chapter **2**

Managing

HISTORY AND CURRENT THINKING

Target Skill

comprehensive management skill: the ability to collectively apply concepts from various major management approaches to perform a manager's job

o b j e c t i v e s

To help build my *comprehensive* management skill, when studying this chapter, I will attempt to acquire:

- **1.** An understanding of the classical approach to management
- 2. An appreciation for the work of Frederick W. Taylor, Frank and Lillian Gilbreth, Henry L. Gantt, and Henri Fayol
- An understanding of the behavioral approach to management
- **4.** An understanding of the studies at the Hawthorne Works and the human relations movement

- **5.** An understanding of the management science approach to management
- **6.** An understanding of how the management science approach has evolved
- **7.** An understanding of the system approach to management
- **8.** Knowledge about the learning organization approach to management
- **9.** An understanding of how triangular management and the contingency approach to management are related

CHALLENGE CASE

HANDLING COMPETITORS AT BURGER KING

BURGER KING IS A FAST-FOOD HAMBURGER RESTAURANT. Recent reports indicate that the company owns or franchises a total of 11,129 restaurants in 65 different countries. Burger King restaurants feature flame-broiled hamburgers, chicken, and other specialty sandwiches. Overall, the menu consists of hamburgers, cheeseburgers, and chicken and fish sandwiches. The menu also includes french fries, onion rings, salads, and desserts. Burger King is also known for its array of breakfast items.

Burger King and other fast-food companies are facing new competition from unlikely rivals.

Specifically, "quick casual" restaurants, including Subway Sandwiches, Chipotle Mexican Grill, Cosi, and Panera Bread, are offering healthier food at higher prices. This combination has helped restaurants in this category steal away traditional fast-food customers. Although executives in the fast-food industry initially believed that these new restaurants were attracting only older customers who could afford to pay higher prices, recent research reveals the quick casual concept appeals to individuals between 18 and 34 years old, a key demographic for the fast-food industry.

One way Burger King management is trying to better compete is to operate the company in a way that is consistent with concerns of customers in a modern society. For example, Burger King attacked this new competition by adding its own healthier food offerings. The Chicken Whopper and a new Veggie Burger are examples of healthier alternatives. More recently, the company is offering other more socially conscious choices to customers. For example, in what animal welfare advocates are describing as a "historic advance," Burger King, the world's second-largest hamburger chain, has begun buying eggs and pork from suppliers that do not confine their animals in cages and crates.¹

John Chidsey was recently named CEO of Burger King. Chidsey understands that Burger King must compete ferociously to survive. Some of his future challenges will be more traditional, like building and maintaining store efficiency, while others will reflect more contemporary issues, such as managing the caloric content of the Burger King menu, and dealing with illegal immigrants.² For sure, Chidsey will have to meet these challenges by managing comprehensively, applying various management concepts collectively to management problems. For Burger King to be successful, Chidsey will have to successfully apply his comprehensive management skill.



In the highly competitive fast-food market, Burger King managers use many management tools to attract and keep loyal customers, like these in Manhattan, New York.

EXPLORING YOUR MANAGEMENT SKILL

You can explore your level of *comprehensive management skill* **before** studying the chapter by completing the exercise "Exploring Your Management Skill: Part 1" on page 44 and

after studying this chapter by completing the exercise "Exploring Your Management Skill: Part 2" on page 45.

THE COMPREHENSIVE MANAGEMENT SKILL CHALLENGE

The Challenge Case illustrates many different comprehensive management skill challenges that management at Burger King must strive to meet. For Burger King to be successful, management must collectively apply insights from the classical, behavioral, management science, contingency, systems, and learning organization approaches to managing.

The remaining material in this chapter explains these approaches and helps you develop your comprehensive management skill. After studying chapter concepts, read the Challenge Case Summary at the end of the chapter to gain insights about using comprehensive management skill at Burger King.

Chapter 1 focused primarily on defining *management*. This chapter presents various approaches to analyzing and reacting to management situations, each characterized by a different method of analysis and a different type of recommended action.

Over the years, a variety of different approaches to management has popped up, along with wide-ranging discussions of what each approach entails. In an attempt to simplify the discussion of the field of management without sacrificing significant information, Donnelly, Gibson, and Ivancevich combined the ideas of Koontz, O'Donnell, and Weihrich with those of Haynes and Massie, and categorized three basic approaches to management:³

- 1. Classical approach
- 2. Behavioral approach
- 3. Management science approach

The following sections build on the work of Donnelly, Gibson, and Ivancevich in presenting the classical, behavioral, and management science approaches to analyzing the management task. The contingency approach is discussed as a fourth primary approach, while the system approach is presented as a recent trend in management thinking. The learning organization is continually evolving and is discussed as the newest form for analyzing management.

THE CLASSICAL APPROACH

The **classical approach to management** was the product of the first concentrated effort to develop a body of management thought. In fact, the management writers who participated in this effort are considered the pioneers of management study. The classical approach recommends that managers continually strive to increase organizational efficiency to increase production. Although the fundamentals of this approach were developed some time ago, contemporary managers are just as concerned with finding the "one best way" to get the job done as their predecessors were. To illustrate this concern, notable management theorists see striking similarities between the concepts of scientific management developed many years ago and the more current management philosophy of building quality into all aspects of organizational operations.⁴

For discussion purposes, the classical approach to management can be broken down into two distinct areas. The first, lower-level management analysis consists primarily of the work of Frederick W. Taylor, Frank and Lillian Gilbreth, and Henry L. Gantt. These individuals studied mainly the jobs of workers at lower levels of the organization. The second area, comprehensive analysis of management, concerns the management function as a whole. The primary contributor to this category was Henri Fayol. Figure 2.1 illustrates the two areas in the classical approach.

Lower-Level Management Analysis

Lower-level management analysis concentrates on the "one best way" to perform a task; that is, it investigates how a task situation can be structured to get the highest production from workers. The process of finding this "one best way" has become known as the *scientific method of management*,

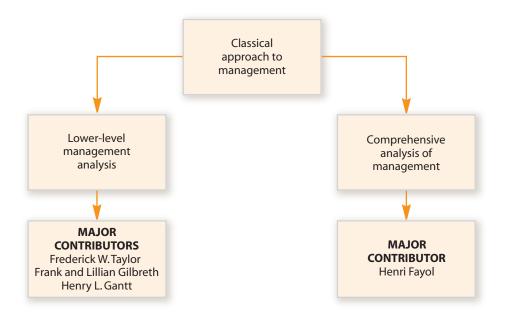


FIGURE 2.1
Division of classical approach
to management into two areas
and the major contributors to
each area

or simply, **scientific management.** Although the techniques of scientific managers could conceivably be applied to management at all levels, the research, research applications, and illustrations relate mostly to lower-level managers. The work of Frederick W. Taylor, Frank and Lillian Gilbreth, and Henry L. Gantt is summarized in the sections that follow.

Frederick W. Taylor (1856–1915) Because of the significance of his contributions, Frederick W. Taylor is commonly called the "father of scientific management." His primary goal was to increase worker efficiency by scientifically designing jobs. His basic premise was that every job had one best way to do it and that this way should be discovered and put into operation. ⁵

WORK AT BETHLEHEM STEEL Co. Perhaps the best way to illustrate Taylor's scientific method and his management philosophy is to describe how he modified the job of employees whose sole responsibility was shoveling materials at Bethlehem Steel Company. During the modification process, Taylor made the assumption that any worker's job could be reduced to a science. To construct the "science of shoveling," he obtained answers—through observation and experimentation—to the following questions:

- 1. Will a first-class worker do more work per day with a shovelful of 5, 10, 15, 20, 30, or 40 pounds?
- 2. What kinds of shovels work best with which materials?
- 3. How quickly can a shovel be pushed into a pile of materials and pulled out properly loaded?
- **4.** How much time is required to swing a shovel backward and throw the load a given horizontal distance at a given height?

As Taylor formulated answers to these types of questions, he developed insights on how to increase the total amount of materials shoveled per day. He raised worker efficiency by matching shovel size with such factors as the size of the worker, the weight of the materials, and the height and distance the materials were to be thrown. By the end of the third year after Taylor's shoveling efficiency plan was implemented, records at Bethlehem Steel showed that the total number of shovelers needed was reduced from about 600 to 140, the average number of tons shoveled per worker per day rose from 16 to 59, the average earnings per worker per day increased from \$1.15 to \$1.88, and the average cost of handling a long ton (2,240 pounds) dropped from \$0.072 to \$0.033—all in all, an impressive demonstration of the applicability of scientific management to the task of shoveling.⁷

While Taylor's approach had a significant impact on productivity, his ideas were unpopular with unions and their workers, who feared that the reengineering of their jobs would ultimately lead to fewer workers. In addition, the heightened emphasis on productivity led to a lessening of quality.⁸

how managers do it

Getting Efficient at Pace Productivity anagers continue to seek ways to improve organizational efficiency and productivity. Consulting firm Pace Productivity uses Taylor-like efficiency studies within its own organization. Using a Timecorder, the company's proprietary handheld electronic device, employees track

their own time by pushing buttons associated with precoded work activities. When an employee presses a new button, time stops recording on the previous activity and begins recording on a new one. The Timecorder tracks how many times each activity well as how much time is cumulatively spent on each activity.

occurs as well as how much time is cumulatively spent on each activity. Managers receive summary reports showing how many times work activities are performed, the time spent, and suggestions for improving worker efficiency based on the results.

Frank Gilbreth (1868–1924) and Lillian Gilbreth (1878–1972) The Gilbreths were also significant contributors to the scientific method. As a point of interest, the Gilbreths focused on handicapped as well as non-handicapped workers. Like other contributors to the scientific method, they subscribed to the idea of finding and using the one best way to perform a job. The primary investigative tool in the Gilbreths' research was **motion study**, which consists of reducing each job to the most basic movements possible. Motion analysis is used today primarily to establish job performance standards. Each movement, or motion, that is used to do a job is studied to determine how much time the movement takes and how necessary it is to performing the job. Inefficient or unnecessary motions are pinpointed and eliminated. In performing a motion study, the Gilbreths considered the work environment, the motion itself, and behavior variables concerning the worker. Table 2.1 shows many factors from each of the categories the Gilbreths analyzed.

TABLE 2.1 Sample Variables Considered in Analyzing Motions

Worker Variables

- 1. Anatomy
- 2. Brawn
- 3. Contentment
- 4. Habits
- 5. Health

Environmental Variables

- 1. Work clothes
- 2. Heat
- 3. Materials quality
- 4. Tools
- 5. Lighting

Work Motion Requirements of Job

- 1. Acceleration requirements
- 2. Automation available
- 3. Inertia to overcome
- 4. Speed necessary
- 5. Combinations of motions required

TABLE 2.2	Partial Results for One of Frank Gilbreth's Bricklaying Motion Studies		
Operation No.	The Wrong Way	The Right Way	Pick and Dip Method: The Exterior 4 Inches (Laying to the Line)
1	Step for mortar	Omit	On the scaffold, the inside edge of the mortar box should be plumb with the inside edge of the stock platform. On the floor, the inside edge of the mortar box should be 21 inches from the wall. Mortar boxes should never be more than 4 feet apart.
2	Reach for mortar	Reach for mortar	Do not bend any more than absolutely necessary to reach mortar with a straight arm.
3	Work up mortar	Omit	Provide mortar of the right consistency. Examine sand screen and keep it in repair so that no pebbles can get through. Keep tender on scaffold to temper up and keep mortar worked upright.
4	Step for brick	Omit	If tubs are kept 4 feet apart, no stepping for brick will be necessary on scaffold. On the floor, keep brick in a pile not nearer than 1 foot or more than 4 feet 6 inches from wall.
5	Reach for brick	Included in 2	Brick must be reached for at the same time the mortar is reached for, and picked up at exactly the same time the mortar is picked up. If it is not picked up at the same time, allowance must be made for operation.

Frank Gilbreth was born in Maine in 1868. After high school graduation, he qualified to be a student at the Massachusetts Institute of Technology but decided to work for a construction business in Boston. He started as a bricklayer's apprentice and advanced to general superintendent. His experience as an apprentice bricklayer led him to do motion studies of bricklaying. He found that bricklayers could increase their output significantly by concentrating on performing some motions and eliminating others. Table 2.2 shows a simplified portion of the results of one of Gilbreth's bricklaying motion studies. For each bricklaying operation, Gilbreth indicated whether it should be omitted for the sake of efficiency and why. He reduced the five motions per brick listed under "The Wrong Way" to the one motion per brick listed under "The Right Way." Overall, Gilbreth's bricklaying motion studies resulted in reducing of the number of motions necessary to lay a brick by approximately 70 percent, consequently tripling bricklaying production.

Lillian Gilbreth, who began as her husband's collaborator, earned two doctorates and was awarded numerous honorary degrees. After Frank's death, she continued to research while also raising the twelve Gilbreth children and becoming the first woman professor at Purdue University. Lillian Gilbreth's work extended into the application of the scientific method to the role of the homemaker and to the handicapped. ¹²

Much of the Gilbreths' work has broad application today for how to design jobs. However, the Gilbreths were also among the first to consider the employee as a productivity factor. Frank Gilbreth recognized that, for motion studies to best impact jobs, managers must communicate with employees about their jobs and develop their job related skills. ¹³

Henry L. Gantt (1861–1919) The third major contributor to the scientific management approach was Henry L. Gantt. He, too, was interested in increasing worker efficiency. Gantt attributed unsatisfactory or ineffective tasks and piece rates (incentive pay for each

product piece an individual produces) primarily to the fact that these tasks and rates were set according to what had been done by workers in the past or to someone's *opinion* of what workers could do. According to Gantt, *exact scientific knowledge* of what could be done by a worker should be substituted for opinion. He considered this task measurement and determination the role of scientific management.

Gantt's management philosophy is encapsulated in his statement that "the essential differences between the best system of today and those of the past are the manner in which tasks are 'scheduled' and the manner in which their performance is rewarded." Using this rationale, he sought to improve systems or organizations through task-scheduling innovation and the rewarding innovation.

Scheduling Innovation The Gantt chart, the primary scheduling device that Gantt developed, is still the scheduling tool most commonly used by modern managers. ¹⁵ Basically, this chart provides managers with an easily understood summary of what work was scheduled for specific time periods, how much of this work has been completed, and by whom it was done. ¹⁶

Special computer software such as MacSchedule has been developed to help managers more efficiently and effectively apply the concept of the Gantt chart today. ¹⁷ MacSchedule allows managers to easily monitor complicated and detailed scheduling issues such as the number of units planned for production during a specified period, when work is to begin and be completed, and the percentage of work that was actually completed during a period. (The Gantt chart is covered in much more detail in Chapter 10.)

Rewarding Innovation Gantt was more aware of the human side of production than either Taylor or the Gilbreths. He wrote that "the taskmaster (manager) of the past was practically a slave driver, whose principal function was to force workmen to do that which they had no desire to do, or interest in doing. The task setter of today under any reputable system of management is not a driver. When he asks the workmen to perform tasks, he makes it to their interest to accomplish them, and is careful not to ask what is impossible or unreasonable."

In contrast to Taylor, who pioneered a piece-rate system under which workers were paid according to the amount they produced and who advocated the use of wage-incentive plans, Gantt developed a system wherein workers could earn a bonus in addition to the piece rate if they exceeded their daily production quota. Gantt, then, believed in worker compensation that corresponded not only to production (through the piece-rate system) but also to overproduction (through the bonus system).

Comprehensive Analysis of Management

Whereas scientific managers emphasize job design when approaching the study of management, managers who embrace the comprehensive view—the second area of the classical approach—are concerned with the entire range of managerial performance.

Among the well-known contributors to the comprehensive view are Chester Barnard, ¹⁹ Alvin Brown, Henry Dennison, Luther Gulick and Lyndall Urwick, J. D. Mooney and A. C. Reiley, and Oliver Sheldon. ²⁰ Perhaps the most notable contributor, however, was Henri Fayol. His book, *General and Industrial Management*, presents a management philosophy that still guides many modern managers. ²¹

Henri Fayol (1841–1925) Because of his writings on the elements and general principles of management, Henri Fayol is usually regarded as the pioneer of administrative theory. The elements of management he outlined—planning, organizing, commanding, coordinating, and control—are still considered worthwhile divisions under which to study, analyze, and affect the management process. ²² (Note the close correspondence between Fayol's elements of management and the management functions outlined in Chapter 1—planning, organizing, influencing, controlling.)



Benefits such as on-campus day care, a medical center, and a free 66,000-square-foot fitness center, reward SAS employees for their unsurpassed skill at devising a continuous stream of successful innovations for the company.

The general principles of management suggested by Fayol, still considered useful in contemporary management practice, are presented here in the order developed by Fayol, accompanied by corresponding defining themes:²³

- Division of work—Work should be divided among individuals and groups to ensure that
 effort and attention are focused on special portions of the task. Fayol presented work specialization as the best way to use the human resources of the organization.
- 2. Authority—The concepts of authority and responsibility are closely related. *Authority* was defined by Fayol as the right to give orders and the power to exact obedience. *Responsibility* involves being accountable, and is therefore naturally associated with authority. Whoever assumes authority also assumes responsibility.
- **3. Discipline**—A successful organization requires the common effort of workers. Penalties should be applied judiciously to encourage this common effort.
- **4. Unity of command**—Workers should receive orders from only one manager.
- **5. Unity of direction**—The entire organization should be moving toward a common objective, in a common direction.
- **6. Subordination of individual interests to the general interests**—The interests of one person should not take priority over the interests of the organization as a whole.
- **7. Remuneration**—Many variables, such as cost of living, supply of qualified personnel, general business conditions, and success of the business, should be considered in determining a worker's rate of pay.
- 8. Centralization—Fayol defined centralization as lowering the importance of the subordinate role. Decentralization is increasing the importance. The degree to which centralization or decentralization should be adopted depends on the specific organization in which the manager is working.
- 9. Scalar chain—Managers in hierarchies are part of a chainlike authority scale. Each manager, from the first-line supervisor to the president, possesses certain amounts of authority. The president possesses the most authority; the first-line supervisor, the least. Lower-level managers should always keep upper-level managers informed of their work activities. The existence of a scalar chain and adherence to it are necessary if the organization is to be successful.
- **10. Order**—For the sake of efficiency and coordination, all materials and people related to a specific kind of work should be assigned to the same general location in the organization.
- 11. Equity—All employees should be treated as equally as possible.
- 12. Stability of tenure of personnel—Retaining productive employees should always be a high priority of management. Recruitment and selection costs, as well as increased product-reject rates, are usually associated with hiring new workers.
- 13. Initiative—Management should take steps to encourage worker initiative, which is defined as new or additional work activity undertaken through self-direction.
- **14. Esprit de corps**—Management should encourage harmony and general good feelings among employees. ²⁴

Fayol's general principles of management cover a broad range of topics, but organizational efficiency, the handling of people, and appropriate management action are the three general themes he stresses. With the writings of Fayol, the study of management as a broad, comprehensive activity began to receive more attention. Some modern management researchers seem to believe, however, that Fayol's work has not received as much acclaim as it deserves.²⁵

Limitations of the Classical Approach

Contributors to the classical approach felt encouraged to write about their managerial experiences largely because of the success they enjoyed. Structuring work to be more efficient and defining the manager's role more precisely yielded significant improvements in productivity, which individuals such as Taylor and Fayol were quick to document.



The behavioral approach to management calls for a broad understanding of the way in which different people behave, respond, and interact with one another in work situations like this circuit board factory meeting.

The classical approach, however, does not adequately emphasize human variables. People today do not seem to be as influenced by bonuses as they were in the nineteenth century. It is generally agreed that critical interpersonal areas, such as conflict, communication, leadership, and motivation, were shortchanged in the classical approach.

THE BEHAVIORAL APPROACH

The **behavioral approach to management** emphasizes increasing production through an understanding of people. According to proponents of this approach, if managers understand their people and adapt their organizations to them, organizational success will usually follow.

The Hawthorne Studies

The behavioral approach is usually described as beginning with a series of studies conducted between 1924 and 1932, which investigated the behavior and attitudes of workers at the Hawthorne (Chicago) Works of the Western Electric Company. Accounts of the Hawthorne Studies are usually divided into two phases: the relay assembly test room experiments and the bank wiring observation room experiment. The following sections discuss each of these phases.

The Relay Assembly Test Room Experiments The relay assembly test room experiments originally had a scientific management orientation. The experimenters believed that if they studied productivity long enough, under different working conditions (including variations in weather conditions, temperature, rest periods, work hours, and humidity), they would discover the working conditions that maximized production. The immediate purpose of the relay assembly test room experiments was to determine the relationship between intensity of lighting and worker efficiency, as measured by worker output. Two groups of female employees were used as subjects. The light intensity for one group was varied, while the light intensity for the other group was held constant.

The results of the experiments surprised the researchers: No matter what conditions employees were exposed to, production increased. They found no consistent relationship between productivity and lighting intensity. An extensive interviewing campaign was undertaken to determine why the subjects continued to increase production under all lighting conditions. The following are the main reasons, as formulated from the interviews:

- 1. The subjects found working in the test room enjoyable.
- **2.** The new supervisory relationship during the experiment allowed the subjects to work freely, without fear.
- 3. The subjects realized that they were taking part in an important and interesting study.
- 4. The subjects seemed to become friendly as a group.

The experimenters concluded that human factors within organizations could significantly influence production. More research was needed, however, to evaluate the potential impact of this human component in organizations.

The Bank Wiring Observation Room Experiment The purpose of the bank wiring observation room experiment was to analyze social relationships in a work group. Specifically, the study focused on the effect of group piecework incentives on a group of men who assembled terminal banks for use in telephone exchanges. The group piecework incentive system dictated that the harder a group worked as a whole, the more pay each member of that group would receive.

The experimenters believed that the study would show that members of the work group pressured one another to work harder so that each group member would receive more pay. To their surprise, they found the opposite: The work group pressured the faster workers to slow down their work rate. The men whose work rate would have increased individual salaries were being pressured by the group, rather than the men whose work rate would have

decreased individual salaries. Evidently, the men were more interested in preserving work group solidarity than in making more money. The researchers concluded that social groups in organizations could effectively exert pressure to influence individuals to disregard monetary incentives. ²⁷

Recognizing the Human Variable

Taken together, the series of studies conducted at the Hawthorne plant gave management thinkers a new direction for research. Obviously, the human variable in the organization needed much more analysis after showing that it could either increase or decrease production drastically. Managers began to realize that they needed to understand this influence so they could maximize its positive effects and minimize its negative effects. This attempt to understand people is still a major force in today's organizational research. ²⁸ Hawthorne study results helped managers to see that understanding what motivates employees is a critical part of being a manager. ²⁹ More current behavioral findings and their implications for management are presented in greater detail later in this text.

The Human Relations Movement

The Hawthorne Studies sparked the **human relations movement**, a people-oriented approach to management in which the interaction of people in organizations is studied to judge its impact on organizational success. The ultimate objective of this approach is to enhance organizational success by building appropriate relationships with people. To put it simply, when management stimulates high productivity and worker commitment to the organization and its goals, human relations are said to be effective; and when management precipitates low productivity and uncommitted workers, human relations are said to be ineffective. **Human relations skill** is defined as the ability to work with people in a way that enhances organizational success.

The human relations movement has made some important contributions to the study and practice of management. Advocates of this approach to management have continually stressed the need to use human methods in managing people. Abraham Maslow, perhaps the best-known contributor to the human relations movement, believed that managers must understand the physiological, safety, social, esteem, and self-actualization needs of organization members. Douglas McGregor, another important contributor to the movement, emphasized a management philosophy built on the views that people can be self-directed, accept responsibility, and consider work to be as natural as play. The ideas of both Maslow and McGregor are discussed thoroughly in Chapter 17. As a result of the tireless efforts of theorists such as Maslow and McGregor, modern managers better understand the human component in organizations and how to appropriately work with it to enhance organizational success.

onsistent with the human relations movement, SAS is dedicated to building a human-oriented work environment. Leaders at SAS, the world's largest privately held software company, believe that employees represent the company's most significant asset. SAS works to maintain this asset by providing generous benefits like subsidized cafeterias and daycare, a free health clinic for employees and their families, and a recreation and fitness center that boasts a pool, sauna, and massage facilities. By placing trust in its employees, SAS generates employee loyalty, productivity, and commitment. For 13 consecutive years, the company has been named to Fortune magazine's list of "100 Best Companies to Work For." 31

how managers do it

Building a "People" Environment at SAS



class discussion highlight

MODERN RESEARCH AND COMPREHENSIVE MANAGEMENT SKILL

Fostering Safe Behavior Among Construction Workers

The behavioral approach to management, presented as a major dimension of comprehensive management skill, emphasizes that managers should focus on solving organizational problems by incorporating a behavioral perspective into problem analysis and solution. This exercise focuses on the results of research relating to encouraging employees to act safely. Safe behavior is behavior that tends to keep employees from incurring injury while working. Although establishing a safe work environment admittedly contains classic, management science, contingency, and systems issues, this exercise focuses only on its behavioral issues.

A recent study by Teo, Ling, and Ong investigated various actions that construction-site managers can use to foster safe behavior among construction-site workers in Singapore. Many managers believe that workers "don't know" and "don't care" what safe behaviors are and how to perform them. Managers would like to encourage safe behavior of workers so that projects can more easily be completed on schedule and medical costs due to injuries can be minimized. Workers are commonly injured on construction sites by falling, being struck by objects, being burned by fire, and experiencing bodily harm through explosions.

The researchers surveyed opinions of contractors in Singapore to see what they believed to be the most effective ways to increase the safe behavior of construction workers. The survey focused on three possible tools to increase this safe behavior: (1) rewarding employees for safe behavior, (2) disciplining (punishing) employees for unsafe behavior, and (3) training employees in how to be safe on a construction site. In the survey, discipline involved administering an undesired consequence when an employee performs unsafe behavior. Punishments studied include (1) fining employees who perform unsafe behaviors, (2) temporarily suspending workers performing unsafe behaviors, and (3) demoting employees who perform unsafe behaviors.

Which of these possible punishments do you think contractors seemed to value most in encouraging safe behavior of workers? Why? Which punishment do you think they valued least? Why? Assuming your thoughts are accurate, what hints can this research give you about developing your comprehensive management skill?

Source: Evelyn Ai Lin Teo, Florence Yean Yng Ling, and Derrick Sern Yau Ong, "Fostering Safe Work Behavior in Workers at Construction Sites," *Engineering, Construction, and Architectural Management* 12, no. 4 (2005): 410–422.

THE MANAGEMENT SCIENCE APPROACH

Churchman, Ackoff, and Arnoff define the management science, or operations research (OR), approach as (1) an application of the scientific method to problems arising in the operation of a system and (2) the solution of these problems by solving mathematical equations representing the system.³² The **management science approach** suggests that managers can best improve their organizations by using the scientific method and mathematical techniques to solve operational problems.

The Beginning of the Management Science Approach

The management science, or operations research, approach can be traced to World War II, an era in which leading scientists were asked to help solve complex operational problems in the military. ³³ Scientists were organized into teams that eventually became known as operations research

(OR) groups. One OR group, for example, was asked to determine which gun sights would best stop German attacks on the British mainland. The term *management science* was actually coined by researchers of a UCLA–RAND academic complex featuring academic and industry researchers working together to solve operations problems.³⁴

These early OR groups typically included physicists and other "hard" scientists who used the problem-solving method with which they had the most experience: the scientific method. The scientific method dictates that scientists:

- 1. Systematically observe the system whose behavior must be explained to solve the problem.
- **2.** Use these specific observations to *construct* a generalized framework (a model) that is consistent with the specific observations and from which consequences of changing the system can be predicted.
- Use the model to *deduce* how the system will behave under conditions that have not been observed but could be observed if the changes were made.
- **4.** Finally, *test* the model by performing an experiment on the actual system to see whether the effects of changes predicted using the model actually occur when the changes are made. ³⁵

The OR groups proved successful at using the scientific method to solve the military's operational problems.

Management Science Today

After World War II, America again became interested in manufacturing and selling products. The success of the OR groups in the military had been so obvious that managers were eager to try management science techniques in an industrial environment. After all, managers also had to deal with complicated operational problems.

By 1955, the management science approach to solving industrial problems had proved effective. Many people saw great promise in refining its techniques and analytical tools. Managers and universities pursued these refinements.

By 1965, the management science approach was being used in many companies and applied to many diverse management problems, such as production scheduling, plant location, and product packaging.

In the 1980s, surveys indicated that management science techniques were used extensively in large, complex organizations. Smaller organizations, however, had not yet fully realized the benefits of using these techniques.

The widespread use of computers in the workplace and the introduction of the Internet have had a significant impact on organizations' use of management science techniques. In the twenty-first century, managers in organizations of all sizes now have ready access to a wealth of tools and other resources that enable them to easily apply the principles of management science to their business. Not only has the introduction of technology transformed how businesses operate, it enables leadership to automate and organize their company's systems for greater consistency—and it allows them to use the power of technology to aid in their decision making. ³⁶

Characteristics of Management Science Applications

Four primary characteristics are usually present in situations in which management science techniques are applied.³⁷ First, the management problems studied are so complicated that managers need help analyzing a large number of variables. Management science techniques increase the effectiveness of the managers' decision making in such a situation. Second, a management science application generally uses economic implications as guidelines for making a particular decision, perhaps because management science techniques are best suited for analyzing quantifiable factors such as sales, expenses, and units of production.

Third, the use of mathematical models to investigate the decision situation is typical in management science applications. Models constructed to represent reality are used to determine how the real-world situation might be improved. The fourth characteristic of a management science application is the use of computers. The great complexity of managerial problems and the sophisticated mathematical analysis of problem-related information required are two factors that make computers especially valuable to the management science analyst.

Today managers use such management science tools as inventory control models, network models, and probability models to aid them in the decision-making process. Later parts of this text will outline some of these models in greater detail and illustrate their applications to management decision making. Because management science thought is still evolving, more and more sophisticated analytical techniques can be expected in the future.

THE CONTINGENCY APPROACH

In simple terms, the **contingency approach to management** emphasizes that what managers do in practice depends on, or is contingent upon, a given set of circumstances—a situation.³⁸ In essence, this approach emphasizes "if—then" relationships: "If" this situational variable exists, "then" a manager probably would take this action. For example, if a manager has a group of inexperienced subordinates, then the contingency approach would recommend that he or she lead in a different fashion than if the subordinates were experienced.³⁹

In general, the contingency approach attempts to outline the conditions or situations in which various management methods have the best chance of success. ⁴⁰ This approach is based on the premise that, although there is probably no one best way to solve a management problem in all organizations, there probably is one best way to solve any given management problem in any one organization. Perhaps the main challenges of using the contingency approach are the following:

- 1. Perceiving organizational situations as they actually exist
- Choosing the management tactics best suited to those situations
- **3.** Competently implementing those tactics

The notion of a contingency approach to management is not novel. It has become a popular discussion topic for contemporary management thinkers. The general consensus of their writings is that if managers are to apply management concepts, principles, and techniques successfully, they must consider the realities of the specific organizational circumstances they face. 41

THE SYSTEM APPROACH

The **system approach to management** is based on general system theory. Ludwig von Bertalanffy, a scientist who worked mainly in physics and biology, is recognized as the founder of general system theory. ⁴² The main premise of the theory is that to fully understand the operation of an entity, the entity must be viewed as a system. A **system** is a number of interdependent parts functioning as a whole for some purpose. For example, according to general system theory, to fully understand the operations of the human body, one must understand the workings of its interdependent parts (ears, eyes, and brain). General system theory integrates the knowledge of various specialized fields so that the system as a whole can be better understood.

Types of Systems

According to von Bertalanffy, the two basic types of systems are closed systems and open systems. A **closed system** is not influenced by, and does not interact with, its environment. It is mostly mechanical and has predetermined motions or activities that must be performed regardless of the

environment. A clock is an example of a closed system. Regardless of its environment, a clock's wheels, gears, and other parts must function in a predetermined way if the clock as a whole is to exist and serve its purpose. The second type of system, the **open system**, is continually interacting with its environment. A plant is an example of an open system. Constant interaction with the environment influences the plant's state of existence and its future. In fact, the environment determines whether the plant will live.

Systems and "Wholeness"

The concept of "wholeness" is important in general system analysis. The system must be viewed as a whole and modified only through changes in its parts. Before modifications of the parts can be made for the overall benefit of the system, a thorough knowledge of how each part functions and the interrelationships among the parts must be present. L. Thomas Hopkins suggested the following six guidelines for anyone conducting system analysis: 43

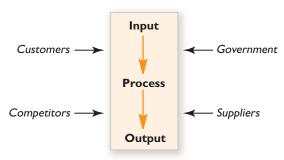
- 1. The whole should be the main focus of analysis, with the parts receiving secondary attention.
- 2. Integration is the key variable in wholeness analysis. It is defined as the interrelatedness of the many parts within the whole.
- Possible modifications in each part should be weighed in relation to possible effects on every other part.
- 4. Each part has some role to perform so that the whole can accomplish its purpose.
- **5.** The nature of the part and its function is determined by its position in the whole.
- **6.** All analysis starts with the existence of the whole. The parts and their interrelationships should then evolve to best suit the purpose of the whole.

Because the system approach to management is based on general system theory, analysis of the management situation as a system is stressed. The following sections present the parts of the management system and recommend information that can be used to analyze the system.

The Management System

As with all systems, the **management system** is composed of a number of parts that function interdependently to achieve a purpose. The main parts of the management system are organizational input, organizational process, and organizational output. As discussed in Chapter 1, these parts consist of organizational resources, the production process, and finished goods, respectively. The parts represent a combination that exists to achieve organizational objectives, whatever they may be.

The management system is an open system—that is, one that interacts with its environment (see Figure 2.2). Environmental factors with which the management system interacts include the government, suppliers, customers, and competitors. Each of these factors represents a potential environmental influence that could significantly change the future of the management system.



ENVIRONMENT

FIGURE 2.2
The open management system

how managers do it

Tracking Customer Opinion with ReviewPro

eedless to say, tracking an environmental factor like customer opinion can be very time-consuming. The challenge of a hotel manager, for example, to accurately track what customers and others are saying about a hotel seems almost impossible. To help overcome this

challenge, hotel managers can use a tool called ReviewPro to compile customer opinions. ReviewPro is a Web-based reputation management service for the hotel industry. It organizes, tracks, and analyzes hotel reviews and other hotel-

related information on the Internet from a wide array of sites, including Facebook and Twitter. Overall, using a tool like ReviewPro helps hotel managers make better decisions about how to improve customer satisfaction.⁴⁴

The critical importance of managers knowing and understanding their customers is perhaps best illustrated by the constant struggle of supermarket managers to know and understand their customers. Supermarket managers fight for the business of a national population that is growing by less than 1 percent per year. Survival requires that they know their customers better than the competition does. That is why many food retailers conduct market research to uncover customer attitudes about different kinds of foods and stores. Armed with a thorough understanding of their customers, gained from this type of research, they hope to win business from competitors who are not benefiting from the insights made possible by such research. ⁴⁵

Information for Management System Analysis

As noted earlier, general system theory supports the use of information from many specialized disciplines to better understand a system. Information from any discipline that can increase the understanding of management system operations enhances the success of the system. Although this statement is a fairly sweeping one, managers can get this broad information from the first three approaches to management outlined in this chapter.

Thus the information used to discuss the management system in the remainder of this text comes from three primary sources:

- 1. Classical approach to management
- 2. Behavioral approach to management
- 3. Management science approach to management

The use of these three sources of information to analyze the management system is referred to as **triangular management.** Figure 2.3 presents the triangular management model. The three sources of information depicted in the model are not meant to represent all the information that can be used to analyze the management system. Rather, these three types of management-related information are probably the most useful in analysis.

A synthesis of classically based information, behaviorally based information, and management science-based information is critical to effective use of the management system. This information is integrated and presented in subsequent parts of this book. These parts discuss management systems and planning (Chapters 7–10), organizing (Chapters 11–14), influencing (Chapters 15–20), and controlling (Chapters 21–22). In addition, a special part of the text focuses on modern challenges managers face when managing management systems (Chapters 3–6).

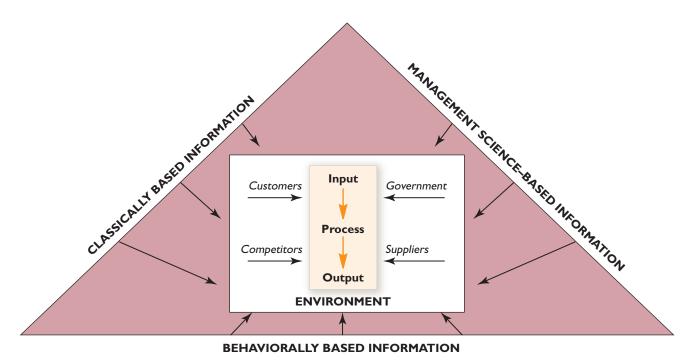


FIGURE 2.3 Triangular management model

LEARNING ORGANIZATION: A NEW APPROACH?

The preceding material in this chapter provides a history of management by discussing a number of different approaches to management that have evolved over time. Each approach developed over a number of years and focused on the particular needs of organizations at the time.

In more recent times, managers seem to be searching for new approaches to management. ⁴⁶ Fueling this search is a range of new issues that modern managers face that their historical counterparts did not. These issues include a concern about the competitive decline of Western firms, the accelerating pace of technological change, the sophistication of customers, and an increasing emphasis on globalization.

A new approach to management that is evolving to handle this new range of issues can be called the *learning organization approach*. A **learning organization** is an organization that does well in creating, acquiring, and transferring knowledge, and in modifying behavior to reflect new knowledge. ⁴⁷ Learning organizations emphasize systematic problem solving, experimenting with new ideas, learning from experience and past history, learning from the experiences of others, and transferring knowledge rapidly throughout the organization. Managers attempting to build a learning organization must create an environment conducive to learning and encourage the exchange of information among all organization members. ⁴⁸ Honda, Corning, and General Electric are successful learning organizations.

The learning organization represents a specific, new *management paradigm*, or fundamental way of viewing and contemplating management. Peter Senge started serious discussion of learning organizations with his book, *The Fifth Discipline: The Art & Practice of the Learning Organization*. ⁴⁹ Senge, his colleagues at MIT, and many others have made significant progress in developing the learning organization concept. According to Senge, building a learning organization entails building five features within an organization:

- Systems thinking—Every organization member understands his or her own job and how
 the jobs fit together to provide final products to the customer.
- **2. Shared vision**—All organization members have a common view of the purpose of the organization and a sincere commitment to accomplish the purpose.

- **3.** Challenging of mental models—Organization members routinely challenge the way business is done and the thought processes people use to solve organizational problems.
- **4. Team learning**—Organization members work together, develop solutions to new problems together, and apply the solutions together. Working as teams rather than as individuals will help organizations gather collective force to achieve organizational goals.
- **5. Personal mastery**—All organization members are committed to gaining a deep and rich understanding of their work. Such an understanding will help organizations successfully overcome important challenges that confront them.

Overall, managers attempting to build learning organizations face many different challenges. One such challenge involves ensuring that an organization changes as necessary. Changes in the external environment, like an increasingly global marketplace, rapid technological advances, and growing pressure to do more with less, all require managers to implement needed change as they build their learning organization. ⁵⁰

CHALLENGE CASE SUMMARY

ohn Chidsey, the CEO of Burger King mentioned in the introductory case, could attempt to use a classical approach to management to stress organizational efficiency—the "one best way" to perform jobs at Burger King restaurants—to increase productivity. Focusing on efficiency could help Burger King reduce costs, which would also help the company contend with new competitors. To take a simplified example, Burger King's managers might want to check whether the dispenser used to apply mustard and ketchup is of the appropriate size to require only one squirt or whether more than one squirt is necessary to adequately cover a hamburger.

In the face of intense competition and the need to control costs, Chidsey could use motion studies to eliminate unnecessary or wasted motions by his employees. For example, are Whoppers, french fries, and drinks located for easy insertion into customer bags, or must an employee walk unnecessary steps during the sales process? Also, would certain Burger King employees be more efficient over an entire working day if they sat, rather than stood, while working?

The classical approach to management might also guide Chidsey to stress efficient scheduling. By ensuring that an appropriate number of people with the appropriate skills are scheduled to work during peak hours and that fewer such individuals are scheduled to work during slower hours, Burger King would maximize its return on labor costs.

Chidsey and other Burger King managers also might want to consider offering employees some sort of bonus if they reach certain work goals. Management should make sure, however, that the goals it sets are realistic; unreasonable or impossible goals tend to make workers resentful and unproductive. For example, management might ask that certain employees reduce errors in filling orders by 50 percent during the next month. If and when these employees reached the goal, Burger King could give them a free lunch as a bonus.

The comprehensive analysis of organizations implies that John Chidsey might be able to further improve success at Burger King by evaluating the entire range of managerial performance—especially with regard to organizational efficiency, the handling of people, and appropriate management action. For example, Chidsey should make sure that Burger King employees receive orders from only one source (be sure that one manager doesn't instruct an employee to serve french fries moments before another manager directs the same employee to prepare milkshakes). Along the same lines, Chidsey might want to make sure that all Burger King employees are treated equally—that fry cooks, for example, don't get longer breaks than order takers.

The behavioral approach to management suggests that Chidsey strongly encourages Burger King managers to consider the people working for them and evaluate the impact of their employees' feelings and relationships on the productivity of Burger King restaurants. A Burger King manager, for example, should try to make the work more enjoyable, perhaps by allowing employees to work at different stations (grill, beverage, cash register, etc.) each day. A Burger King manager might also consider creating opportunities for employees to become more friendly with one another, perhaps through a Burger King employee picnic. In essence, the behavioral approach to management stresses that

managers recognize the human variable in their restaurants and strive to maximize its positive effects.

This chapter suggests that John Chidsey could enhance the success of Burger King by encouraging managers to use the management science approach to solve operational problems. According to the scientific method, a Burger King manager would first spend some time observing what takes place in a restaurant. Next, the manager would use these observations to outline exactly how the restaurant operates as a whole. Third, the manager would apply this understanding of Burger King's operations by predicting how various changes might help or hinder the restaurant as a whole. Before implementing possible changes, the manager would test them on a small scale to see whether they actually affected the restaurant as desired.

If Burger King's managers were to follow the contingency approach to management, their actions as managers would depend on the situation. For example, if some customers hadn't been served within a reasonable period because the equipment needed to make chocolate sundaes had broken down, then management probably would not hold employees responsible. But if management knew that the equipment had broken down because of employee mistreatment or neglect, then reaction to the situation would likely be different.

A Burger King manager could also apply the system approach and view a restaurant as a system, or a number of interdependent parts that function as a whole, to reach restaurant objectives. Naturally, a Burger King restaurant would be viewed as an open system—one that exists in and is influenced by its environment. Major factors within the environment of a Burger King restaurant would be its customers, suppliers, competitors, and the government. For example, if a Burger King competitor significantly lowered its price for hamburgers to a point well below what Burger King was asking for a hamburger, Burger King management might be forced to consider modifying different parts of its restaurant system in order to meet or beat that price.

Last, a Burger King manager could apply the learning organization approach. Using this approach, a restaurant manager, for example, would see the restaurant as an organizational unit that needs to be good at creating, acquiring, and transferring knowledge, and modifying behavior to reflect new knowledge. For example, all Burger King employees at a restaurant would be involved in gathering new thoughts and ideas about running the restaurant and be on a team with management in which they possess a significant voice in establishing how the restaurant exists and operates.

MANAGEMENT SKILL ACTIVITIES

This section is specially designed to help you develop comprehensive management skill. An individual's comprehensive management skill is based on an understanding of various approaches to management and the ability to apply that understanding to various management situations. The following activities are designed to both heighten your understanding of various approaches to management and to develop your ability to apply this understanding.

UNDERSTANDING MANAGEMENT CONCEPTS



To check your understanding and to practice using the concepts in this chapter, go to www.mymanagementlab.com and explore the material associated with Chapter 2.

Know Key Terms

Understanding the following key terms is critical to your understanding of chapter material. Define each of these terms. Refer to the page(s) referenced after a term to check your definition or to gain further insight regarding the term.

classical approach to management 28 scientific management 29 motion study 30 behavioral approach to management 34 human relations movement 35

human relations skill 35
management science approach 36
contingency approach to management 38
system approach to management 38
system 38

closed system 38
open system 39
management system 39
triangular management 40
learning organization 41

Know How Management Concepts Relate

This section is comprised of activities that will further sharpen your understanding of management concepts. Answer essay questions as completely as possible. Also, remember that many additional true/false and multiple choice questions appear online at MyManagementLab.com to help you further refine your understanding of management concepts.

- 1. How will you be able to use the classical approach to management in your job as a manager?
- 2. How does Henri Fayol's contribution to management differ from the contributions of Frank and Lillian Gilbreth?
- 3. Discuss the primary limitation of the classical approach to management. Would this approach be more significant to managers today than managers in the more distant past? Explain.
- 4. What is the "systems approach" to management? How do the concepts of closed and open systems relate to this approach?
- Discuss the triangular management model as a tool for organizing how a manager should think about the management process.

DEVELOPING MANAGEMENT SKILLS

Learning activities in this section are aimed at helping you develop comprehensive management skill. Learning activities include Exploring Your Management Skill: Parts 1 & 2, Experiential Exercises, Cases, and a VideoNet Exercise.

Exploring Your Management Skill: Part 1

Before studying this chapter, respond to the following questions regarding the type of advice you would give to Burger King's CEO, John Chidsey, referenced in the Challenge Case. Then address the concerning comprehensive management skill challenges that he presently faces within the company. You are not expected to be a comprehensive management skill expert at this point. Answering the questions now can help you focus on important points when you study the chapter. Also, answering the questions again after you study the chapter will give you an idea of how much you have learned.

Record your answers here or online at MyManagementLab.com. Completing the questions at MyManagementLab.com will allow you to get feedback about your answers automatically. If you answer the questions in the book, look up answers in the Exploring Your Management Skill section at the end of the book.

FOR EACH STATEMENT CIRCLE:

- "Y" if you would give the advice to Chidsey.
- "N" if you would NOT give the advice to Chidsey.
- "NI" if you have no idea whether you would give the advice to Chidsey.

Mr. Chidsey, in meeting your comprehensive management skill challenges at Burger King, you should ...

Before After Study Study

1. keep in mind that there is probably "one best" way to do restaurant jobs.

Y, N, NI

use motion study principles to manage lower-level jobs in restaurants, such as cooks, but not upper-level jobs, such as vice president of marketing.

Y, N, NI

3. divide work among Burger King workers so that they can focus on special portions of tasks.

Y, N, NI

4. not apply insights of the classical approach to management in concert with insights from the behavioral approach.

Y, N, NI

5. focus on understanding how to increase production at Burger King through an understanding of people.

Y, N, NI

not worry about some Burger King workers influencing other workers to disregard monetary incentives you offer.

Y, N, NI

continually focus on building experience in determining what action to take at Burger King, depending on what events occur.

Y, N, NI

8. see Burger King as a series of interdependent parts functioning as a whole.

Y, N, NI

9. build an understanding of Burger King as a closed system.

Y, N, NI

10. visualize Burger King system inputs as directly leading to system outputs.

Y, N, NI

11. feel free to change Burger King system inputs after considering system outputs but not system process.

Y, N, NI

12. continually monitor customers to determine ways to make the Burger King system more responsive to customer needs.

Y, N, NI

13. use the triangular management model as a guideline for understanding comprehensive management skill.

Y, N, NI

14. analyze Burger King as a group of interrelated parts that may or may not function as a whole.

Y. N. N

 use systems thinking at Burger King as a foundation for building the company as a learning organization.
 Y, N, NI

Exploring Your Management Skill: Part 2

As you recall, you completed Exploring Your Management Skill before you started to study this chapter. Your responses gave you an idea of how much you initially knew about various approaches to management and helped you focus on important points as you studied the chapter. Answer the Exploring Your Management Skill questions again now and compare your score to the first time you took it. This comparison will give you an idea of how much you have learned from

studying this chapter and pinpoint areas for further clarification before you start studying the next chapter. Record your answers within the text or online at MyManagementLab.com. Completing the survey at MyManagementLab.com will allow you to grade and compare your test scores automatically. If you complete the test in the book, look up answers in the Exploring Your Management Skill section at the end of the book.

Your Management Skills Portfolio

Your Management Learning Portfolio is a collection of activities especially designed to demonstrate your management knowledge and skill. By completing these activities online at MyManagementLab.com, you will be able to print, complete with cover sheet, as many activities as you choose. Be sure to save your work. Taking your printed portfolio to an employment interview could be helpful in obtaining a job.

The portfolio activity for this chapter is Comprehensive Management Skill at Crocs. Read this highlight about Crocs Inc. and perform the activities that follow.

Crocs Inc. started when three Boulder, Colorado-based founders decided to develop and market an innovative type of footwear called Crocs™ shoes. Originally intended as a boating/outdoor shoe because of its slip-resistant, nonmarking sole, by 2003 Crocs had become a bona-fide phenomenon, universally accepted as an all-purpose shoe for comfort and fashion.

During 2003–2004 Crocs focused on accommodating remarkable growth while maintaining control. The company

expanded its product line, added warehouses and shipping programs for speedy assembly and delivery, and hired a senior management team. Today, Crocs are available all over the world and on the Internet as the company continues to significantly expand all aspects of its business.

Despite rapid success, Crocs still stands behind its core values. The company is committed to making a lightweight, comfortable, slip-resistant, fashionable, and functional shoe that can be produced quickly and at an affordable price.

Crocs has also developed products that focus on the needs of specific industries. The company offers specialized footwear products that support the needs of the health care, hospitality, restaurant, and transportation industries. The stylish closed-toe designs, made from patented material, are non-marking, slip resistant, and odor resistant. Ergonomically certified, company shoes provide arch support with circulation nubs designed to stimulate your feet while you work. Crocs purports that its shoes improve health, safety, and overall well-being in the workplace.

Activity 1

You have just been appointed the new president of Crocs, Inc. To be successful, you will need to apply insights from many different approaches to management—your comprehensive management skill. Fill out the following form to help you organize your thoughts about how to examine Crocs, Inc., from a comprehensive management skill perspective.

PLANNING ISSUES TO INSPECT

Approach to Management	Issues to Be Examined at Crocs, Inc.
Behavioral Approach	Do employees get along with management?
(managing by focusing on people)	1
	2.
	3.
	4
Systems Approach (managing by viewing the organization as a whole)	What major parts of Crocs, Inc., function together to achieve goals?
	1
	2.
	3
	4
Classical Approach	Do people have the right tools to perform their jobs?
(managing by finding the "one best way" to do jobs)	1.
	2
	3.
	4
Activity 2	
Assuming that you have gathered the information outlined in you organize your thoughts for enabling Crocs to maximize s	Activity 1, explain how the triangular management model would help uccess.

Experiential Exercises

1 Analyzing a Golf Swing

Directions. Read the following scenario and then perform the listed activities. Your instructor may want you to perform the activities as an individual or within groups. Follow all of your instructor's directions carefully.

Frank and Lillian Gilbreth recommended improving worker efficiency and effectiveness by searching for the "one best way" to perform work tasks. To discover this one best way, the Gilbreths would perform motion studies. A motion study would pinpoint those behaviors normally associated with a job well done and encourage workers to adopt those behaviors. As a result of one of the Gilbreths' motion studies, the number of motions needed to lay brick was reduced from 12 to 2.

Obviously, the effectiveness and efficiency of bricklayers were significantly increased as a result of the motion study.

To gain some experience in performing a motion study, find two photos on the Internet. One photo should show professional golfer Phil Mickelson's golf swing and follow-through. The other photo should show an amateur's golf swing and follow-through. The form and follow-through of the amateur do not lead to the same golf success that Mickelson attains.

Activity 1: Compare Phil Mickelson's follow-through and finish to that of the amateur. How are they the same? How are they different? Refer to specific behaviors in your comparison.

Activity 2: What advice would you give the amateur for improving his success in golf?

Activity 3: What are the strengths and limitations of your motion study results?

2 You and Your Career Planning to Be President

You have just been offered a job as time study specialist in a company that manufacturers plumbing tools.⁵¹ Your main job would be to figure out how hard people should be working—that is,

how many activities of various sorts they should be performing per hour. Using a stopwatch and computer, you would measure what people do during a typical workday and make suggestions to their supervisors for how employees can improve. You would probably enjoy seeing how a piece of scrap metal is molded into a finished tool. On the other hand, you may not enjoy pushing people to work harder through the results of your studies. The salary and benefits seem fine to you. You've been with the company for two years and think that eventually you'd like to be president of this company. Would you take the job? Why? Why not?

Video Net Exercise

Rewards and Challenges of Being a Manager: Campus MovieFest

Video Highlights

Campus MovieFest (CMF) began in the Atlanta area as a student film club. It has expanded to hold festivals at more than 50 colleges and universities worldwide and is now the world's largest student film festival. On each campus location, CMF provides student teams all the equipment, training, and technical support needed to make their own five-minute movies, for one week. In the video, several managers discuss the beginnings of the company, managerial roles, communication, challenges, and rewards.

Discussion Questions

1. Describe the beginnings of Campus MovieFest as discussed by Vijay Makar in the video.

- 2. Describe the many roles of the managers in the video.
- 3. What do the managers say are the rewards and challenges of their jobs?

Internet Activity

Browse the Campus MovieFest site at www.campusmoviefest .com. Look around the site. Take the time to watch some of the featured student videos. Now click on the "About Us" link. Once there, read the statements listed about the organization's mission and goals. Are these statements consistent with the video clip? Use the management systems approach to describe the typical process of making a student video. If you were to make your own student video, what would it be about? Why?

CASES

1 HANDLING COMPETITORS AT BURGER KING

"Handling Competitors at Burger King" (p. 27) was written to help you better understand the management concepts contained in this chapter. Answer the following discussion questions about the Challenge Case to better understand how concepts relating to management history can be applied in a company such as Burger King.

- Based on information in the introductory case, list three problems you think future Burger King managers will have to solve.
- 2. What action(s) do you think the managers will have to take to solve these problems?
- 3. From what you know about fast-food restaurants, how easy would it be to manage a Burger King restaurant? Why?

2 21ST CENTURY CHANGES FOR 160-YEAR OLD NEW YORK TIMES

Read the case and answer the questions that follow. Studying this case will help you better understand how the history of an organization impacts its current strategy. This case examines the New York Times.

The New York Times has been not only a fixture in New York City, but an American institution as well. Founded in 1851, it has covered the American Civil War, Custer's last stand, two world wars, moon landings, and even Lady Gaga. Few organizations in the United States are simultaneously as tenured and well-known as the *Times*. In its storied history, it has slowly and sometimes swiftly changed and evolved.

Some of the milestones it has achieved seem somewhat quaint today, but they were the latest in technology when they occurred. A few highlights from the organization's history read like the history of American society. As early as 1896, the paper began using photographs in its stories—now a ubiquitous component of papers all over the world. And in 1919, the New York Times sent a shipment of papers to London—by dirigible—thereby becoming the first trans-Atlantic delivery by air. Starting in 1980, news was being sent by satellite to printing presses across the country, enabling the paper to publish a national edition that would have universal appeal. Then, 16 years later, the Times made its debut on the Internet with its own Web site, nytimes.com.

But other changes are occurring at the *Times*. Venturing far away from its mainstay newspaper business, the paper is attempting to find new ways to maintain a profit. The *Times* is not alone in dealing with a generation that simply doesn't read the newspaper. Since 2000, readership of newspapers in general has been declining at the rate of about 700,000 per year. Advertising dollars from classified ads have dropped in half and employment ads are about one-quarter what they were just 10 years ago. ⁵²

So, what is a newspaper to do? How about offer a fine wine? Or a class on nursing? Or even a piece of the Titanic? The New York Times is doing all of these things—and more. According to Alice Ting, executive director of brand development with the paper, "Like a lot of newspapers, we were looking to expand into different verticals." In other words, offerings beyond the daily news. "If you think of the newspaper," she added, "we report on dining and food and home and health, so we've always looked at whether there was a way to extend the brand into those areas."53 Thus, the New York Times Wine Club was a natural extension. Here, readers and nonreaders may order boutique wines directly from the Times. Customers may choose to have a shipment arrive once a month, every other month, or every three months. Along with their purchase, they receive tasting notes, recipes, and information about certain wine regions.54

In addition, through its "Knowledge Network," the *Times* offers online classes on art, cooking, nursing, paralegal studies, and numerous other topics. Students earn continuing education credits for taking classes directly from the *Times* or from various universities and colleges that partner with the paper. Collectibles are also available through the *Times'* Web site. One can order a piece of coal from the *Titanic* or a guitar signed by Willie Nelson. Jim Mones, director of the *Times'* online store said, "We started out with just photographs, and had great

success. Then we extended to other kinds of content." That extension ties back to the *Times'* brand image. "We always look to see if it is a fit for the brand," added Ting. "And secondarily, is it something our readers would be passionate about? It's always brand first and then our customers."

Beyond unique offerings, the *Times* is at a major crossroads with regard to the access of their online content for news. Currently, subscribers and nonsubscribers can read news headlines on the *Times'* Web site at no cost. However, consideration is being given to charging for this access for those who do not have a paid subscription. With countless competing Web sites offering free news, this decision is one the *Times* is not taking lightly. The current plan is to permit free access to a predetermined number of articles per month—say, 10. Then, a fee would be assessed for any access beyond that number. Those who already have a paid subscription would have unlimited nocharge access. Arthur Sulzberger, Jr., chairman and publisher of the *Times*, sees this as a necessary step for the paper. "We believe this is where our world is going," Sulzberger said, "it's a journey." ⁵⁵

QUESTIONS

- 1. Assume you are a manager working at the New York Times' headquarters. Based on the current changes taking place at the newspaper, which of Henri Fayol's 14 principles of management would be most pertinent to you? Why?
- 2. With all the changes occurring at the *Times*, do you think the systems approach to management is applicable in this organization? Why or why not?
- 3. How do you think working conditions have changed at the *New York Times*? What do you imagine it was like to work there in 1851?

Endnotes

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