

# Principles of Management

## **Managing Decision Making and Problem Solving**

Chapter 09

# The Nature of Decision Making

- Decision Making
  - The act of choosing one alternative from among a set of alternatives.
- Decision-Making Process
  - The process of *recognizing and defining the nature of a decision situation, identifying alternatives, choosing the “best” alternative, and putting it into practice.*
  - An effective decision is one that **optimizes** some set of factors such as *profits, sales, employee welfare, and market share.*
  - Managers make decisions about both *problems and opportunities.*



# Types of Decisions

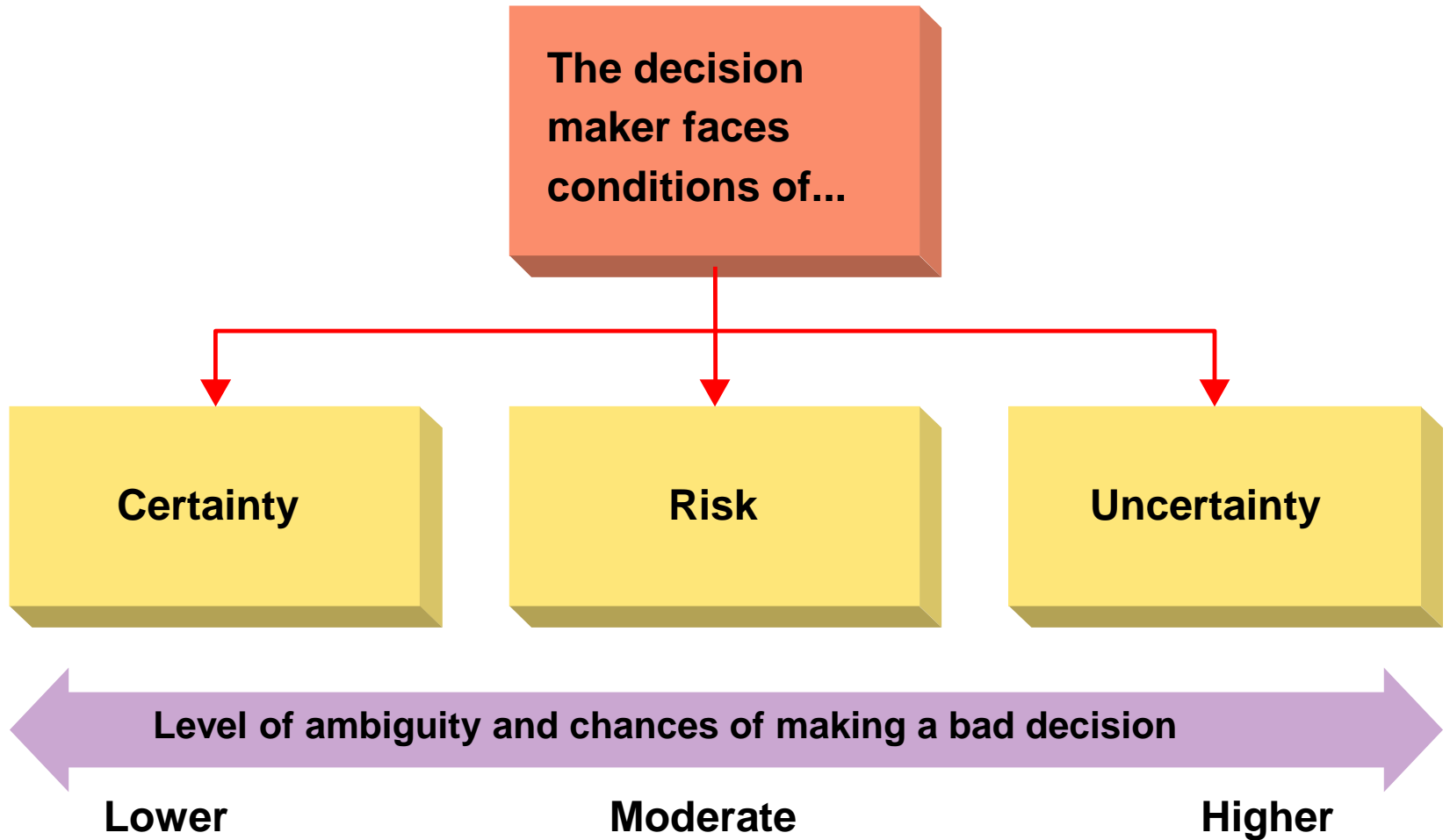
- Programmed Decisions
  - A decision that is a **fairly structured** decision or recurs with some frequency or both.
    - Example: Starting your car in the morning.
- Nonprogrammed decisions
  - A decision that is **relatively unstructured** and occurs much less often a programmed decision.
    - Example: Choosing a vacation destination.



# Decision-Making Conditions

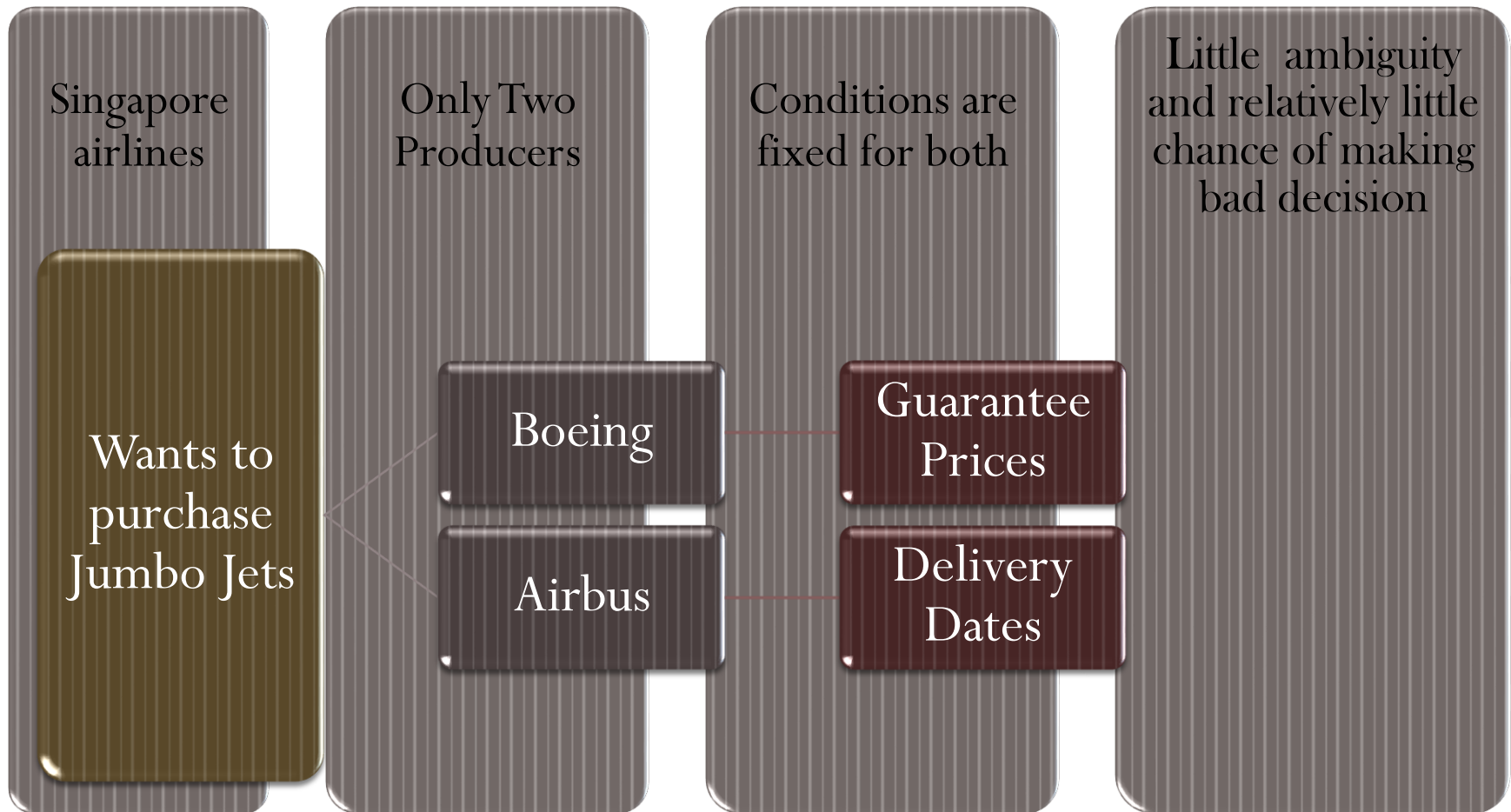
- Decision Making Under Certainty
  - A condition in which the decision maker knows with reasonable certainty what the alternatives are and what conditions are associated with each alternative.
- Decision Making Under Risk
  - A condition in which the availability of each alternative and its potential payoffs and costs are all associated with risks.
- Decision Making Under Uncertainty
  - A condition in which the decision maker does not know all the alternatives, the risks associated with each, or the consequences of each alternative.

# Decision-Making Conditions (cont'd)



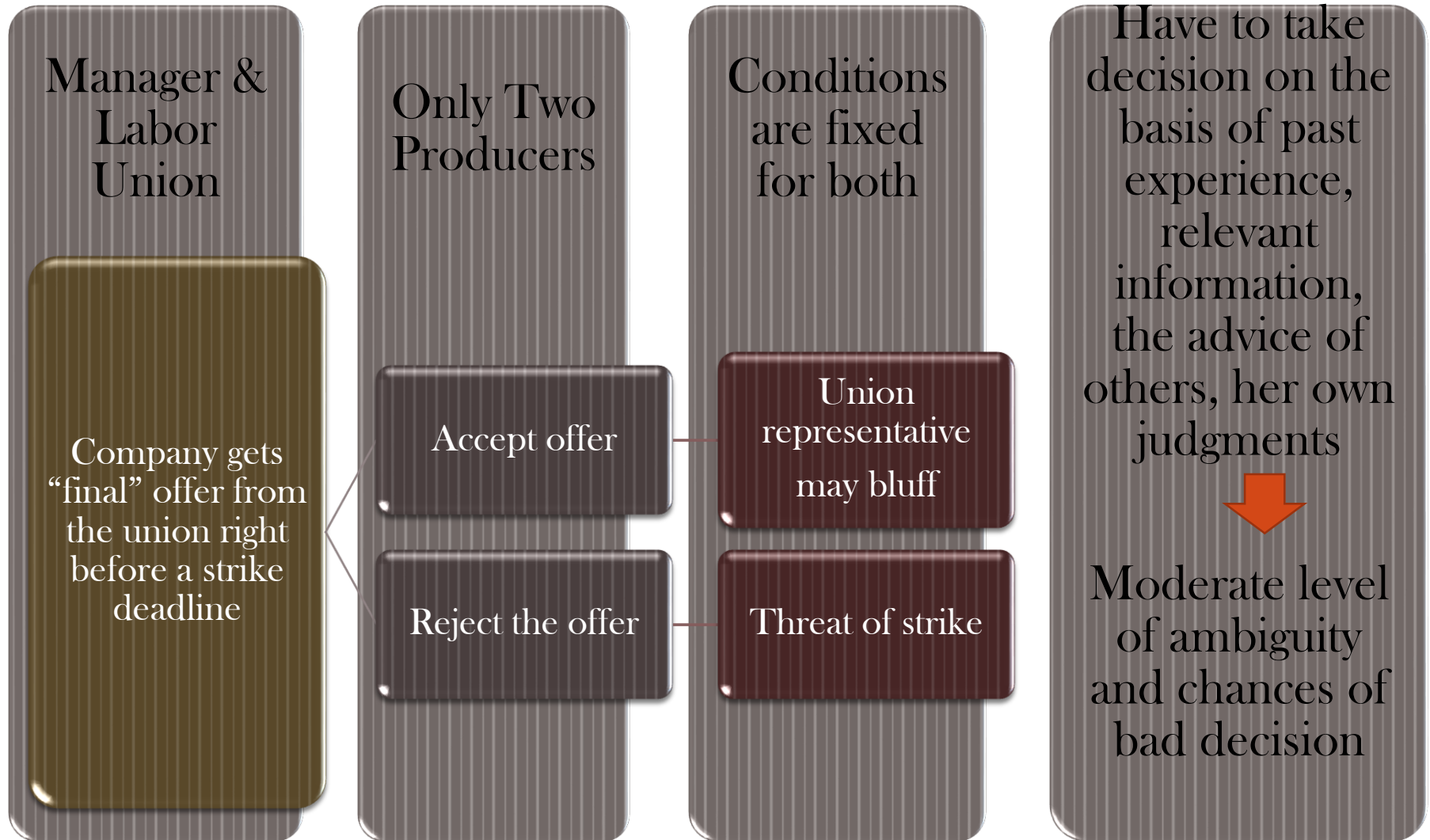
# Decision-Making Conditions (cont'd)

- **Certainty**



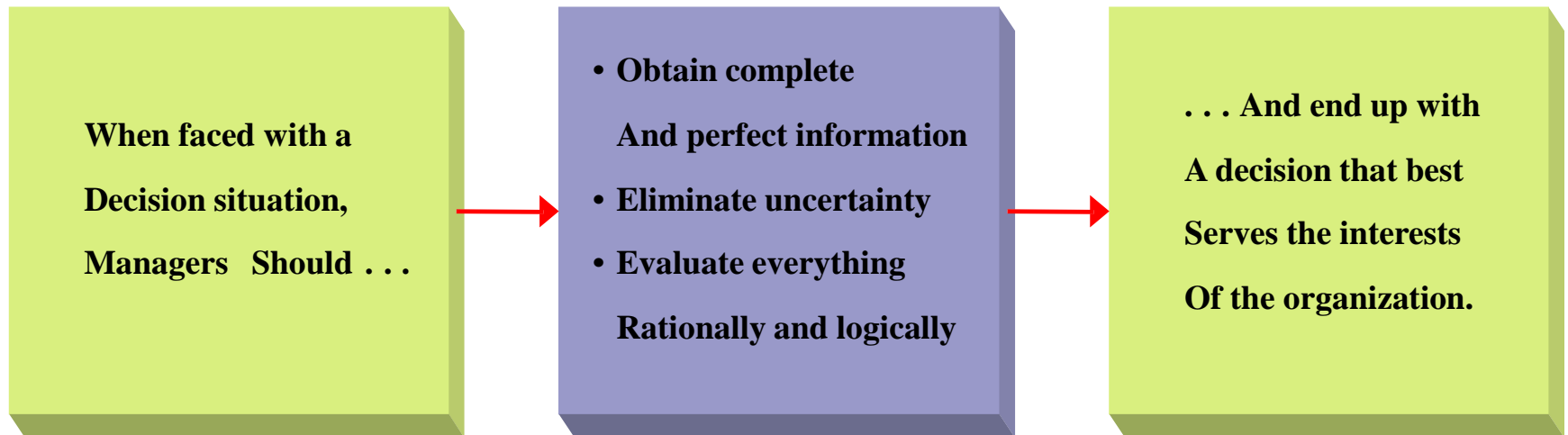
# Decision-Making Conditions (cont'd)

- **Risk**



# Rational Perspectives on Decision Making

- The Classical Model of Decision Making





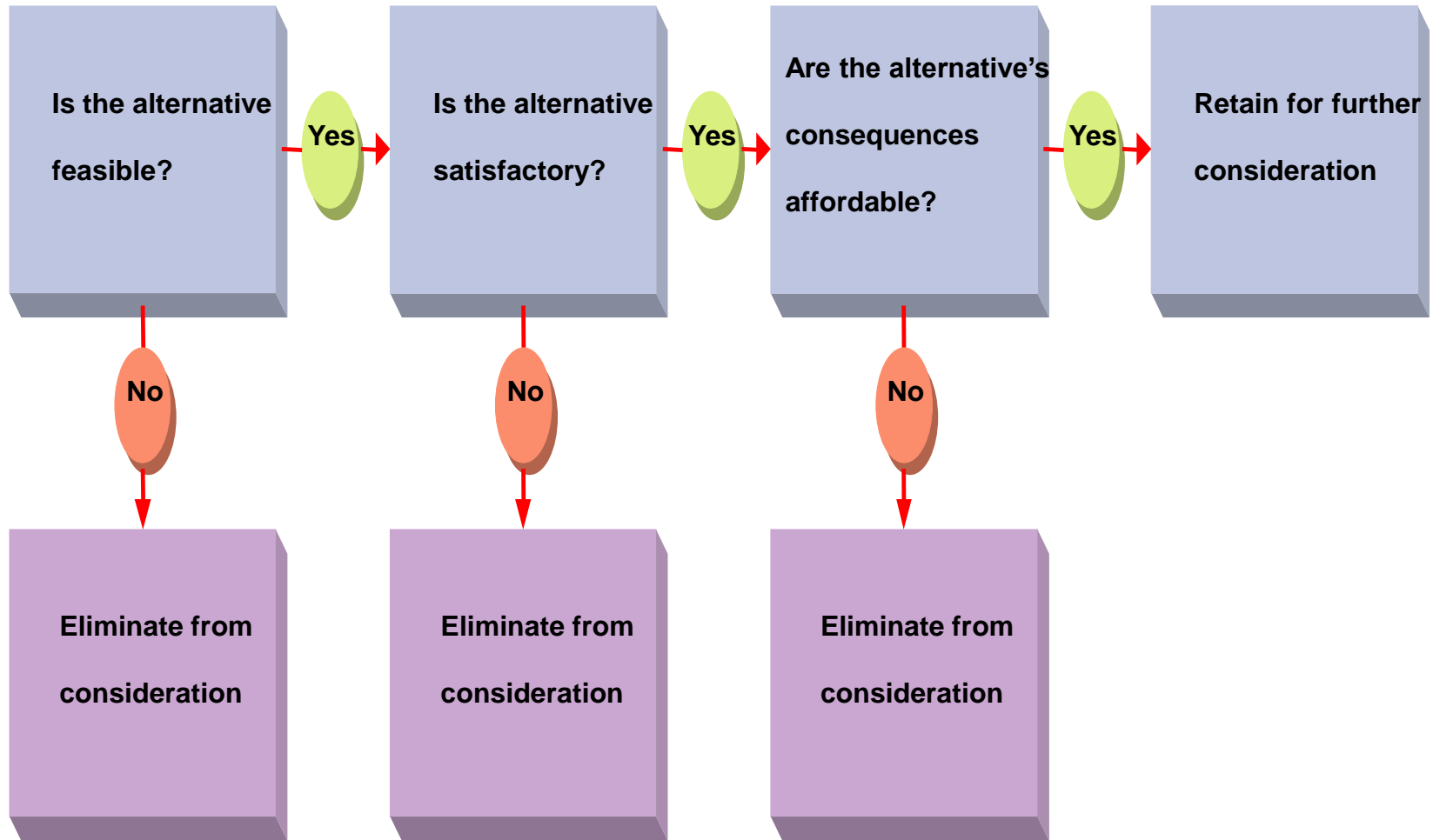
# Steps in the Rational Decision-Making Process

Step	Detail	Example
<b>1. Recognizing and defining the decision situation</b>	<b>Some stimulus indicates that a decision must be made. The stimulus may be positive or negative.</b>	<b>A plant manager sees that employee turnover has increased by 5 percent.</b>
<b>2. Identifying alternatives</b>	<b>Both obvious and creative alternatives are desired. In general, the more important the decision, the more alternatives should be considered.</b>	<b>The plant manager can increase wages, increase benefits, or change hiring standards.</b>
<b>3. Evaluating alternatives</b>	<b>Each alternative is evaluated to determine its feasibility, its satisfactoriness, and its consequences.</b>	<b>Increasing benefits may not be feasible. Increasing wages and changing hiring standards may satisfy all conditions.</b>

# Steps in the Rational Decision-Making Process (cont'd)

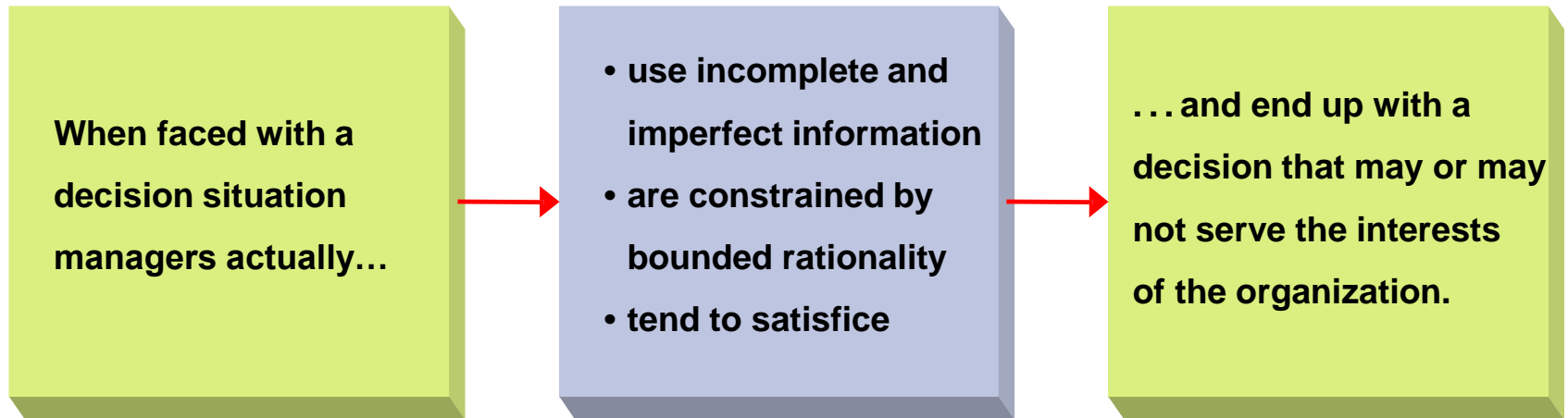
Step	Detail	Example
<b>4. Selecting the best alternative</b>	<b>Consider all situational factors, and choose the alternative that best fits the manager's situation.</b>	<b>Changing hiring standards will take an extended period of time to cut turnover, so increase wages.</b>
<b>5. Implementing the chosen alternative</b>	<b>The chosen alternative is implemented into the organizational system.</b>	<b>The plant manager may need permission from corporate headquarters. The human resource department establishes a new wage structure.</b>
<b>6. Following up and evaluating the results</b>	<b>At some time in the future, the manager should ascertain the extent to which the alternative chosen in step 4 and implemented in step 5 has worked.</b>	<b>The plant manager notes that, six months later, turnover has dropped to its previous level.</b>

# Evaluating Alternatives in the Decision-Making Process



# Behavioral Aspects of Decision Making

- The Administrative Model of Decision Making



# Behavioral Aspects of Decision Making (cont'd)

- Bounded Rationality
  - The concept that decision makers are limited by their values and unconscious reflexes, skills, and habits.
- Satisficing
  - The tendency to search for alternatives only until one is found that meets some minimum standard of sufficiency to resolve the problem.
- Coalition
  - A political force in decision making which consists of an informal alliance of individuals or groups formed to achieve a goal.

# Behavioral Aspects of Decision Making (cont'd)

- Intuition
  - An innate belief about something without conscious consideration.
- Escalation of Commitment
  - A decision maker is staying with a decision even when it appears to be wrong.
- Risk Propensity
  - The extent to which a decision maker is willing to gamble when making a decision.



# Behavioral Aspects of Decision Making (cont'd)

- Ethics and Decision Making
  - Individual ethics (personal beliefs about right and wrong behavior) combine with the organization's ethics to create managerial ethics.
  - Components of managerial ethics:
    - Relationships of the firm to employees
    - Employees to the firm
    - The firm to other economic agents



# Group and Team Decision Making in Organizations

- Forms of Group Decision Making
  - Interacting groups or teams
    - are the most common form of decision-making groups which consists of an existing group or newly formed team interacting and then making a decision.
  - Delphi groups
    - are sometimes used for developing a consensus of expert opinion from a panel of experts who individually contribute through a moderator.
  - Nominal groups
    - are a structured technique designed to generate creative and innovative ideas through the individual contributions of alternatives that are winnowed down through a series of rank-ordering of the alternatives to reach a decision.



# Advantages and Disadvantages of Group and Team Decision Making

Advantages	Disadvantages
<ol style="list-style-type: none"><li data-bbox="285 554 923 631">1. More information and knowledge are available.</li><li data-bbox="285 654 923 731">2. More alternatives are likely to be generated.</li><li data-bbox="285 753 923 831">3. More acceptance of the final decision is likely.</li><li data-bbox="285 853 923 931">4. Enhanced communication of the decision may result.</li><li data-bbox="285 953 923 1031">5. Better decisions generally emerge.</li></ol>	<ol style="list-style-type: none"><li data-bbox="1027 554 1742 674">1. The process takes longer than individual decision making, so it is costlier.</li><li data-bbox="1027 696 1742 773">2. Compromise decisions resulting from indecisiveness may emerge.</li><li data-bbox="1027 796 1742 831">3. One person may dominate the group.</li><li data-bbox="1027 853 1491 888">4. Groupthink may occur.</li></ol>

# Heuristics

- A method of decision making that proceeds along empirical lines, using rules of thumb, to find solutions or answers
- Three general cognitive guides people use intuitively-
  - **Availability:** People sometimes judge an event's likelihood by testing it against their memories.
  - **Representativeness:** People also tend to assess the likelihood of an occurrence by trying to match it with a preexisting category.
  - **Anchoring & Adjustment:** people start with some initial value, then make adjustments to that value in order to arrive at a final decision.

# Managing Group and Team Decision-Making Processes

- Managers Can Promote the Effectiveness of Group and Team Decision Making
  - Being aware of the pros and cons of having a group or team make a decision.
  - Setting deadlines for when decisions must be made.
  - Avoid problems with dominance by managing group membership.
  - Have each group member individually critically evaluate all alternatives.
  - As a manager, do not make your position known too early.
  - Hold a follow-up meeting to recheck the decision.

# Decision-Making Styles

- Linear thinking style
  - A person's preference for using external data and facts and processing this information through rational, logical thinking
- Nonlinear thinking style
  - A person's preference for internal sources of information and processing this information with internal insights, feelings, and hunches

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## Exhibit 6-11 Common Decision-Making Errors and Biases

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# Decision-Making Biases and Errors

- Heuristics
  - Using “rules of thumb” to simplify decision making.
- Overconfidence Bias
  - Holding unrealistically positive views of oneself and one’s performance.
- Immediate Gratification Bias
  - Choosing alternatives that offer immediate rewards and that to avoid immediate costs.

# Decision-Making Biases and Errors

- Anchoring Effect
  - Fixating on initial information and ignoring subsequent information.
- Selective Perception Bias
  - Selecting organizing and interpreting events based on the decision maker's biased perceptions.
- Confirmation Bias
  - Seeking out information that reaffirms past choices and discounting contradictory information.

# Decision-Making Biases and Errors (cont'd)

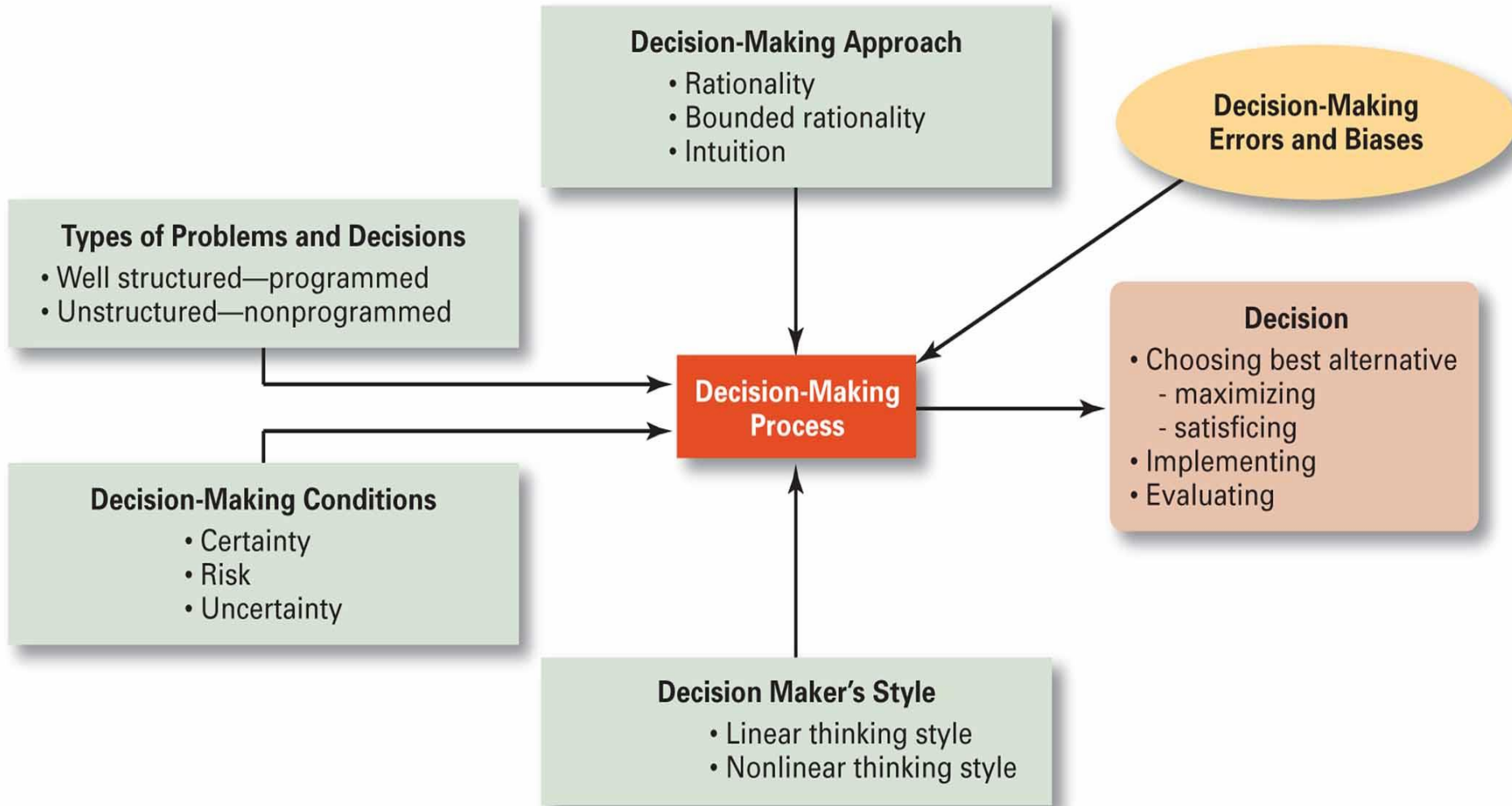
- Framing Bias
  - Selecting and highlighting certain aspects of a situation while ignoring other aspects.
- Availability Bias
  - Losing decision making objectivity by focusing on the most recent events.
- Representation Bias
  - Drawing analogies and seeing identical situations when none exist.
- Randomness Bias
  - Creating unfounded meaning out of random events.



# Decision-Making Biases and Errors

- Sunk Costs Errors
  - Forgetting that current actions cannot influence past events and relate only to future consequences.
- Self-Serving Bias
  - Taking quick credit for successes and blaming outside factors for failures.
- Hindsight Bias
  - Mistakenly believing that an event could have been predicted once the actual outcome is known (after-the-fact).

## Exhibit 6-12 Overview of Managerial Decision Making



# Characteristics of an Effective Decision-Making Process

- It focuses on what is important.
- It is logical and consistent.
- It acknowledges both subjective and objective thinking and blends analytical with intuitive thinking.
- It requires only as much information and analysis as is necessary to resolve a particular dilemma.
- It encourages and guides the gathering of relevant information and informed opinion.
- It is straightforward, reliable, easy to use, and flexible.