Chapter 2
Making Decisions

In this chapter, students will explore the importance of decision-making to managers and learn how to make effective decisions.

LEARNING OBJECTIVES

1. Describe the eight steps in the decision-making process.
2. Explain the four ways managers make change.
3. Classify decisions and decision-making conditions.
4. Describe different decision-making styles and discuss how biases affect decision making.
5. Identify effective decision-making techniques.

It's Your Career

Be a Better Decision Maker

Decisions are an essential part of your life, personally and professionally. Each and every day is a series of decisions, from minor to significant, and everything in between. Good decision-making is a skill, and like any skill, it can be learned and improved. So, how can you improve your decision-making skills? The chapter outlines four things students need to know; each numbered item will be described further in the chapter:

1. Know, understand, and use the decision-making process. Yes, there is a "method" to making decisions that takes you from identifying problems to evaluating the effectiveness of your decision. It works. Know it. Understand it. Use it.
2. Know when and how to use rational or intuitive decision-making or both. Different types of problems and different types of conditions will influence how you approach making a decision.
3. Know your decision-making style. Not everyone approaches decision making the same way. But you do need to recognize how you're most comfortable when making a decision—and how others around you make decisions.
4. Know, recognize, and understand the biases and errors that may influence your decision-making. Biases and errors can creep into your decision making. You may think you're making good decisions and may not even recognize you're doing these things. Yet, these errors and biases are likely undermining your ability to make good judgments and good choices. Beware! Be aware!

CHAPTER OUTLINE

2.1 THE DECISION-MAKING PROCESS

A **decision** is a choice made from two or more alternatives. The **decision-making process** is a set of eight steps that include identifying a problem, selecting an alternative, and evaluating the decision's effectiveness. (See **Exhibit 2-1** for an illustration of the decision-making process.)

A. Step 1: *Identify a problem.* A **problem** is a discrepancy between an existing and a desired condition. In order to identify a problem, you, as a manager, should recognize and understand the three characteristics of problems:
   1. You must be aware of the problem. Be sure to identify the actual problem rather than a symptom of the problem.
   2. You must be under pressure to act. A true problem puts pressure on the manager to take action; a problem without pressure to act is a problem that can be postponed.
   3. You must have the authority or resources to act. When managers recognize a problem and are under pressure to take action but do not have the necessary resources, they usually feel that unrealistic demands are being put upon them.

B. Step 2: *Identify decision criteria*. **Decision criteria** are criteria that define what is relevant in a decision.

C. Step 3: *Allocate weights to the criteria*. The criteria identified in Step 2 of the decision-making process do not have equal importance, so the decision-maker must assign a weight to each of the items in order to give each item accurate priority in the decision. **Exhibit 2-2** lists the criteria and weights for Amanda's purchase decision for new computers.

D. Step 4: *Developing alternatives*. The decision-maker must now identify viable alternatives that could resolve the problem.

E. Step 5: *Analyze alternatives*. Each of the alternatives must now be critically analyzed by evaluating it against the criteria established in Steps 2 and 3. **Exhibit 2-3** shows the values that Amanda assigned to each of her alternatives for a new computer. **Exhibit 2-4** reflects the weighting for each alternative, as illustrated in **Exhibits 2-2** and **2-3**.

F. Step 6: *Select an alternative*. This step to select the best alternative from among those identified and assessed is critical. If criteria weights have been used, the decision-maker simply selects the alternative that received the highest score in Step 5.

G. Step 7: *Implement the alternative*. The selected alternative must be implemented by effectively communicating the decision to the individuals who will be affected by it and winning their commitment to the decision.

H. Step 8: *Evaluate decision effectiveness*. This last step in the decision-making process assesses the result of the decision to determine whether or not the problem has been resolved.

2.2 MANAGERS MAKING DECISIONS

At this point in the study of Chapter 2, students will learn about the manager as a decision-maker and how decisions are actually made in organizations. **Exhibit 2-5** shows how decision-making fits into the four functions of management.

In this section, students examine how decisions are made, the types of problems and decisions faced by real-life managers, the conditions under which managers make decisions, and decision-making styles.

A. **Making Decisions: Rationality.** Managerial decision-making is assumed to be rational—that is, making choices that are consistent and value-maximizing within specified constraints. If a manager could be perfectly rational, he or she would be *completely* logical and objective.

1. Rational decision-making assumes that the manager is making decisions in the best interests of the *organization*, not in his or her own interests.
2. The assumptions of rationality can be met **if** the manager is faced with a simple problem in which (1) goals are clear and alternatives limited, (2) time pressures are minimal and the cost of finding and evaluating alternatives is low, (3) the organizational culture supports innovation and risk taking, and (4) outcomes are concrete and measurable.

B. **Making Decisions: Bounded Rationality.** In spite of these limits to perfect rationality, managers are expected to be rational as they make decisions. Because the *perfectly* rational model of decision-making isn't realistic, managers tend to operate under assumptions of bounded rationality, which is decision-making behavior that is rational, but limited (bounded) by an individual's ability to process information.
1. Under bounded rationality, managers make **satisficing** decisions, in which they accept solutions that are "good enough."
2. Managers' decision-making may be strongly influenced by the organization's culture, internal politics, power considerations, and by a phenomenon called **escalation of commitment—**an increased commitment to a previous decision despite evidence that it may have been wrong.

C. **Making Decisions: The Role of Intuition.** Managers also regularly use their intuition. Intuitive decision-making is a subconscious process of making decisions on the basis of experience and accumulated judgment. **Exhibit 2-6** describes the five different aspects of intuition.
1. Making decisions on the basis of gut feeling doesn't necessarily happen independently of rational analysis; the two complement each other.
2. Although intuitive decision-making will not replace the rational decision-making process, it does play an important role in managerial decision-making.

D. **Making Decisions: The Role of Evidence-Based Management.** The premise behind **evidence-based management (EBMgt)** is that any decision-making process is likely to be enhanced through the use of relevant and reliable evidence. EBMgt promotes the use of the best available evidence to improve management practice.
1. The four essential elements of EBMgt are the decision-maker's expertise and judgment; external evidence that's been evaluated by the decision-maker; opinions, preferences, and values of those who have a stake in the decision; and relevant organizational (internal) factors such as context, circumstances, and organizational members.
2. The strength or influence of each of these elements on a decision will vary with each decision.
3. The key for managers is to recognize and understand the mindful, conscious choice as to which element(s) are most important and should be emphasized in making a decision.

2.3 TYPES OF DECISIONS AND DECISION-MAKING CONDITIONS

A. **Types of Decisions.** Managers encounter different types of problems and use different types of decisions to resolve them.

1. **Structured problems** are straightforward, familiar, and easily defined. In dealing with structured problems, a manager may use a **programmed decision,** which is a repetitive decision that can be handled by a routine approach. Managers rely on three types of programmed decisions:
    a. A **procedure** is a series of interrelated sequential steps that can be used to respond to a structured problem.
    b. A **rule** is an explicit statement that tells managers what they can or cannot do.
    c. A **policy** is a guideline for making decisions.
2. **Unstructured problems** are problems that are new or unusual and for which information is ambiguous or incomplete. These problems are best handled by a **nonprogrammed decision** that is a unique decision that requires a custom-made solution.
3. **Exhibit 2-7**describes differences between programmed versus nonprogrammed decisions.
    a. At higher levels in the organizational hierarchy, managers deal more often with difficult, unstructured problems and make nonprogrammed decisions in attempting to resolve these problems and challenges.
    b. Lower-level managers handle routine decisions themselves, using programmed decisions. They let upper-level managers handle unusual or difficult decisions.

B. **Decision-Making Conditions.**

1. **Certainty** is a situation in which a manager can make accurate decisions because all outcomes are known. Few managerial decisions are made under the condition of certainty.
2. More common is the situation of **risk,** in which the decision-maker is able to estimate the likelihood of certain outcomes. **Exhibit 2-8** shows an example of how a manager might make decisions using “expected value,” considering the conditions of risk.

FUTURE VISION: Who Makes the Decisions, Person or Machine?

Consumers with E-book readers may be surprised that the information they download may be monitored by publishers and retailers. Such information can be a treasure for managers who need up to date information in order to make decisions. The latest decision software will go beyond simple tracking and storing of data to learn and pick out patterns of behavior. This intelligent software will have many managerial applications for decision-making including health care and human resources.

The following discussion questions are posed:
Talk About It 1: What steps of the decision-making process will technology be most useful for? Explain.

Talk About It 2: How can technology be a "tool" for managerial decision-making?

Student answers to these questions will vary.

3. **Uncertainty** is a situation in which the decision-maker is not certain and cannot even make reasonable probability estimates concerning outcomes of alternatives.
    a. The choice of alternative is influenced by the limited amount of information available to the decision-maker.
    b. It's also influenced by the psychological orientation of the decision-maker.
        1) An optimistic manager will follow a *maximax* choice, maximizing the maximum possible payoff.
        2) A pessimistic manager will pursue a *maximin* choice, maximizing the minimum possible payoff. (see **Exhibit 2-9)**
        3) The manager who desires to minimize the maximum "regret" will opt for a *minimax* choice. (see **Exhibit 2-10)**

LEADER MAKING A DIFFERENCE

Elon Musk is not your typical CEO. In 2002, he sold his second Internet startup, PayPal, to eBay for $1.5 billion. Currently, Musk is CEO of Space Exploration Technologies (SpaceX) and Tesla Motors, and chairman and largest shareholder of SolarCity, an energy technology company. Each of these ventures has transformed (or is transforming) an industry: PayPal—Internet payments; Tesla—automobiles; SpaceX—aeronautics; and SolarCity—energy. As a decision-maker, Musk deals mostly with unstructured problems in risky conditions. However, like other business innovators, Musk is comfortable with that and in pursuing what many might consider "crazy" idea territory. His genius has been compared to that of the late Steve Jobs and Fortune magazine named him the 2013 Businessperson of the Year.

What can you learn from this leader making a difference?

2.4 DECISION-MAKING STYLES

Managers have different styles in making decisions and solving problems. One perspective proposes that people differ along two dimensions in the way they approach decision-making.

A. **Linear-Nonlinear Thinking Profile**

1. Research shows that an individual's thinking style reflects two dimensions: (1) the source of information you tend to use, and (2) how you process that information (linear—rational, logical, analytical; or nonlinear—intuitive, creative, insightful).
2. These four dimensions are collapsed into two styles. The **linear thinking style** is characterized by a person's preference for using external data and facts and processing this information through rational, logical thinking to guide decisions and actions. The **nonlinear thinking style** is characterized by a preference for internal sources of information and processing this information with internal insights, feelings, and hunches to guide decisions and actions.

B. **Decision-Making Biases and Errors**

Managers use different styles and "rules of thumb" (**heuristics**) to simplify their decision-making. See **Exhibit 2-11** for the common decision-making biases.

1. *Overconfidence bias* occurs when decision-makers tend to think that they know more than they do or hold unrealistically positive views of themselves and their performance.
2. *Immediate gratification bias* describes decision-makers who tend to want immediate rewards and avoid immediate costs.
3. The *anchoring effect* describes when decision-makers fixate on initial information as a starting point and then, once set, fail to adequately adjust for subsequent information.
4. *Selective perception bias* occurs when decision-makers selectively organize and interpret events based on their biased perceptions.
5. *Confirmation bias* occurs when decision-makers seek out information that reaffirms their past choices and discount information that contradicts their past judgments.
6. *Framing bias* occurs when decision-makers select and highlight certain aspects of a situation while excluding others.
7. *Availability bias* is seen when decision-makers tend to remember events that are the most recent and vivid in their memory.
8. Decision-makers who show *representation bias* assess the likelihood of an event based on how closely it resembles other events or sets of events.
9. *Randomness bias* describes the effect when decision-makers try to create meaning out of random events.
10. The s*unk costs error* is when a decision-maker forgets that current choices cannot correct the past. Instead of ignoring sunk costs, the decision-maker cannot forget them. In assessing choices, the individual fixates on past expenditures rather than on future consequences.
11. *Self-serving bias* is exhibited by decision-makers who are quick to take credit for their successes and blame failure on outside factors.

12. *Hindsight bias* is the tendency for decision-makers to falsely believe, once the outcome is known, that they would have accurately predicted the outcome.

C. **Overview Managerial Decision-Making**

1. **Exhibit 2-12** provides an overview of managerial decision-making. Managers want to make good decisions because doing so is in their best interests.
2. Regardless of the decision, it has been shaped by a number of factors, which are discussed in Chapter 7.

2.5 EFFECTIVE DECISION-MAKING FOR TODAY'S WORLD

Today's business world revolves around making decisions, which are often risky ones made with incomplete or inadequate information and under intense time pressure. How can managers make effective decisions under these conditions?

A. **Guidelines for Effective Decision-Making**

1. Understand cultural differences.
2. Create standards for good decision-making.
3. Know when it is time to call it quits.
4. Use an effective decision-making process.
5. Build highly reliable organizations (HROs) that practice five habits:
   a. Do not be tricked by your own success.
   b. Defer to the experts on the front lines.
   c. Let unexpected circumstances provide the solution.
   d. Embrace complexity.
   e. Anticipate, but also recognize the limits to your ability to anticipate.

B. **Design Thinking and Decision-Making**

Design thinking has been described as "approaching management problems as designers approach design problems." It can be useful when identifying problems and when identifying and evaluating alternatives.

C. **Big Data and Decision-Making**

Big data is the vast amount of quantifiable information that can be analyzed by highly sophisticated data processing. One IT expert described big data with "3V's: high volume, high velocity, and/or high variety information assets. With this type of data at hand, decision-makers have very powerful tools to help them make decisions. However, experts caution that collecting and analyzing data for data's sake is wasted effort. Goals are needed when collecting and using this type of information.

ANSWERS TO REVIEW AND DISCUSSION QUESTIONS

Student answers to these questions will vary.

2-1. Why is decision-making often described as the essence of the manager's job?
Decisions are made throughout the performance of all four functions of management. Almost anything a manager does in terms of planning, organizing, leading, and

controlling involves decision-making. The pervasiveness of decision-making in management explains why managers are often called decision-makers. (LO: 1, Describe the eight steps in the decision-making process, AACSB: Analytical thinking)

2-2. Describe the eight steps in the decision-making process.
The decision-making process consists of eight steps: (1) identify problem; (2) identify decision criteria; (3) weight the criteria; (4) develop alternatives; (5) analyze alternatives; (6) select alternative; (7) implement alternative; and (8) evaluate decision effectiveness. (LO: 1, Describe the eight steps in the decision-making process, AACSB: Analytical thinking)

2-3. Compare and contrast the four ways managers make decisions.
The assumptions of rationality are as follows: the problem is clear and unambiguous; a single, well-defined goal is to be achieved; all alternatives and consequences are known; and the final choice will maximize the payoff. Bounded rationality says that managers make rational decisions but are bounded (limited) by their ability to process information. Satisficing happens when decision-makers accept solutions that are good enough. With escalation of commitment, managers increase commitment to a decision even when they have evidence it may have been a wrong decision. Intuitive decision-making means making decisions on the basis of experience, feelings, and accumulated judgment. Using evidence-based management, a manager makes decisions based on the best available evidence. (LO: 2, Explain the four ways managers make change, AACSB: Analytical thinking)

2-4. Explain the two types of problems and decisions. Contrast the three decision-making conditions.
Programmed decisions are repetitive decisions that can be handled by a routine approach and are used when the problem being resolved is straightforward, familiar, and easily defined (structured). Nonprogrammed decisions are unique decisions that require a custom-made solution and are used when the problems are new or unusual (unstructured) and for which information is ambiguous or incomplete. Certainty is a situation in which a manager can make accurate decisions because all outcomes are known. Risk is a situation in which a manager can estimate the likelihood of certain outcomes. Uncertainty is a situation in which a manager is not certain about the outcomes and can't even make reasonable probability estimates. (LO: 3, Classify decisions and decision-making conditions, AACSB: Analytical thinking)

2-5. Would you call yourself a linear or nonlinear thinker? What are the decision-making implications of these labels? What are the implications for choosing where you want to work?
Student responses to these questions will vary. A linear thinker is one who is more logical and rational in searching for and processing information. A nonlinear thinker relies more on instincts and feelings in searching for and processing information. The decision-making implication of this label is that it describes the way we think or process information and in turn, influences how we tend to make decisions. Organizations need both linear and nonlinear thinkers. Each of these styles provides a different perspective. (LO: 5, Identify effective decision-making techniques, AACSB: Analytical thinking)

2-6. "As managers use computer and software tools more often, they'll be able to make more rational decisions." Do you agree or disagree with that statement? Why?

Although computer and software tools allow managers to gather information and analyze it more efficiently, utilizing computers does not necessarily allow managers to be more rational. Looking at the assumptions of rationality (see **Exhibit 6.7**), it is apparent that adding computers to the decision-making process does not guarantee perfectly rational decision-making by managers. (LO: 5, Identify effective decision-making techniques, AACSB: Analytical thinking)

2-7. How can managers blend the guidelines for making effective decisions in today's world with the rationality and bounded rationality models of decision-making, or can they? Explain.
A balance is required. Under today's business conditions (such as intense time pressure and higher degrees of risk and uncertainty), managers must practice sound decision-making approaches. Knowing when it's time to quit, for example, is not inconsistent with rationality and bounded rationality. (LO: 5, Identify effective decision-making techniques, AACSB: Analytical thinking)

2-8. Is there a difference between wrong decisions and bad decisions? Why do good managers sometimes make wrong decisions? Bad decisions? How can managers improve their decision-making skills?
Time pressures, incomplete information, and higher levels of uncertainty in today's business environment may lead to ineffective decision-making. Managers can improve their decision-making skills by focusing on six characteristics of effective decision-making, including focusing on important criteria, logic and consistency; blending subjective and objective thinking with analysis; requiring the information necessary to resolve a particular dilemma; gathering relevant and informed opinions; and remaining flexible. (LO: 5, Identify effective decision-making techniques, AACSB: Analytical thinking)

PERSONAL INVENTORY ASSESSMENTS

Student answers to these questions will vary.

ETHICS DILEMMA

Student answers to these questions will vary.

This dilemma describes a situation where a baggage handler refused to load a dangerously thin hunting dog with bloody paws and covered in sores onto a flight. The baggage handler was afraid that the dog wouldn't survive the flight and refused to load the dog despite her supervisor's instructions. The baggage handler was fired but later reinstated with back pay.

Ask the students:
2-11. Was the decision by the supervisor to fire the baggage handler appropriate? Explain both "why" and "why not."
2-12. If you were a manager, how would you use this incident to "teach" employees about ethics and decision-making?

(LO: 2, Explain the four ways managers make change, AACSB: Ethical understanding and reasoning)

SKILLS EXERCISE: DEVELOPING YOUR CREATIVITY SKILL

Creativity is an important skill for all managers – not just those in marketing and R&D. In this exercise, students work on developing their creativity skills using eight steps suggested by the authors. To practice their new creativity skills, students can engage in a brainstorming exercise where they see how many words can be made from the letters in the word ‘brainstorm.’ To illustrate the usefulness of brainstorming, this could be done as an entire class with someone assigned to write down the created words. There are 95 possible words that can be generated. (LO: 5, Identify effective decision-making techniques, AACSB: Analytical thinking)

WORKING TOGETHER: TEAM EXERCISE

In this team-based activity, small groups of students are to discuss previous decision-making experiences. They should discuss whether they feel they made good/bad decisions and what happened during the decision-making process that contributed to the quality of the decision. The group should develop a list of practical suggestions for making good decisions.

In preparation for this exercise, you might initiate a class discussion centered on a particular decision-making situation. Ask the class if anyone is considering making a large purchase, such as a car, stereo, computer, or house. Students can help this individual make the decision by offering suggestions following the eight steps of the decision-making process for making a “good decision.” Compiling a variety of decision criteria for a car purchase, for instance, and weighting each criterion can create interest and provide insight for students. Although one student may think that having heated car seats is a must, others may totally disregard this criterion. This class activity should help students to become more comfortable and skillful in using the decision-making process. (LO: 5, Identify effective decision-making techniques, AACSB: Analytical thinking)

MY TURN TO BE A MANAGER

- For one week, pay close attention to the decisions you make and how you make them. Write a description of five of those decisions, using the steps in the decision-making process as your guide. Also, describe whether you relied on external or internal sources of information to help you make each decision and whether you think you were more linear or nonlinear in how you processed that information. (LO: 1, Describe the eight steps in the decision-making process, AACSB: Analytical thinking)

- When you feel you haven't made a good decision, assess how you could have made a better decision. (LO: 1, Describe the eight steps in the decision-making process, AACSB: Analytical thinking)

- Find two examples each of procedures, rules, and policies. Bring your examples to class and be prepared to share them. (LO: 3, Classify decisions and decision-making conditions, AACSB: Analytical thinking)

- Write a procedure, a rule, and a policy for your instructor to use in your class. Be sure that each one is clear and understandable. And be sure to explain how it fits the characteristics of being a procedure, a rule, or a policy. (LO: 3, Classify decisions and decision-making conditions, AACSB: Analytical thinking)

- Find three examples of managerial decisions described in any of the popular business periodicals (Wall Street Journal, BusinessWeek, Fortune, etc.). Write a paper describing each decision and any related information, such as what led to the decision, what happened as a result of the decision, etc. What did you learn about decision-making from these examples? (LO: 3, Classify decisions and decision-making conditions, AACSB: Analytical thinking)

- Interview two managers and ask them for suggestions on what it takes to be a good decision-maker. Write down their suggestions and be prepared to present them in class. (LO: 5, Identify effective decision-making techniques, AACSB: Analytical thinking)

- Steve's and Mary's suggested readings: Noel M. Tichy and Warren G. Bennis, *Judgment: How Winning Leaders Make Great Calls* (Portfolio, 2007); Gerd Gigerenzer, *Gut Feelings: The Intelligence of the Unconscious* (Viking, 2007); Stephen P. Robbins, *Decide & Conquer: Make Winning Decisions and Take Control of Your Life* (Financial Times Press, 2004); and John S. Hammond, Ralph L. Keeney, and Howard Raiffa, *Smart Choices: A Practical Guide to Making Better Decisions* (Harvard Business School Press, 1999). (LO: 1, Describe the eight steps in the decision-making process, AACSB: Analytical thinking) (LO: 2, Explain the four ways managers make change, AACSB: Analytical thinking) (LO: 3, Classify decisions and decision-making conditions, AACSB: Analytical thinking) (LO: 4, Describe different decision-making styles and discuss how biases affect decision making, AACSB: Analytical thinking) (LO: 5, Identify effective decision-making techniques, AACSB: Analytical thinking)

- Do a web search on the phrase "101 dumbest moments in business." Get the most current version of this end-of-year list. Choose three of the examples and describe what happened. What's your reaction to each example? How could the managers have made better decisions? (LO: 4, Describe different decision-making styles and discuss how biases affect decision making, AACSB: Analytical thinking)

- In your own words, write down three things you learned in this chapter about being a good manager. (LO: 5, Identify effective decision-making techniques, AACSB: Analytical thinking)

- Self-knowledge can be a powerful learning tool. Go to **mymanagementlab** and complete these self-assessment exercises: How Well Do I Handle Ambiguity? How Well Do I Respond to Turbulent Change? and What's My Decision-Making Style? Using the results of your assessments, identify personal strengths and weaknesses. What will you do to reinforce your strengths and improve your weaknesses? (LO: 5, Identify effective decision-making techniques, AACSB: Analytical thinking)

ANSWERS TO CASE APPLICATION 1 QUESTIONS

Student answers to these questions will vary.

Tasting Success

2-13. Which decisions in this story could be considered unstructured problems? Structured problems?
Students may note that Coke's production of "Simply Orange" juice is an unstructured problem that involves complicated algorithms and complex applications of business analytics. By creating their "black book," an algorithm of blending orange juices, Coke has created a structured problem where managers can blend juices according to instructions. (LO: 3, Identify effective decision-making techniques, AACSB: Analytical thinking)

2-14. How does the Black Book help Coke's managers and other employees in decision-making?
Black Book allows managers to blend batches of juice to match certain tastes and consistency. The Black Book produces an algorithm that allows managers to include external data and "tweak" recipes as needed based on factors like weather patterns, crop yields, and other cost pressures to tweak recipes constantly. (LO: 3, Identify effective decision-making techniques, AACSB: Analytical thinking)

2-15. What does Coke's big data have to do with its goals?
According to the purchasing director for Coke's massive Florida juice packaging facility, the process of making orange juice requires some 1 quintillion (that's 1 followed by 18 zeroes) decisions. The orange juice formula includes detailed data about the more than 600 different flavors that make up an orange and about customer preferences. (LO: 5, Identify effective decision-making techniques, AACSB: Analytical thinking)

2-16. Do some research on revenue analytics. What is it? How can it help managers make better decisions?
Revenue Analytics is the application of disciplined analytics that predict consumer behavior in the market and optimize product availability and pricing to maximize revenue growth. The primary aim of Revenue Analytics is selling the right product to the right customer at the right time for the right price. In Revenue Analytics, it is essential to understand the customers' perception of product value and accurately aligning product prices, placement, and availability with each customer segment. (LO: 5, Identify effective decision-making techniques, AACSB: Analytical thinking)

ANSWERS TO CASE APPLICATION 2 QUESTIONS

Student answers to these questions will vary.

The Business of Baseball

2-17. In a general sense, what kinds of decisions are made in baseball? Would you characterize these decisions as structured or unstructured problems? Explain. What type(s) of decision-making condition would you consider this to be? Explain.
The answer to this question lies in which aspect of baseball you are referring. When it comes to actually playing the game and the decision involved, the problems are structured. For example, if a pop fly is hit to left field and there is a player on 1st, where is the ball thrown? On the other hand, recruiting high profile players, building a new stadium, and trying to secure television contracts would be considered unstructured because the factors involved may be novel and untried. (LO: 2, Explain the four ways managers make change, AACSB: Analytical thinking)

2-18. Is it appropriate for baseball managers to use only quantitative, objective criteria in evaluating their players? What do you think? Why?
Students should see that qualitative criteria are also important because baseball is a sport that involves life-long fans and grudges. Many of the decisions involved in baseball are based on fan loyalty and a team's potential to sell tickets. Not all of these decisions involve objective measures. (LO: 3, Classify decisions and decision-making conditions, AACSB: Analytical thinking)

2-19. Do some research on Sabermetrics. What is it? What does it have to do with decision-making?
Sabermetrics is a quantification decision-making aid. By telling decision makers what to pay attention to and by providing weights for those criteria, it is easier to predict winners and losers. Students should check out this site: http://www-math.bgsu.edu/~albert/papers/saber.html (LO: 3, Classify decisions and decision-making conditions, AACSB: Analytical thinking)

2-20. Describe how baseball front office executives and college coaches could use each of the following to make better decisions: (a) rationality, (b) bounded rationality, (c) intuition, and (d) evidence-based management.
Baseball teams, like any organization, make a variety of different decisions each day. Students should see that high priority decisions should follow rational and evidence-based decision models, because they provide the most economical results. This would have included a thorough evaluation of the decision criteria, criteria weights, possible alternatives, and evaluation of those alternative's outcomes. On the other hand, other decisions that are not high priority and do not have a major impact on the organization are likely to follow less than ideal models, like bounded rationality or intuition. In a decision involving bounded rationality, the decision would have been made based on a limited set of criteria and alternatives. In the case of intuition, a number of factors would have been considered including past experience, manager feelings, manager's skills, subconscious mental process, and managerial values. (LO: 3, Classify decisions and decision-making conditions, AACSB: Analytical thinking)

2-21. Can there be too much information in managing the business of baseball? Discuss.
There is a term that students may be familiar with called paralysis of analysis. If you ever watch a sporting event, you will hear a bewildering number of statistics and how often something like weather, home field advantage, injuries, streaks, and other factors affect the outcome. Often, these variables predict little variation in the outcome of a

game. (LO: 3, Classify decisions and decision-making conditions, AACSB: Analytical thinking)

ADDITIONAL CHAPTER INFORMATION

You may want to provide additional challenges for your students by asking them to research a recent business situation in the news. Why do they think some of the decisions were made? Which decision-making styles appear to have been used by management in this situation?