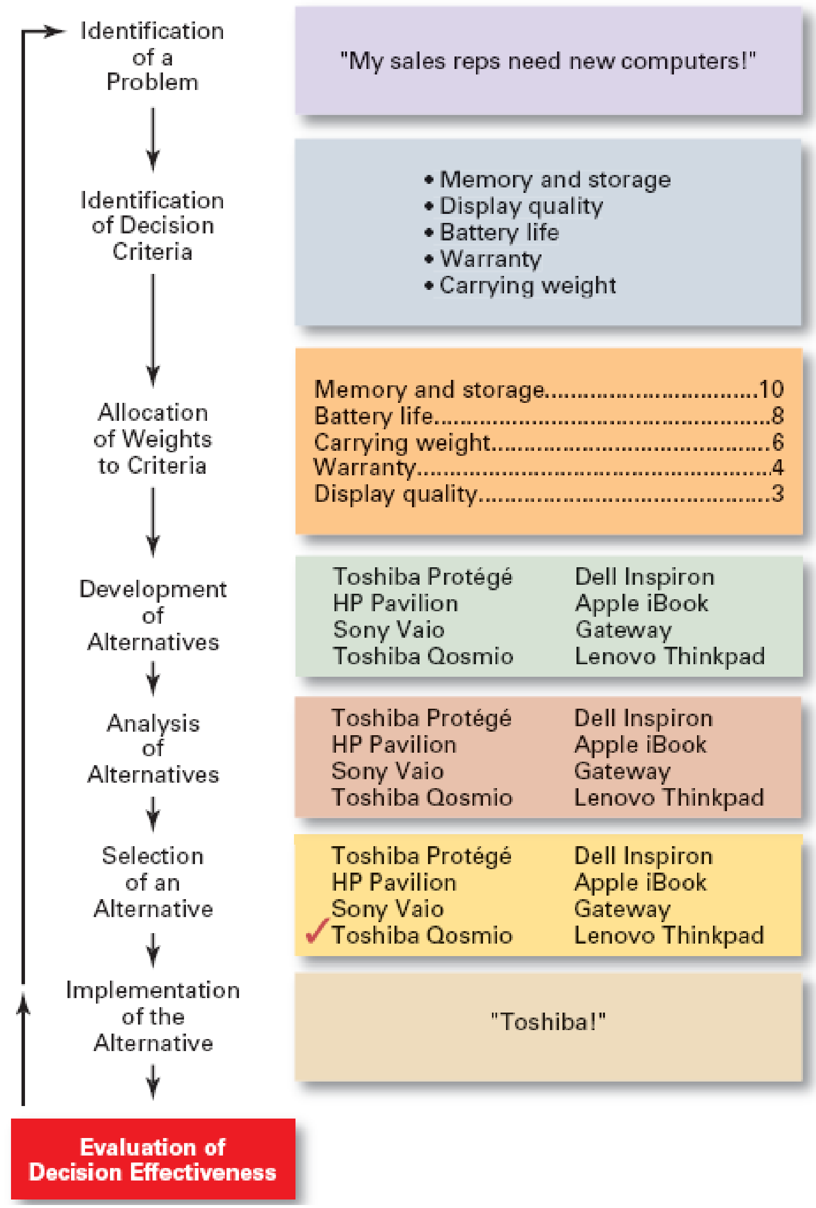
Decision Making

- Decision
  - Making a choice from two or more alternatives.
- The Decision-Making Process
  - Identifying a problem and decision criteria and allocating weights to the criteria.
  - Developing, analyzing, and selecting an alternative that can resolve the problem.
  - Implementing the selected alternative.
  - Evaluating the decision's effectiveness.

Exhibit 6–1
The Decision-Making Process



Step 1: Identifying the Problem

- Problem
  - A discrepancy between an existing and desired state of affairs.
- Characteristics of Problems
  - A problem becomes a problem when a manager becomes aware of it.
  - There is pressure to solve the problem.
  - The manager must have the authority, information, or resources needed to solve the problem.

Step 2: Identifying Decision Criteria

- Decision criteria are factors that are important (relevant) to resolving the problem.
  - Costs that will be incurred (investments required)
  - Risks likely to be encountered (chance of failure)
  - Outcomes that are desired (growth of the firm)

Step 3: Allocating Weights to the Criteria

- Decision criteria are not of equal importance:
  - Assigning a weight to each item places the items in the correct priority order of their importance in the decision making process.

Exhibit 6–2 Criteria and Weights for Computer Replacement Decision

Criterion	Weight
Memory and Storage	10
Battery life	8
Carrying Weight	6
Warranty	4
Display Quality	3

Step 4: Developing Alternatives

- Identifying viable alternatives
  - Alternatives are listed (without evaluation) that can resolve the problem.

Step 5: Analyzing Alternatives

- Appraising each alternative's strengths and weaknesses
  - An alternative's appraisal is based on its ability to resolve the issues identified in steps 2 and 3.

Exhibit 6–3 Assessed Values of Laptop Computers Using Decision Criteria

	Memory and Storage	Battery Life	Carrying Weight	Warranty	Display Quality
Toshiba Protégé S100	10	3	10	8	5
Dell Inspiron 700m	8	7	7	8	7
HP Pavilion zd8000	8	5	7	10	10
Apple iBook	8	7	7	8	7
Sony Vaio VGN-FS790	7	8	7	8	7
Gateway NX850X	8	3	6	10	8
Toshiba QosmioG15-AV501	10	7	8	6	7
Lenovo Thinkpad R52	4	10	4	8	10

Step 6: Selecting an Alternative

- Choosing the best alternative
  - The alternative with the highest total weight is chosen.

Step 7: Implementing the Alternative

- Putting the chosen alternative into action.
  - Conveying the decision to and gaining commitment from those who will carry out the decision.

Exhibit 6–4 Evaluation of Laptop Alternatives Against Weighted Criteria

	Memory and Storage	Battery Life	Carrying Weight	Warranty	Display Quality	Total
Toshiba Protégé S100	100	24	60	32	15	231
Dell Inspiron 700m	80	56	42	32	21	231
HP Pavilion zd8000	80	40	42	40	30	232
Apple iBook	80	56	42	32	21	231
Sony Vaio VGN-FS790	70	64	42	32	21	229
Gateway NX850X	80	24	36	40	24	204
Toshiba QosmioG15-AV501	100	56	48	24	21	249
Lenovo Thinkpad R52	40	80	24	32	30	206

Step 8: Evaluating the Decision's Effectiveness

- The soundness of the decision is judged by its outcomes.
  - How effectively was the problem resolved by outcomes resulting from the chosen alternatives?
  - If the problem was not resolved, what went wrong?

Making Decisions

- Rationality
  - Managers make consistent, value-maximizing choices with specified constraints.
  - Assumptions are that decision makers:
    - Are perfectly rational, fully objective, and logical.
    - Have carefully defined the problem and identified all viable alternatives.
    - Have a clear and specific goal
    - Will select the alternative that maximizes outcomes in the organization’s interests rather than in their personal interests.

Exhibit 6–6 Assumptions of Rationality

- The problem is clear and unambiguous.
- A single, well-defined goal is to be achieved.
- All alternatives and consequences are known.
- Preferences are clear.
- Preferences are constant and stable.
- No time or cost constraints exist.
- Final choice will maximize payoff.

Lead to

Rational Decision Making

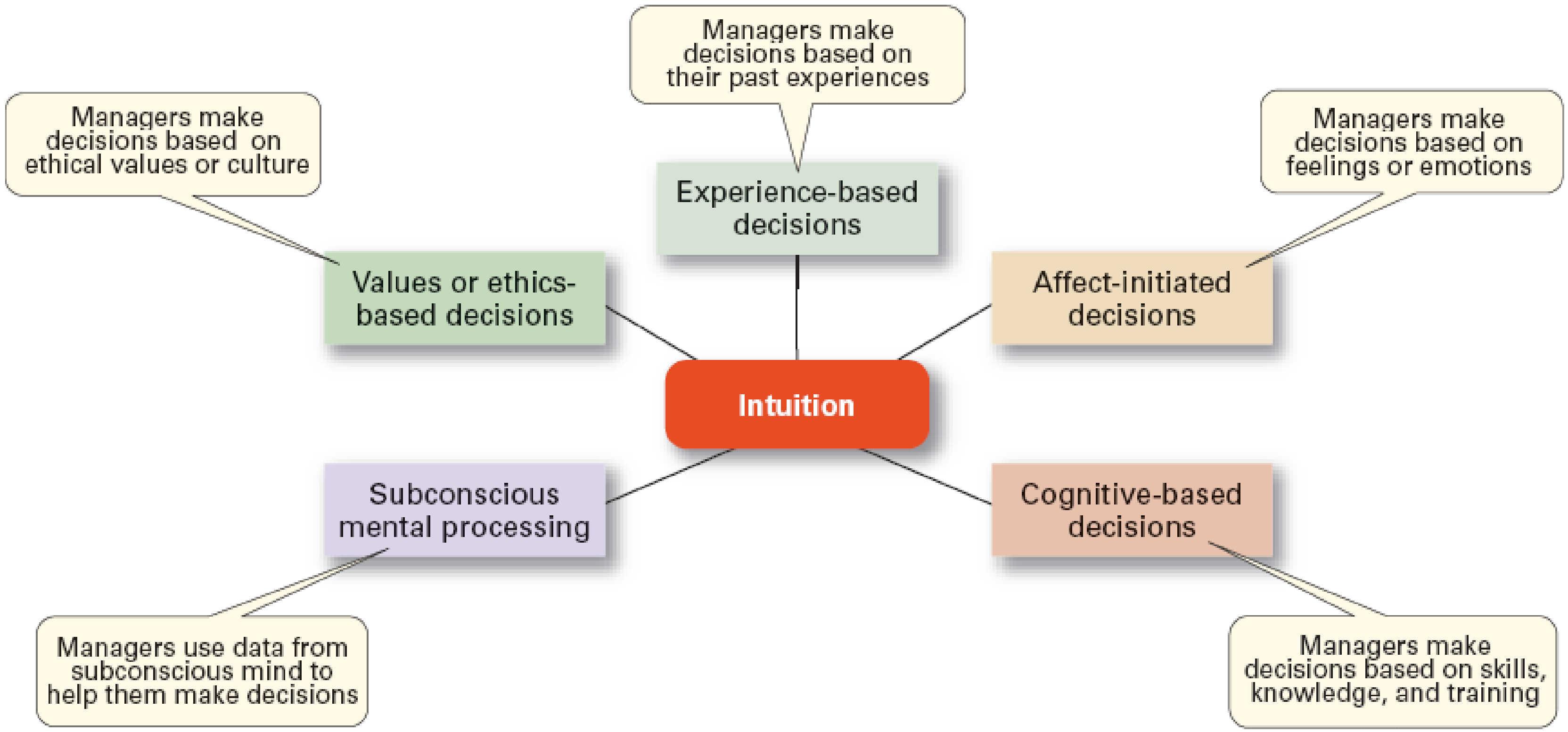
Making Decisions (cont’d)

- Bounded Rationality
  - Managers make decisions rationally, but are limited (bounded) by their ability to process information.
  - Assumptions are that decision makers:
    - Will not seek out or have knowledge of all alternatives
    - Will ***satisfice***—choose the first alternative encountered that satisfactorily solves the problem—rather than maximize the outcome of their decision by considering all alternatives and choosing the best.
  - Influence on decision making
    - Escalation of commitment: an increased commitment to a previous decision despite evidence that it may have been wrong.

The Role of Intuition

- Intuitive decision making
  - Making decisions on the basis of experience, feelings, and accumulated judgment.

Exhibit 6–7 What is Intuition?



Source: Based on L. A. Burke and M. K. Miller, “Taking the Mystery Out of Intuitive Decision Making,” *Academy of Management Executive*, October 1999, pp. 91–99.

Types of Problems and Decisions

- Structured Problems
  - Involve goals that clear.
  - Are familiar (have occurred before).
  - Are easily and completely defined—information about the problem is available and complete.
- Programmed Decision
  - A repetitive decision that can be handled by a routine approach.

Types of Programmed Decisions

- Policy
  - A general guideline for making a decision about a structured problem.
- Procedure
  - A series of interrelated steps that a manager can use to respond (applying a policy) to a structured problem.
- Rule
  - An explicit statement that limits what a manager or employee can or cannot do.

Policy, Procedure, and Rule Examples

- Policy
  - Accept all customer-returned merchandise.
- Procedure
  - Follow all steps for completing merchandise return documentation.
- Rules
  - Managers must approve all refunds over $50.00.
  - No credit purchases are refunded for cash.

Problems and Decisions (cont'd)

- Unstructured Problems
  - Problems that are new or unusual and for which information is ambiguous or incomplete.
  - Problems that will require custom-made solutions.
- Nonprogrammed Decisions
  - Decisions that are unique and nonrecurring.
  - Decisions that generate unique responses.

Exhibit 6–8 Programmed versus Nonprogrammed Decisions

Characteristics	Programmed Decisions	Nonprogrammed Decisions
Type of problem	Structured	Unstructured
Managerial level	Lower levels	Upper levels
Frequency	Repetitive, routine	New, unusual
Information	Readily available	Ambiguous or incomplete
Goals	Clear, specific	Vague
Time frame for solution	Short	Relatively long
Solution relies on	Procedures, rules, policies	Judgment and creativity

Decision-Making Conditions

- Certainty
  - A situation in which a manager can make an accurate decision because the outcome of every alternative choice is known.
- Risk
  - A situation in which the manager is able to estimate the likelihood (probability) of outcomes that result from the choice of particular alternatives.

Decision-Making Conditions

- Uncertainty
  - Limited information prevents estimation of outcome probabilities for alternatives associated with the problem and may force managers to rely on intuition, hunches, and “gut feelings”.
    - **Maximax:** the optimistic manager’s choice to maximize the maximum payoff
    - **Maximin:** the pessimistic manager’s choice to maximize the minimum payoff
    - **Minimax:** the manager’s choice to minimize maximum regret.

Decision-Making Styles

- Dimensions of Decision-Making Styles
  - Ways of thinking
    - Rational, orderly, and consistent
    - Intuitive, creative, and unique
  - Tolerance for ambiguity
    - Low tolerance: require consistency and order
    - High tolerance: multiple thoughts simultaneously

Decision-Making Styles (cont'd)

- Types of Decision Makers
  - Directive
    - Use minimal information and consider few alternatives.
  - Analytic
    - Make careful decisions in unique situations.
  - Conceptual
    - Maintain a broad outlook and consider many alternatives in making decisions.
  - Behavioral
    - Avoid conflict by working well with others and being receptive to suggestions.

Exhibit 6–12 Decision-Making Matrix

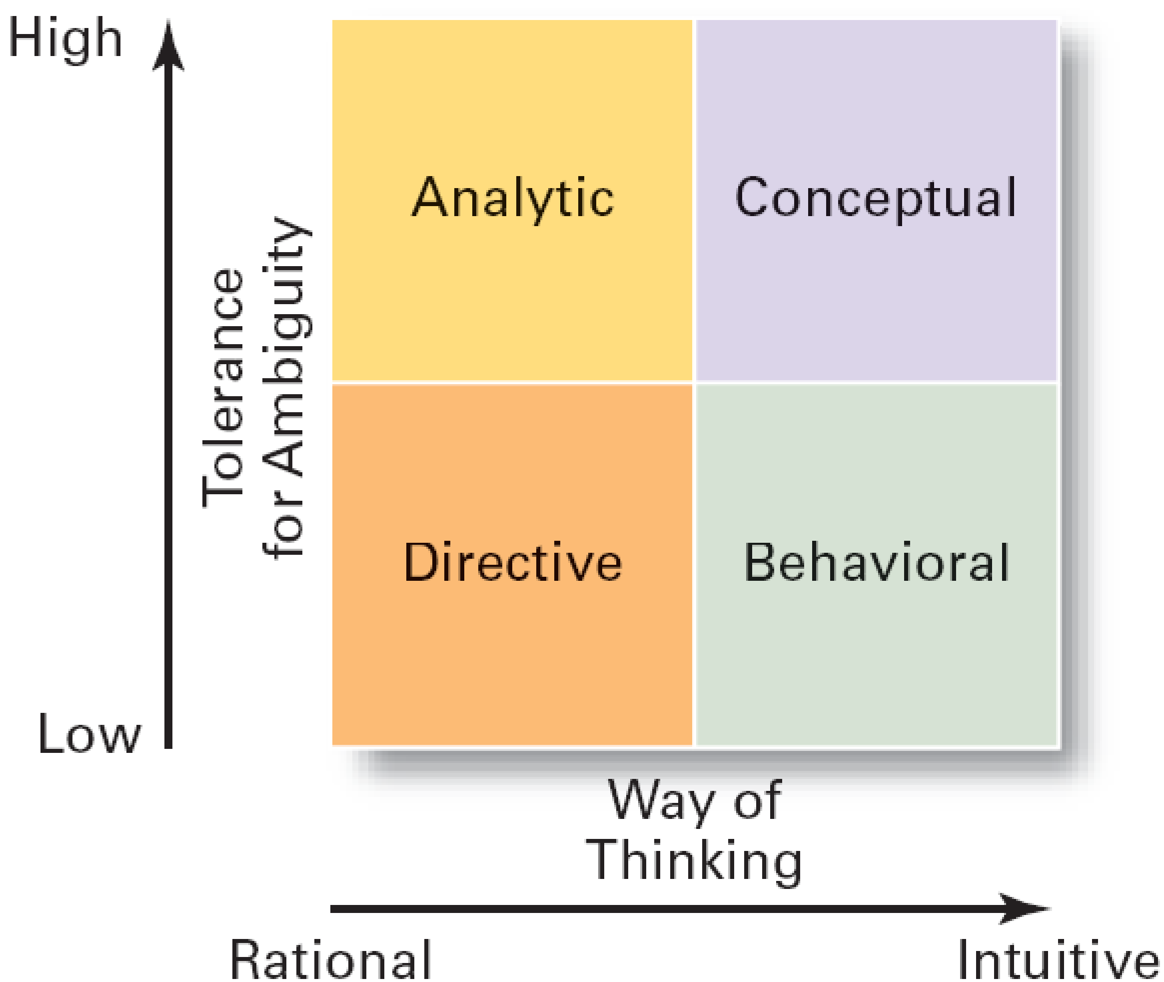
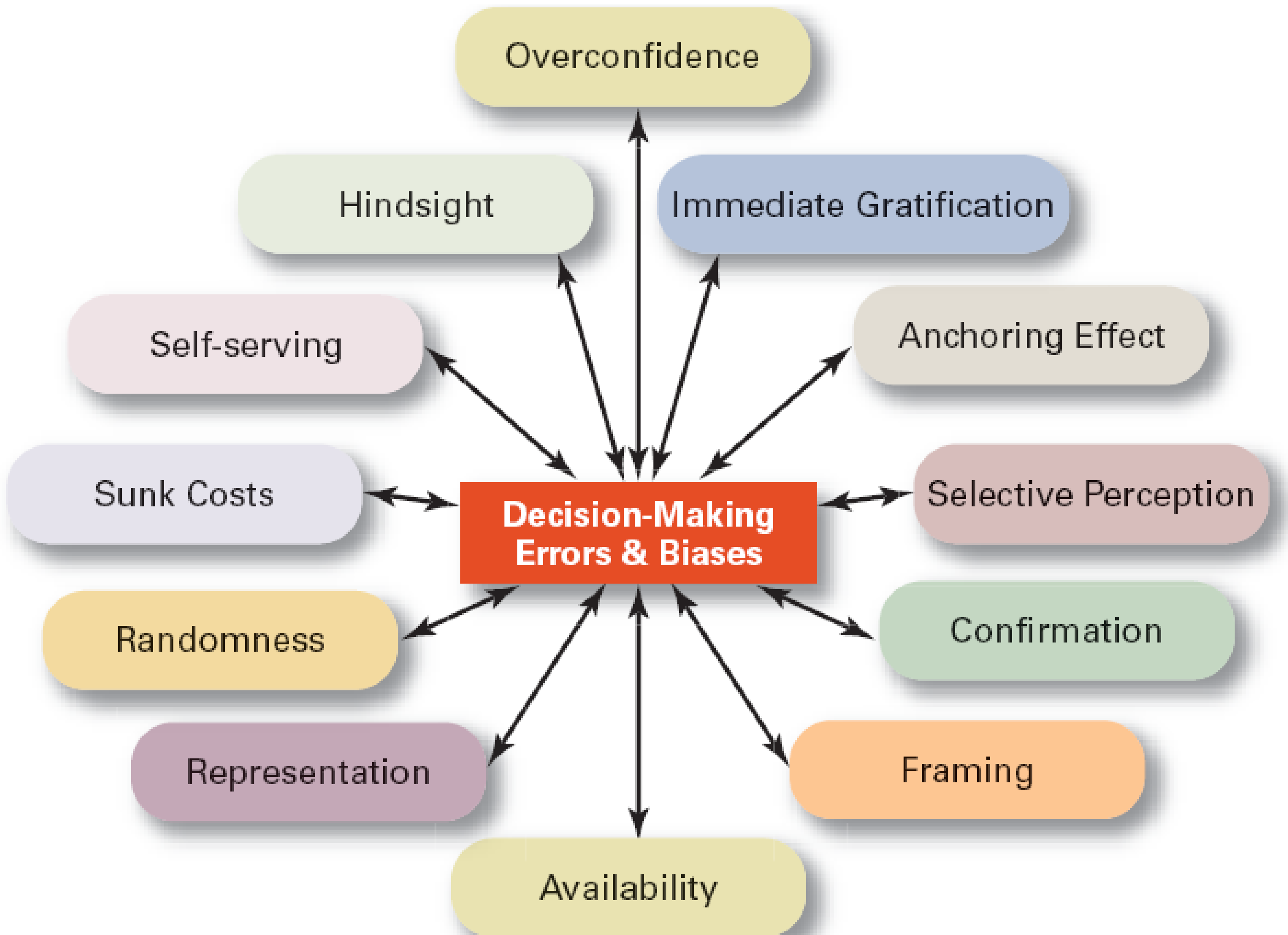


Exhibit 6–13 Common Decision-Making Errors and Biases



Decision-Making Biases and Errors

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

Decision-Making Biases and Errors (cont'd)

- 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.

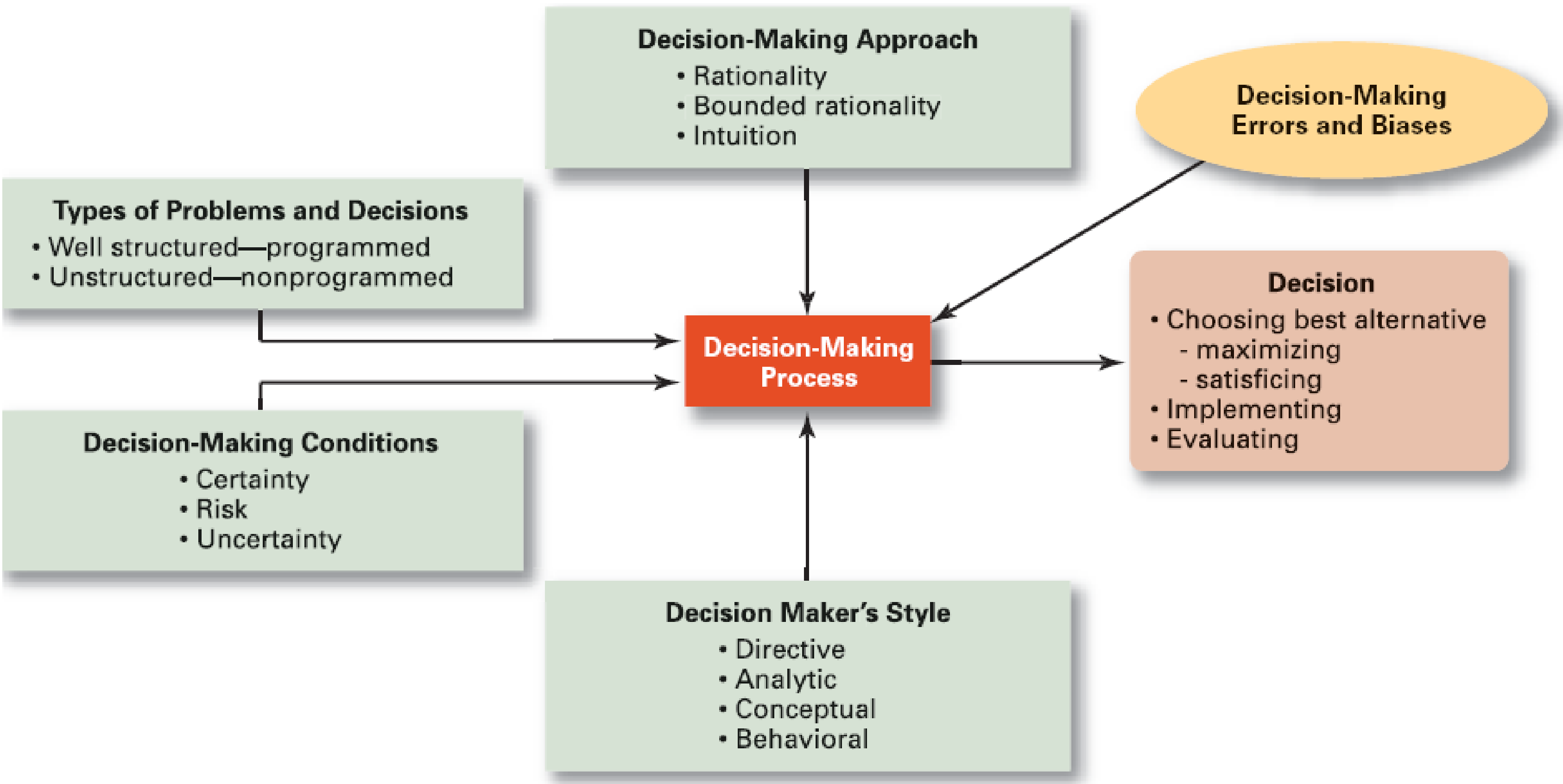
Decision-Making Biases and Errors (cont'd)

- 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 (cont'd)

- 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 6–14 Overview of Managerial Decision Making



What Is Planning?

- Planning
  - A primary managerial activity that involves:
    - Defining the organization’s goals
    - Establishing an overall strategy for achieving those goals
    - Developing plans for organizational work activities.
  - Types of planning
    - **Informal:** not written down, short-term focus; specific to an organizational unit.
    - **Formal:** written, specific, and long-term focus, involves shared goals for the organization.

Why Do Managers Plan?

- Purposes of Planning
  - Provides direction
  - Reduces uncertainty
  - Minimizes waste and redundancy
  - Sets the standards for controlling

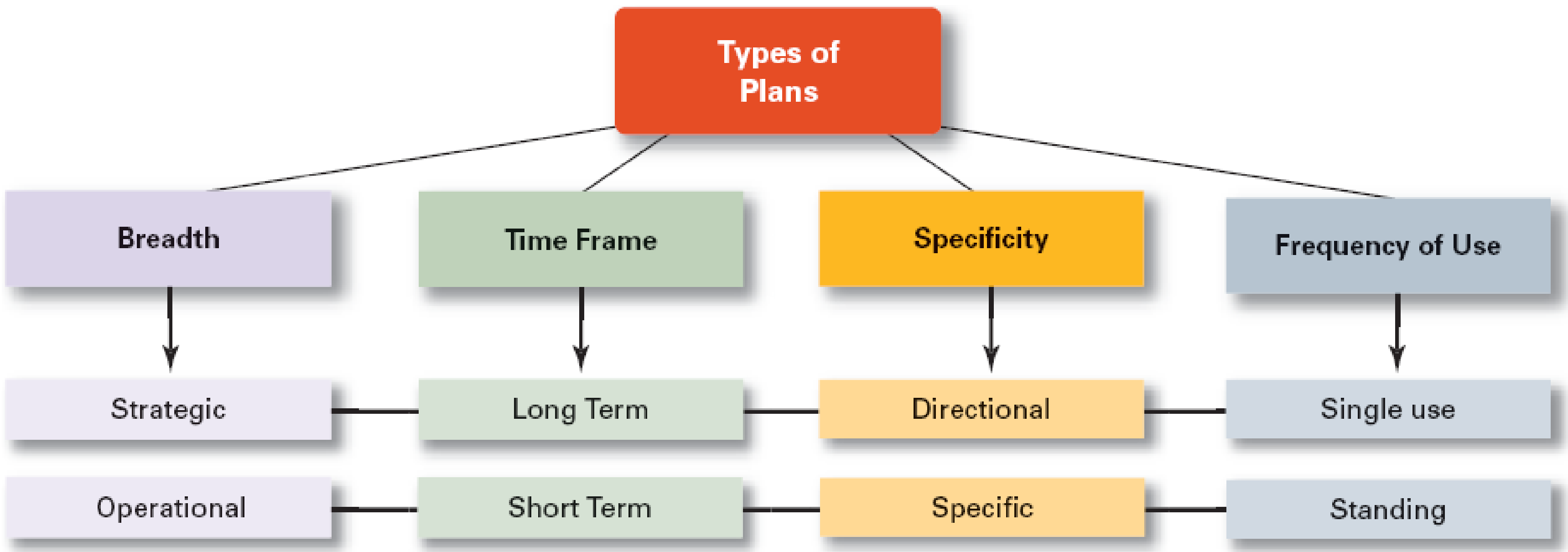
How Do Managers Plan?

- Elements of Planning
  - Goals (also Objectives)
    - Desired outcomes for individuals, groups, or entire organizations
    - Provide direction and evaluation performance criteria
  - Plans
    - Documents that outline how goals are to be accomplished
    - Describe how resources are to be allocated and establish activity schedules

Types of Goals

- Financial Goals
  - Are related to the expected internal financial performance of the organization.
- Strategic Goals
  - Are related to the performance of the firm relative to factors in its external environment (e.g., competitors).
- Stated Goals versus Real Goals
  - Broadly-worded official statements of the organization (intended for public consumption) that may be irrelevant to its real goals (what actually goes on in the organization).

Exhibit 7–2 Types of Plans



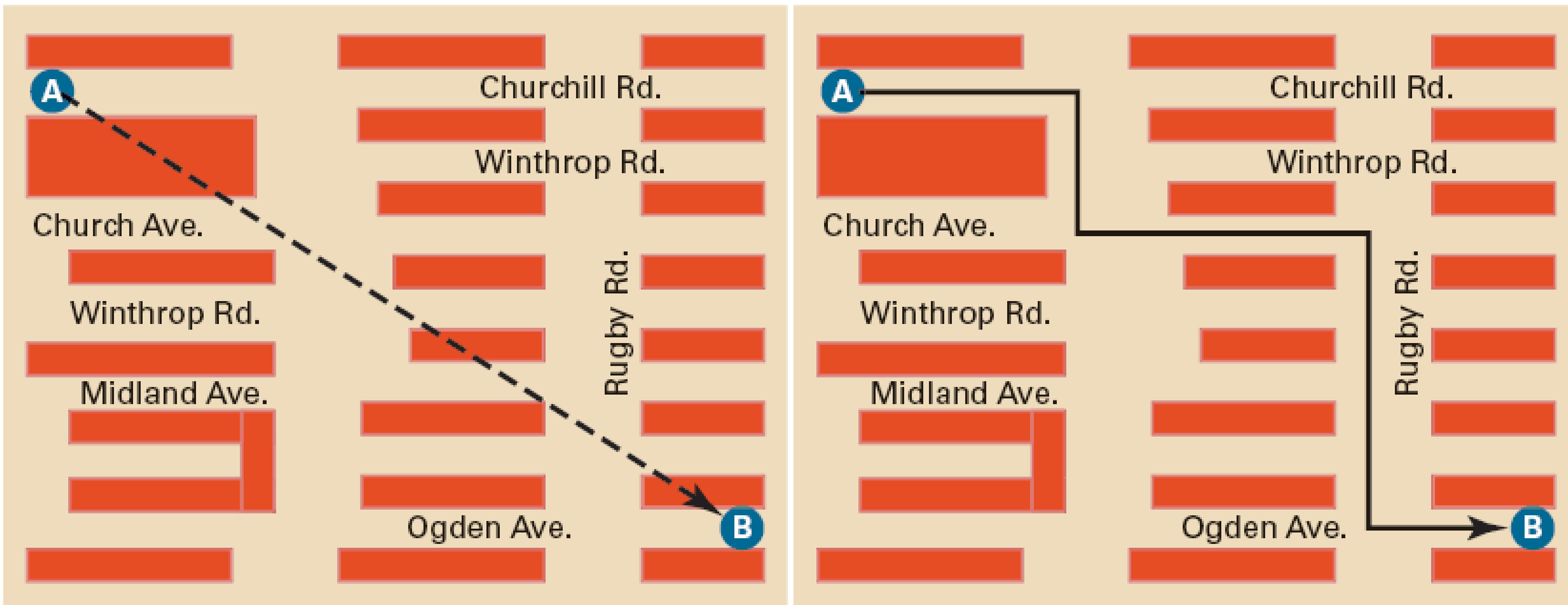
Types of Plans

- Strategic Plans
  - Apply to the entire organization.
  - Establish the organization's overall goals.
  - Seek to position the organization in terms of its environment.
  - Cover extended periods of time.
- Operational Plans
  - Specify the details of how the overall goals are to be achieved.
  - Cover short time period.

Types of Plans (cont'd)

- Long-Term Plans
  - Plans with time frames extending beyond three years
- Short-Term Plans
  - Plans with time frames on one year or less
- Specific Plans
  - Plans that are clearly defined and leave no room for interpretation
- Directional Plans
  - Flexible plans that set out general guidelines, provide focus, yet allow discretion in implementation.

Exhibit 7–3 Specific Versus Directional Plans



Directional Plans

Specific Plans

Types of Plans (cont'd)

- Single-Use Plan
  - A one-time plan specifically designed to meet the need of a unique situation.
- Standing Plans
  - Ongoing plans that provide guidance for activities performed repeatedly.

Steps in Goal Setting

1. Review the organization's mission statement.

    Do goals reflect the mission?

2. Evaluate available resources.

    Are resources sufficient to accomplish the mission?

3. Determine goals individually or with others.

    Are goals specific, measurable, and timely?

4. Write down the goals and communicate them.

    Is everybody on the same page?

5. Review results and whether goals are being met.

    What changes are needed in mission, resources, or goals?

Developing Plans

- Contingency Factors in A Manager's Planning
  - Manager's level in the organization
    - Strategic plans at higher levels
    - Operational plans at lower levels
  - Degree of environmental uncertainty
    - Stable environment: specific plans
    - Dynamic environment: specific but flexible plans
  - Length of future commitments
    - **Commitment Concept:** current plans affecting future commitments must be sufficiently long-term to meet those commitments.

Exhibit 7–7 Planning in the Hierarchy of Organizations