decision makers
 - Team decision makers
 - Group decision makers
 - All of the above are categories of decision makers.

Answer: d **Difficulty: Easy** **Reference: pp. 38-39**

23. Which of the following is not a factor that affects decision style?
- Context
 - Inference
 - Values
 - Perception

Answer: b **Difficulty: Hard** **Reference: p. 41**

24. Which of the following is not a decision style behavior?
- Analytical
 - Behavioral
 - Conceptual
 - All of the above are decisions style behaviors.

Answer: d **Difficulty: Medium** **Reference: p. 44**

25. According to Mintzberg, which of the following is not a decision typology?
- Entrepreneurial activities
 - Knowledge activities
 - Adaptive activities
 - Planning activities

Answer: b **Difficulty: Medium** **Reference: p. 55**

26. According to Delbecq, which of the following is not a classification scheme for negotiation?
- Inferred decisions
 - Routine decisions
 - Creative decisions
 - Negotiated decisions

Answer: a **Difficulty: Medium** **Reference: pp. 54-55**

27. According to Thompson, which of the following is not a type of strategy based decision scheme?
- Inspirational strategies
 - Judgmental strategies
 - Conversational strategies
 - Compromise strategies

Answer: c **Difficulty: Medium** **Reference: p. 55**

28. The perception of a problem context is typically caused by one or more:
- crisis.
 - stimuli.
 - telephone calls.
 - catastrophes.

Answer: b **Difficulty: Easy** **Reference: p. 36**

29. The term used to describe the manner in which a manager makes decisions is called:
- decision methodology.
 - decision model.
 - decision style.
 - cognitive style.

Answer: c **Difficulty: Easy** **Reference: p. 41**

30. In any problem context, before any effective investigation of alternative solutions can be conducted, the decision maker must first:
- establish the available resources.
 - determine the best solution.
 - define the problem.
 - None of the above.

Answer: c **Difficulty: Easy** **Reference: p. 37**

31. A decision in which many people may serve to influence the final decision but only one decision maker has the authority and responsibility to make the decision is called a:
- unilateral decision.
 - bilateral decision.
 - negotiated decision.
 - unanimous decision.

Answer: a **Difficulty: Medium** **Reference: p. 39**

32. Which of the following involves factors relating to the forces acting on the decision maker in the course of making the decision?
- Problem space
 - Problem style
 - Problem context
 - Decision style

Answer: c **Difficulty: Easy** **Reference: p. 41**

33. Which of the following best describes the basic characteristics of the directive decision style? A directive decision style is characterized by:
- a high need for structure in the problem context combined with a relatively low tolerance for context ambiguity and a tendency to function best in a verbal setting rather than through written communication or other multichannel media.
 - a relatively greater tolerance for context ambiguity, a tendency toward the need for greater volumes of information and the consideration of large sets of alternatives, and a preference for written communication media.
 - a long-term thinker with a high tolerance for ambiguity and a tendency to be much more of a “people person”.
 - conflict-averse with a tendency to rely on meetings and consensus for communicating to and organizing subordinates.

Answer: a **Difficulty: Medium** **Reference: p. 42**

34. Which of the following best describes the basic characteristics of the analytical decision style? An analytical decision style is characterized by:
- a high need for structure in the problem context combined with a relatively low tolerance for context ambiguity and a tendency to function best in a verbal setting rather than through written communication or other multichannel media.
 - a relatively greater tolerance for context ambiguity, a tendency toward the need for greater volumes of information and the consideration of large sets of alternatives, and a preference for written communication media.
 - a long-term thinker with a high tolerance for ambiguity and a tendency to be much more of a “people person”.
 - conflict-averse with a tendency to rely on meetings and consensus for communicating to and organizing subordinates.

Answer: b **Difficulty: Medium** **Reference: p. 42**

35. Which of the following best describes the basic characteristics of the conceptual decision style? The conceptual decision style is characterized by:
- a high need for structure in the problem context combined with a relatively low tolerance for context ambiguity and a tendency to function best in a verbal setting rather than through written communiqué or other multichannel media.
 - a relatively greater tolerance for context ambiguity, a tendency toward the need for greater volumes of information and the consideration of large sets of alternatives, and a preference for written communication media.
 - a long-term thinker with a high tolerance for ambiguity and a tendency to be much more of a “people person”.
 - conflict-averse with a tendency to rely on meetings and consensus for communicating to and organizing subordinates.

Answer: c **Difficulty: Medium** **Reference: p. 43**

36. Which of the following best describes the basic characteristics of the behavioral decision style? The behavioral decision style is characterized by:
- a high need for structure in the problem context combined with a relatively low tolerance for context ambiguity and a tendency to function best in a verbal setting rather than through written communiqué or other multichannel media.
 - a relatively greater tolerance for context ambiguity, a tendency toward the need for greater volumes of information and the consideration of large sets of alternatives, and a preference for written communication media.
 - a long-term thinker with a high tolerance for ambiguity and a tendency to be much more of a “people person”.
 - conflict-averse with a tendency to rely on meetings and consensus for communicating to and organizing subordinates.

Answer: d **Difficulty: Medium** **Reference: p. 44**

37. Simon classified problems on a continuum that ranged from:
- structured to unstructured.
 - parallel to perpendicular.
 - discrete to obtuse.
 - 1 to 10.

Answer: a **Difficulty: Easy** **Reference: p. 50**

38. Which of the following is not included in the Keen and Scott Morton classification of decision-making perspectives?
- Process-oriented perspective
 - Knowledge-engineer perspective
 - Political perspective
 - Rational manager perspective

Answer: b **Difficulty: Medium** **Reference: p. 57**

39. Which of the following is not a satisficing strategy?
- a. Simulation
 - b. "What-if" analysis
 - c. Markov analysis
 - d. Linear programming

Answer: d

Difficulty: Hard

Reference: p. 59

40. Which of the following is not an optimizing strategy?
- a. Goal programming
 - b. Environmental impact analysis
 - c. Investment models
 - d. Transportation models

Answer: b

Difficulty: Hard

Reference: p. 59

Essay Questions

41. *Define a 'good decision'.*

A good decision results in the attainment of the objective or objectives that give rise to the need for a decision within the boundaries and constraints imposed by the problem's context.

42. *List 10 common types of support provided by a DSS.*

1. Explores multiple perspectives of a decision context
2. Generates multiple and higher quality alternatives for consideration
3. Explores and tests multiple problem-solving techniques
4. Facilitates brainstorming and other creative problem-solving techniques
5. Explores multiple analysis scenarios for a group decision context
6. Provides guidance and reduction of debilitating biases and inappropriate heuristics
7. Increases decision maker's ability to tackle complex problems
8. Improves response time of decision maker
9. Discourages premature decision making and alternative selection
10. Provides control over multiple and disparate sources of data

43. *Define Mintzberg's activity-based decision typology.*

1. Entrepreneurial activities are generally characterized by high levels of uncertainty. The selection of alternatives is motivated by proactive considerations and is typically focused on near-term growth over long-term issues.
2. Adaptive activities are characterized by high levels of uncertainty and are motivated by reactive considerations. They are more focused on the short-term issues at hand.
3. Planning activities are characterized by high risk and motivated by proactive and reactive considerations. The focus is on growth and efficiency over the long term.

44. *Define what is meant by the term bounded rationality.*

Simon used the term bounded rationality to refer to the cognitive limitations that decision maker's face. They make rational decisions that are bounded by often uncontrollable constraints.

45. *List the major components of the decision-making process.*

1. Stimulus
2. The Decision Maker
3. Problem Definition
4. Alternative Selection
5. Implementation

46. *In which portion of the decision-making process is a DSS most helpful for decisionmakers? Why?*

Alternative selection is the heart of the decision-making process and the portion of the activity where a DSS is most often most useful. The selection of an effective solution from a set of feasible alternatives is the essence of decisionmaking. It is the decision itself. The DSS can be used to provide quantitative approaches to the analysis of the set of feasible alternatives and to assist the decisionmaker in choosing the best available solution to the problem at hand.

47. *List and briefly describe the classes of decision-makers.*

The individual decisionmaker, as the name implies, stands alone in the final decision process. This class of users essentially works alone during the decision process in the sense that the analysis of information and the ultimate generation of a final decision rests solely in their hands. The multiple class of decision-makers is made up of multiple individuals interacting to reach a decision. We differentiate between multiple decisionmakers and group or team decision-makers. Here, the multiple decisionmakers are those that each have a stake in a particular decision outcome and thus are motivated to reach eventual agreement and common commitment to a course of action. Each member of this class may have completely unique motivations or goals and may approach the decision process from a wide variety of angles. Further, each may use a common DSS or a variety of systems as support for their contribution to the decision-making process. In contrast to the multiple decisionmaker, a group decisionmaker is characterized by membership in a more formal structure where each member of the group has a similar vested interest in the decision outcome and has an equal say in its formation. Group decisionmakers generally work in a formalized environment that consists of regular meetings devoted to working through the decision process, formalized schedules and agendas focusing on specific portions of the process, and often deadlines by which the decision must be finalized and operationalized. Yet another class of decision-maker is called the team decisionmaker. This decision structure can be thought of as a combination of individual and group classes of decision-makers. Often, an organization is structured such that while the authority to make a particular decision may rest with an individual manager, he or she may be supported by several assistants who are working toward the same goal(s). In the team context, decision support may come from several individuals empowered by the key individual decisionmaker to collect information and/or make certain determinations regarding a portion of the intended decision outcome.

48. *Describe the three forces that affect a particular individual's decision style.*

The three factors of context, perception, and values intertwine in their relationship to decision style. The problem context involves factors relating to the forces acting on the decisionmaker in the course of making the decision. Organizational and environment forces such as government regulation, new technologies, market competition, internal power struggles, etc. all serve to reform or affect the problem context. Further, forces of a more individual nature such as skill set, energy, motivation, and perceived abilities, among others can also serve as forces that shape the problem context for the decisionmaker. The totality of these forces must be balanced and managed by the decisionmaker during the problem-solving process.

49. *List and briefly describe the forces that can act on a problem context and on a decisionmaker during the course of making a decision.*

The conditions surrounding the decisionmaker that relate to feelings, health, security, reward, frustrations, anxieties, and maybe most important, cognitive limitations can all serve as forces acting upon the decisionmaker during the process of selecting the appropriate alternative. Each of these personal forces can serve to either reinforce or debilitate the decisionmaker's ability to make a sound decision. Forces and constraints in the environmental category include limits on resources, governmental regulation, societal values such as views on the moral or ethical nature of the decision being considered, competitive pressures of the marketplace, the demands of the consumer, the needs and demands of the individual stakeholders potentially affected by the decision outcome, and the emergence of new technology. Individually or in any combination, these forces require the decisionmaker to respond in a manner that results in alteration of the final decision to account for, or control for, the effects of these forces and constraints. Within the decisionmaker's own organization there exist forces and constraints that must be accounted for and dealt with in the process of making a decision. The existence of policies and procedures, issues of group conformity, organizational culture, and coordination of staffing and other resources can affect the nature of the decision process. The degree to which the manager interacts with his superiors and subordinates, combined with the overall policy structure of the organization, can serve to significantly alter a decision process, and thus, its outcome. A significant source of constraint and consequence to the decision process is the problem context itself. Within this category issues relating to skill inventory, time requirements, motivation to reach a decision, and the perception of importance by the decisionmaker and the organization are all salient factors. Probably the most important and often manifest of these is time requirements. Even if all other forces acting upon the situation are effectively dealt with, the limits on time can serve to create severe pressure and stress on the decision-maker and, if left unattended or ignored, can significantly increase the probability of error or poor quality decision outcomes.

50. *List the advantages of using heuristics.*

1. Simple to understand
2. Easy to implement
3. Requires less conception time
4. Requires less cognitive effort or less CPU time
5. Can produce multiple correct solutions