Chapter 2
The History of Management

Pedagogy Map

This chapter begins with the learning outcome summaries and key terms, followed by a set of lesson plans that the instructor can use while explaining the concepts.

- Lesson Plan for Lecture (for large sections)
- Lesson Plan for Group Work (for smaller classes)
- Assignments with Teaching Tips and Solutions
  - o What Would You Do Case? Assignment—ISG Steelton
  - o Self-Assessment—Dealing with Conflict
  - o Management Team Decision—Tough Love?
  - o Practice Being a Manager—Observing History Today
  - o Develop Your Career Potential—Know Where Management Is Going
  - o Management Workplace—Profile on Barcelona Restaurant Group
  - o Review Questions
  - o Assignment
  - o Additional Resources

Highlighted Assignments	Key Points
What Would You Do? Case Assignment	Frederick Taylor's original research is made more accessible by casting college students with summer jobs at the steel mill, in the role of the workers Taylor used in his pig iron studies.
Self-Assessment	Students can use the assessment to gain a better understanding of how to deal with conflict.
Management Team Decision	As a management team, students must decide how to resolve a conflict between a company and its employees.
Practice Being a Manager	Students should do observational activities to see

	management theories in practice in modern work environments.
Develop Your Career Potential	Students should begin scanning the press to get a sense of where management is going.
Reel to Real Video Assignment: Management Workplace	Barcelona Restaurant Group strives to provide a unique dining experience by hiring a staff that has the freedom to impress customers.

Supplemental Resources

4LTR Press supplements and online assets include PowerPoint Lectures, Test Banks, Executive Profiles, What Would You Do Cases (WWYD), and Self-Assessment Activities. Within the exposition (narrative), students will experience interactive problems that include matching and fill-in-the-blank problems. They will also encounter the second half of the WWYD Case and the Self-Assessment content.

Learning Outcomes

LO 2-1 Explain the origins of management.

Management jobs and careers didn't exist 125 years ago, so management was not yet a field of study. Examples of management thought and practice can be found throughout history. For example, the earliest recorded instance of information management dates to ancient Sumer (modern Iraq), *circa* 8000–3000 BCE. During the Industrial Revolution (1750–1900), however, jobs and organizations changed dramatically. First, unskilled laborers running machines began to replace high-paid, skilled artisans. Second, instead of being performed in fields, homes, or small shops, jobs occurred in large, formal organizations where hundreds, if not thousands, of people worked under one roof.

LO 2-2 Explain the history of scientific management.

Bosses, who were hired by the company owner or founder, used to make decisions by the seat of their pants without any systematic study, thought, or collection of information. There were no procedures to standardize operations, no standards by which to judge whether performance was good or bad, and no follow-up to determine whether productivity or quality actually improved when changes were made. This all changed, however, with the advent of scientific management, which involved thorough study and testing of different work methods to identify the best, most efficient ways to complete a job. Frederick W. Taylor, who once described scientific

management as "seventy-five percent science and twenty-five percent common sense," emphasized that the goal of scientific management was to use systematic study to find the "one best way" of doing each task. To do that, managers had to follow four principles. The first principle was to "develop a science" for each element of work. Study it. Analyze it. Determine the "one best way" to do the work. Second, managers had to scientifically select, train, teach, and develop workers to help them reach their full potential. The third principle instructed managers to cooperate with employees to ensure that the scientific principles were actually implemented. The fourth principle of scientific management was to divide the work and the responsibility equally between management and workers. Above all, Taylor believed these principles could be used to determine a "fair day's work," that is, what an average worker could produce at a reasonable pace, day in and day out.

The husband and wife team of Frank and Lillian Gilbreth are best known for their use of motion studies to simplify work, but they also made significant contributions to the employment of disabled workers and to the field of industrial psychology. As a result of his experience with bricklaying, Gilbreth and his wife, Lillian, developed a long-term interest in using motion study to simplify work, improve productivity, and reduce the level of effort required to safely perform a job. Motion study broke each task or job into separate motions and then eliminated those that were unnecessary or repetitive. Because many motions were completed very quickly, the Gilbreths used motion-picture films, then a relatively new technology, to analyze jobs. Taylor also strove to simplify work, but he did so by managing time rather than motion as the Gilbreths did. Taylor developed time study to put an end to soldiering and to determine what could be considered a fair day's work. Time study worked by timing how long it took a "first-class man" to complete each part of his job. Henry Gantt (1861–1919) was first a protégé and then an associate of Frederick W. Taylor. Gantt is best known for the Gantt chart, but he also made significant contributions to management with respect to pay-for performance plans and the training and development of workers. A Gantt chart visually indicates what tasks must be completed at which times in order to complete a project.

LO 2-3 Discuss the history of bureaucratic and administrative management.

Today, when people hear the term bureaucracy, they think of inefficiency and red tape, incompetence and ineffectiveness, and rigid administrators blindly enforcing nonsensical rules. When German sociologist Max Weber (1864–1920) first proposed the idea of bureaucratic organizations, however, these problems were associated with monarchies and patriarchies rather than bureaucracies. According to Weber, bureaucracy is "the exercise of control on the basis of knowledge." Rather than ruling by virtue of favoritism or personal or family connections, people in a bureaucracy would lead by virtue of their rational-legal authority—in other words, their knowledge, expertise, or experience.

According to Weber, bureaucracies are characterized by seven elements. First, instead of hiring people because of their family or political connections or personal loyalty, they should be hired because their technical training or education qualifies them to do the job well. Second, along the same lines, promotion within the company should no longer be based on who an individual knows (politics) or who an individual is (heredity) but on his or her experience or achievements. Third, each position or job is part of a chain of command that clarifies who reports to whom throughout the organization. Fourth, to increase efficiency and effectiveness, tasks and responsibilities should be separated and assigned to those best qualified to complete them. Fifth, because of his strong distaste for favoritism, Weber believed that an organization's rules and procedures should apply to all members regardless of their position or status. Sixth, to ensure consistency and fairness over time and across different leaders and supervisors, all rules, procedures, and decisions should be recorded in writing. Finally, to reduce favoritism, "professional" managers rather than company owners should manage or supervise the organization.

Though his work was not translated and widely recognized in the United States until 1949, Frenchman Henri Fayol (1841–1925) was as important a contributor to the field of management as Taylor. But, whereas Taylor's ideas changed companies from the shop floor up, Fayol's ideas were shaped by his experience as a managing director (CEO) and generally changed companies from the board of directors down. Fayol is best known for developing five functions of managers and fourteen principles of management, as well as for his belief that management can and should be taught to others. Fayol argued that managers need to perform five managerial functions if they are to be successful: planning, organizing, coordinating, commanding, and controlling. In addition, according to Fayol, effective management is based on the fourteen principles in Exhibit 2.5.

LO 2-4 Explain the history of human relations management.

Follett believed that the best way to deal with conflict was not domination, where one side wins and the other loses, or compromise, where each side gives up some of what it wants, but integration.

Australian-born Elton Mayo (1880–1948) is best known for his role in the famous Hawthorne Studies at the Western Electric Company. The first stage of the Hawthorne Studies investigated the effects of lighting levels and incentives on employee productivity in the Relay Test Assembly Room, where workers took approximately a minute to put "together a coil, armature, contact springs, and insulators in a fixture and secure the parts by means of four machine screws." Over the next five years, the experimenters introduced various levels and combinations of lighting, financial incentives, and rest pauses (work breaks) to study the effect on productivity. Curiously, however, production levels increased whether the experimenters increased or decreased the

lighting, paid workers based on individual production or group production, or increased or decreased the number and length of rest pauses.

Mayo and his colleagues eventually concluded that two things accounted for the results. Together, the increased attention from management and the development of a cohesive work group led to significantly higher levels of job satisfaction and productivity. In short, the Hawthorne Studies found that workers' feelings and attitudes affected their work.

The next stage of the Hawthorne Studies was conducted in the Bank Wiring Room, where "the group consisted of nine wiremen, three solderers, and two inspectors. Each of these groups performed a specific task and collaborated with the other two in completion of each unit of equipment. While productivity increased in the Relay Test Assembly Room no matter what the researchers did, productivity dropped in the Bank Wiring Room. Mayo and his colleagues found that the differences in performance were due to group dynamics. The workers in the Bank Wiring Room had been an existing work group for some time and had already developed strong negative norms that governed their behavior. In the end, the Hawthorne Studies demonstrated that the workplace was more complex than previously thought, that workers were not just extensions of machines, and that financial incentives weren't necessarily the most important motivator for workers. By highlighting the crucial role, positive or negative, that groups, group norms and group behavior play at work, Mayo strengthened Follett's point about coordination— make just one change in an organization and others, some expected and some unexpected, will occur.

Barnard proposed a comprehensive theory of cooperation in formal organizations. In fact, he defines an organization as a "system of consciously coordinated activities or forces of two or more persons." According to Barnard, the extent to which people willingly cooperate in an organization depends on how workers perceive executive authority and whether they're willing to accept it. In general, people will be indifferent to managerial directives or orders if they (1) are understood, (2) are consistent with the purpose of the organization, (3) are compatible with the people's personal interests, and (4) can actually be carried out by those people. Acceptance of managerial authority (that is, cooperation) is not automatic, however.

LO 2-5 Discuss the history of operations, information, systems, and contingency management.

In general, operations management uses a quantitative or mathematical approach to find ways to increase productivity, improve quality, and manage or reduce costly inventories. The manufacture of standardized, interchangeable parts, the graphical and computerized design of parts, and the accidental discovery of just-in-time inventory systems were some of the most important historical events in operations management.

For most of recorded history, information has been costly, difficult to obtain, and slow to spread. Because of the immense labor and time it took to hand copy information, books, manuscripts, and written documents of any kind were rare and extremely expensive. Consequently, throughout history, organizations have pushed for and quickly adopted new information technologies that reduce the cost or increase the speed with which they can acquire, store, retrieve, or communicate information. The first technologies to truly revolutionize the business use of information were paper and the printing press—paper in the 14th century, the manual typewriter in 1850, the telegraph in the 1860s, the telephone in the 1880s, the personal computer in the 1980s, and the Internet technologies in the last three decades.

A system is a set of interrelated elements or parts that function as a whole. One of the more important ideas in the systems approach to management is that organizational systems are composed of parts or **subsystems**, which are simply smaller systems within larger systems. **Synergy** occurs when two or more subsystems working together can produce more than they can working apart. Systems can be open or closed. **Closed systems** can function without interacting with their environments. But nearly all organizations should be viewed as **open systems** that interact with their environments and depend on them for survival. Exhibit 2.7 illustrates how the elements of systems management work together.

The contingency approach to management clearly states that there are no universal management theories and that the most effective management theory or idea depends on the kinds of problems or situations that managers or organizations are facing at a particular time and place. One of the practical implications of the contingency approach to management is that management is much harder than it looks.

Key Terms

Bureaucracy	Organization
Closed systems	Rate buster
Compromise	Scientific management
Contingency approach	Soldiering
Domination	Subsystems
Gantt Chart	Synergy
Integrative conflict resolution	System
Motion study	Time study
Open systems	

Lesson Plan for Lecture (for large sections)

Pre-Class Prep for Instructors:

Pre-Class Prep for Students:

- Prepare the syllabus.
- Bring the PPT slides.

- Buy the book.

Warm Up Instructors should begin Chapter 2 by leading students through the following series of questions:
- "How long have there been managers?" (since the late 1800s)
- "So if managers have only been around since the late 19th century, does that mean the origin of management dates also to that time?" (yes/no)
- "Explain."

(If a blackboard is available, the instructor should begin to write their ideas on it so that a cumulative definition can be derived.)

Content Delivery Lecture slides: The instructor could make note of where he or she stopped so that he or she can start off from the same or the next topic at the next class meeting. Slides have teaching notes on them to help the instructor as he or she delivers the lecture.

Topics	Activities
2-1 The Origins of Management 2-1a Management Ideas and Practices throughout History 2-1b Why We Need Managers Today	
2-2 Scientific Management 2-2a Father of Scientific Management: Frederick W. Taylor 2-2b Motion Studies: Frank and Lillian Gilbreth	Ask the class to give specific examples of each of these types (using titles).

2-2c Charts: Henry
Gantt

**2-3 Bureaucratic and
Administrative
Management**
2-3a Bureaucratic
Management: Max
Weber
2-3b Administrative
Management: Henri
Fayol

**2-4 Human Relations
Management**
2-4a Constructive
Conflict and
Coordination: Mary
Parker Follett
2-4b Hawthorne
Studies: Elton Mayo
2-4c Cooperation and
Acceptance of
Authority: Chester
Barnard

**2-5 Operations,
Information,
Systems, and
Contingency
Management**
2-5a Operations
Management
2-5b Information
Management
2-5c Systems
Management
2-5d Contingency
Management

Key Terms

Summary

Adjust the lecture to include the activities in the right column. Some activities should be done before introducing the concept, and some activities should be done after introducing the concept.

Special Items

Spark a quick discussion by asking students to respond to the following statement: "Efficiency is exploitation: The studies and techniques developed by Taylor and Gilbreth simply enabled employers to get more work out of their employees."

Make sure students back up their answers.

Conclusion and Preview

Assignments:
1. Inform students to be ready at the next class meeting to discuss or answer questions from Management Team Decision—Tough Love?
2. After covering Chapter 2, the students could be assigned to review Chapter 2 and read the next chapter on the syllabus.

Remind students about any upcoming events.

Lesson Plan for Group Work (for smaller classes)

Pre-Class Prep for Instructors:

- Set up the classroom so that small groups of four to five students can sit together.

Pre-Class Prep for Students:

- Bring the book.

Warm Up

Begin Chapter 2 by leading students through the following series of questions:
- "How long have there been managers?" (since the late 1800s)
- "So if managers have only been around since the late 19th century, does that mean the origin of management dates also to that time?" (yes/no)
- "Explain."

(If a blackboard is available, the instructor should begin to write their ideas on it so that a cumulative definition can be derived.)

Content Delivery	Lecture on The Origins of Management (Section 2-1).

Break for the following group activity:

"Scientific Management"

Divide the class into small groups, and give students roughly 5 minutes to review the What Would You Do? case. Have students come to an agreement about how they would get the work done (the metal moved) and why they think that method would work.

Have groups share their work with the whole class.

Lecture on Scientific Management (Section 2-2).
Before lecturing on the next section, do the following activity:

"Gantt Charts"

Divide the class into small groups. Give each group a blank Gantt chart, and have them create the chart using one of the projects below. Make sure that all groups use the same project so that the instructor can compare ideas across groups after the work is complete.
- Planning a campus fund-raiser for the end of the semester
- Mapping out a research project that is due at the end of the semester
- Planning a formal birthday party for a friend or relative

Have groups share their work with the class.

Lecture on Bureaucratic and Administrative Management and Human Relations Management (Sections 2-3 and 2-4).

Lecture on Operations, Information, Systems, and Contingency Management (Section 2-5).

Special Items	Spark a quick discussion by asking students to respond to the following statement:

"Efficiency is exploitation: The studies and techniques developed by Taylor and Gilbreth simply enabled employers to get more work out of their employees."

Make sure students back up their answers.

Conclusio n and Preview

Possible assignments:

1. Instructors should have students work through the [Management Team Decision—Tough Love?](#) provided at the end of the chapter. To check whether the work is done, the instructor can have students provide written answers, or let students know that the next time the class meets, the instructor will call on one of them to present his or her work.

2. Instructors should have students do the [Develop Your Career Potential— Know Where Management Is Going](#) exercise. Students are required to bring in the article and the concept list to the next class meeting. If the class is small enough, instructors should spend five minutes having students share their results at the beginning of class as a warm up to the next lecture. Ask a student who has an article based on the content, which the instructor is going to deliver, to present their article last.

3. If the instructor has finished covering Chapter 2, he or she could assign students to review Chapter 2 and read the next chapter on the syllabus.

Remind students about any upcoming events.

Assignments with Teaching Tips and Solutions

What Would You Do? Case Assignment

ISG Steelton
International Steel Group, Steelton, Pennsylvania

As the day-shift supervisor at the ISG Steelton steel plant, you summon the six college students who are working for you this summer, doing whatever you need done (sweeping up, sandblasting the inside of boilers that are down for maintenance, running errands, and so forth). You walk them across the plant to a field where the company stores scrap metal. The area, about the size of a football field, is stacked with organized piles of metal. You explain that everything they see has just been sold. Metal prices, which have been depressed, have finally risen enough that the company can earn a small profit by selling its scrap.

You point out that railroad tracks divide the field into parallel sectors, like the lines on a football field, so that each stack of metal is no more than 15 feet from a track. Each stack contains 390 pieces of metal. Each piece weighs 92 pounds and is about a yard long and just over 4 inches high and 4 inches wide. You tell the students that, working as a team, they are to pick up each piece, walk up a ramp to a railroad car that will be positioned next to each stack, and then neatly position and stack the metal for shipment. That's right, you repeat, *92* pounds, *walk* up the ramp,

and *carry* the metal onto the rail car. Anticipating their questions, you explain that a forklift could be used only if the metal were stored on wooden pallets (it isn't); if the pallets could withstand the weight of the metal (they would be crushed); and if you, as their supervisor, had forklifts and people trained to run them (you don't). In other words, the only way to get the metal into the rail cars is for the students to carry it.

Based on an old report from the last time the company sold some of the metal, you know that workers typically loaded about 30 pieces of metal parts per hour over an 8-hour shift. At that pace, though, it will take your six students *6 weeks* to load all of the metal. But the purchasing manager who sold it says it must be shipped in *2* weeks. Without more workers (there's a hiring freeze) and without forklifts, all of the metal has to be loaded by hand by these six workers in 2 weeks. But how do you do that? What would motivate the students to work much, much harder than they have all summer? They've gotten used to a leisurely pace and easy job assignments. Motivation might help, but motivation will only get so much done. After all, short of illegal steroids, nothing is going to work once muscle fatigue kicks in from carrying those 92-pound pieces of metal up a ramp all day long. What can you change about the way the work is done to deal with the unavoidable physical fatigue?

If you were the supervisor in charge, what would you do?

Sources:
J. Hough and M. White, "Using Stories to Create Change: The Object Lesson of Frederick Taylor's 'Pig-Tale,'" *Journal of Management* 27 (2001): 585–601; E. Locke, "The Ideas of Frederick W. Taylor: An Evaluation," *Academy of Management Review* 7 (1982): 14–24; F. W. Taylor, *The Principles of Scientific Management* (New York: Harper, 1911); C. Wrege and R. Hodgetts, "Frederick W. Taylor's 1899 Pig Iron Observations: Examining Fact, Fiction, and Lessons for the New Millennium," *Academy of Management Journal* 43 (2000): 1283–1291; D. Wren, *The History of Management Thought*, 5th ed. (New York: Wiley, 2005).

What Really Happened? Solution

In the case, the students learned that six college students had summer jobs working for a supervisor at International Steel Group in Steelton, Pennsylvania. Their task, over the next two weeks, was to load thousands of 92-pound pieces of metal onto nearby railroad cars for shipping. Unfortunately, since the metal pieces were stacked individually and not on pallets, it wouldn't be possible to use a forklift to load them. Likewise, because of a hiring freeze, the supervisor didn't have the option of hiring more workers. In other words, the only way to get the metal parts into the rail cars was for the college students to load them by hand. Previous experience with this task indicated that workers typically carried 30 to 31 metal parts per hour up the ramp into a rail car. At that pace, it would take the six college students six weeks to load all of the metal. Unfortunately, however, the purchasing manager who sold the metal had already agreed to have it all loaded and shipped within two weeks. The students' job as a supervisor was to figure out how to solve this dilemma.

That general scenario is actually based on one of the most famous cases in the history of management, the pig iron experiments, which were conducted by Frederick W. Taylor, the father of scientific management, at Bethlehem Steel in Bethlehem, Pennsylvania, in 1899. Bethlehem Steel had 10,000 long tons (a long ton is 2,240 pounds) of pig iron on hand. Each pig was 32 inches long, approximately 4 inches high and 4 inches wide, and weighed, on average, about 92 pounds. After the price of a long ton of pig iron rose from $11 to $13.50 per ton, the company sold all 10,000 long tons of pig iron and used laborers to load it onto rail cars for shipping. And, like our college students in the opening case, the laborers at Bethlehem Steel had the job of carrying 92-pound pieces of pig iron up a steep plank and loading them onto a railroad car. Over the course of a 10-hour day, the average laborer could load about 12.5 tons, or 304 to 305 pieces, of pig iron per day; in other words, 30 to 31 pieces per hour. Based on a study analyzing the workers and how long it took them to complete each step involved in loading pig iron, Taylor and his associates, James Gillespie and Hartley Wolle, determined that the average laborer should be able to load 47.5 tons, or 1,156 pieces, of pig iron per day, or 115 to 116 pieces per hour over a 10-hour day. Nearly four times as much! Of course, the question was how to do it. Taylor wrote: "It was our duty to see that the . . . pig iron was loaded on to the cars at the rate of 47 tons per man per day, in place of 12.5 tons, at which rate the work was then being done. And it was further our duty to see that this work was done without bringing on a strike among the men, without any quarrel with the men, and to see that the men were happier and better contented when loading at the new rate of 47 tons than they were when loading at the old rate of 12.5 tons."

Let's find out what really happened and see what steps Frederick W. Taylor and his associates took to try to achieve this goal.

So, without more workers (there's a hiring freeze) and without forklifts, it all has to be loaded by hand by these six workers in two weeks. But how do you do that? What would motivate them to work much, much harder than they have been all summer? After all, they've gotten used to the leisurely pace and job assignments.

One of Taylor's strongest beliefs was that it was the management's responsibility to pay workers fairly for their work, or as Taylor would put it "a fair day's pay for a fair day's work." In essence, in an age of labor unrest when managers and workers distrusted, if not hated, each other, Taylor was trying to align management and employees so that each could see that what was good for employees was also good for management. Once this was done, he believed that workers and managers could avoid the conflicts that he had experienced at Midvale Steel. And one of the best ways, according to Taylor, to align management and employees was to use incentives to motivate workers. Taylor wrote that " . . . in order to have any hope of obtaining the initiative of his workmen the manager must give some special incentive to his men beyond that which is

given to the average man of the trade. This incentive can be given in several different ways, for example, the hope of rapid promotion or advancement; higher wages, either in the form of generous piecework prices or of a premium or bonus of some kind for good and rapid work; shorter hours of labor; better surroundings and working conditions than are ordinarily given, etc., and, above all, this special incentive should be accompanied by that personal consideration for, and friendly contact with, his workmen which comes only from a genuine and kindly interest in the welfare of those under him. It is only by giving a special inducement or 'incentive' of this kind that the employer can hope even approximately to get the 'initiative' of his workmen."

So, what kind of incentives did Taylor provide the laborers who were loading pig iron onto the rail cars? Taylor increased the worker's pay by 61 percent, from $1.15 a day to approximately $1.85 a day, contingent on loading 47.5 tons of pig iron. While that may not sound like much today, imagine if one was offered a 61 percent increase in pay. For example, since the average business college graduate earns a starting salary of about $40,000 a year, imagine being offered a $24,000 increase in pay. Would that increase motivate one? How much harder would one be willing to work for a 61 percent increase in pay? Here's what Taylor wrote regarding the motivating power of money for Henry Knolle (called "Schmidt" in Taylor's book), who was one of the pig iron handlers: "We found that upon wages of $1.15 a day he had succeeded in buying a small plot of ground, and that he was engaged in putting up the walls of a little house for himself in the morning before starting to work and at night after leaving. He also had the reputation of being exceedingly 'close,' that is, of placing a very high value on a dollar. As one man whom we talked to about him said, 'A penny looks about the size of a cartwheel to him.'" When asked whether he wanted to earn $1.85 per day, what Taylor called a "high-priced man," Knolle, who had immigrated to the United States, responded, "Did I vant $1.85 a day? Vas dot a high-priced man? Vell, yes, I vas a high-priced man." Taylor wrote: "And throughout this time he [Knolle] averaged a little more than $1.85 per day, whereas before he had never received over $1.15 per day, which was the ruling rate of wages at that time in Bethlehem. That is, he received 60 percent higher wages than were paid to other men who were not working on task work." In fact, the pay increase could be even larger or smaller depending on how much each worker loaded each day. For example, worker Simon Conrad averaged 55.1 tons per day and thus received an average of $2.07 per day. Likewise, worker Joseph Auer averaged 49.9 tons per day and received an average of $1.87 per day. Were all workers able to make more money under this incentive system? No, and Taylor indicated that only about one in eight workers was capable of that level of performance at this task. For some, the work was too physically taxing (more on that below), and they were allowed to return to the guaranteed daily wage of $1.15 per day. But, when Taylor's incentive system was used with workers who were physically capable of performing the job (and Taylor's third principle of scientific management indicates that managers should select workers on the basis of their aptitude to do a job well) the amount of pig iron loaded per day typically increased by three or four times.

In the long run, was Taylor right about the motivating power of money? Yes and no. Yes, numerous studies over the last 100 years show that when financial rewards are clearly tied to performance, they significantly increase individual performance. Do financial rewards work all of the time? No. But, as the students will learn in Chapter 13 on motivation, linking financial rewards to individual performance increases one's performance 68 percent of the time in general and 84 percent of the time in manufacturing settings, such as at Bethlehem Steel. So, how was Taylor wrong about the motivating power of money? Well, it should be noted that few others have been able to achieve the quadrupling of performance that was associated with financial incentives in Taylor's pig iron experiments. On average, using individually based financial incentives increases performance "just" 23 to 30 percent. However, 23 to 30 percent is still a large increase in performance, and the students will see that few companies ignore management ideas that can bring about such large improvements.

And while motivation might help, motivation will only get so much done. After all, short of illegal steroids, nothing is going to work once muscle fatigue kicks in from carrying those 92-pound parts up a ramp all day long. So, what can you change about the way the work is done to deal with the physical fatigue that can't be avoided from this kind of work?

Another of Taylor's controversial proposals was to give rest breaks to workers doing physical labor. We take morning, lunch, and afternoon breaks for granted, but in Taylor's day, factory workers were expected to work without stopping. If they were being paid for 10 hours of work, then they should be working for those 10 hours. When Taylor said that breaks would increase worker productivity, no one believed him. Given the prevalent beliefs of the time, people just didn't comprehend how time spent not working, such as rest breaks, could actually lead to more work getting done. In short, people believed that if they worked fewer minutes, they'd get less done, not more.

However, Taylor understood that especially with physical labor, rest was necessary. (Today people know that rest breaks are needed for all kinds of work.) Taylor wrote: "When a laborer is carrying a piece of pig iron weighing 92 pounds in his hands, it tires him about as much to stand still under the load as it does to walk with it, since his arm muscles are under the same severe tension whether he is moving or not." He further said: "It will also be clear that in all work of this kind it is necessary for the arms of the workman to be completely free from load (that is, for the workman to rest) at frequent intervals. Throughout the time that the man is under a heavy load the tissues of his arm muscles are in the process of degeneration, and frequent periods of rest are required so that the blood may have a chance to restore these tissues to their normal condition." Taylor referred to the fatigue that physical work generated as the law of heavy laboring. He explained: "Practically all such work consists of a heavy pull or a push on the man's arms, that is, the man's strength is exerted by either lifting or pushing something which he grasps in his hands. And the law is that for each given pull or push on the man's arms, it is possible for

the workman to be under load for only a definite percentage of the day. For example, when pig iron is being handled (each pig weighing 92 pounds), a first-class workman can only be under load 43 percent of the day. He must be entirely free from load during 57 percent of the day. And as the load becomes lighter, the percentage of the day under which the man can remain under load increases. Thus, if the workman is handling a half-pig, weighing 46 pounds, he can then be under load 58 percent of the day and only has to rest during 42 percent. As the weight grows lighter the man can remain under the load during a larger and larger percentage of the day, until finally a load is reached which he can carry in his hands all day long without being tired out."

Here's Taylor's explanation of how rest breaks were actually used with the pig iron loaders: "Schmidt [the laborer, Henry Knolle] started to work, and all day long, and at regular intervals, was told by the man [one of Taylor's associates] who stood over him with a watch, 'Now pick up a pig and walk. Now sit down and rest. Now walk—now rest,' etc. He worked when he was told to work, and rested when he was told to rest, and at half-past five in the afternoon had his 47.5 tons loaded on the car." Taylor further explained: "Practically the men were made to take a rest, generally by sitting down, after loading ten to twenty pigs. This rest was in addition to the time which it took them to walk back from the car to the pile. It is likely that many of those who are skeptical about the possibility of loading this amount of pig iron do not realize that while these men were walking back they were entirely free from load, and that therefore their muscles had, during that time, the opportunity for recuperation."

Some academicians are critical of Taylor with respect to the short-term effects of rest breaks, pointing out that the pig iron laborers could only work at most for two or three consecutive days at these high levels (that is, four times the normal workload) before having to take two or three days off to recover from the cumulative physical fatigue of this difficult job. However, under Taylor's plan the workers weren't penalized or exploited because of this. During the two or three days off from the high load or high payment plan, they simply moved a smaller number of pig irons under the regular pay plan under which they were guaranteed $1.15 per day. It can be assumed that during these off days, the workers recovered from their heavier work days by only moving the typical 12.5 tons of pig iron per day. Furthermore, even though the physical demands of the work made it likely that most of the workers spent no more than half of their time on the high load or high payment plan, they were able to move so much more pig iron tonnage under that incentive plan (compared to the standard $1.15 plan) that the overall average cost of handling a ton of pig iron dropped by slightly more than half, from $0.072 to $0.033 per ton. However, workers benefited as well, earning somewhere between 30 and 60 percent more money, depending on the percentage of days they worked under the high load or high payment plan and how much pig iron they were able to load on those days.

In the end, what can we take away from Taylor's pig iron experiments? This excerpt from a 1915 speech he made to the Cleveland Advertising Club can help us put them into perspective:

Most people think scientific management is chiefly handling pig-iron. I do not know why (laughter). I do not know how they have gotten that impression, but a large part of the community has that impression. The reason I chose pig-iron for the first illustration [of scientific management] is that if you can prove to any one that the strength, the effort of those four principles when applied to such rudimentary work as that, the presumption is that it can be applied to something better. The only way to prove it is to start at the bottom and show these four principles all along the line.

Basically, Taylor's pig iron experiments were intended as a demonstration of the power of his four principles of scientific management, shown below:

- **First:** Develop a science for each element of a man's work that replaces the old rule-of-thumb method.
- **Second:** Scientifically select and then train, teach, and develop the workman, whereas in the past he chose his own work and trained himself for it as best as he could.
- **Third:** Heartily cooperate with the men so as to ensure that all of the work being done is in accordance with the principles of the science that have been developed.
- **Fourth:** There is an almost equal division of the work and the responsibility between the management and the workmen. The management takes over all the work for which they are better fitted than the workmen, while in the past almost all of the work and the greater part of the responsibility were thrown upon the workmen.

In short, if those principles could work extremely well in basic jobs, such as heavy manual labor, then what results might they produce with even more complex tasks and jobs? Taylor summarizes what one should learn as follows.

It is no single element, but rather this whole combination, that constitutes scientific management, which may be summarized as follows:

- Science, not rule of thumb
- Harmony, not discord
- Cooperation, not individualism
- Maximum output, in place of restricted output
- The development of each man to his greatest efficiency and prosperity

Self-Assessment

Dealing with Conflict

Conflict is an inevitable part of work life (and life in general), and the success of individual employees, teams, and entire organizations depends on how they manage interpersonal conflict. How do you deal with conflict? Do you look for it, avoid it, or something in between? This twenty-question assessment is

designed to provide insight into how you manage conflict. This information will provide you with a baseline for future development of conflict-management skills.

You can also use this self-assessment as a precursor to the Management Team Decision exercise that follows. At a minimum, it will raise your awareness of how you handle differences of opinion before you begin working in a team.

It may even inspire you to make conscious changes in your conflict-management style, helping you—and your team—be more effective. Rate each statement using the following scale:

1. Strongly disagree
2. Disagree
3. Not sure
4. Agree
5. Strongly agree

When I have a conflict at work, I do the following:
1. I give in to the wishes of the other party.
1   2   3   4   5

2. I try to realize a middle-of-the-road solution.
1   2   3   4   5

3. I push my own point of view.
1   2   3   4   5

4. I examine issues until I find a solution that really satisfies me and the other party.
1   2   3   4   5

5. I avoid a confrontation about our differences.
1   2   3   4   5

6. I concur with the other party.
1   2   3   4   5

7. I emphasize that we have to find a compromise solution.
1   2   3   4   5

8. I search for gains.
1   2   3   4   5

9. I stand for my own and others' goals and interests.
1   2   3   4   5

10. I avoid differences of opinion as much as possible.
1   2   3   4   5

11. I try to accommodate the other party.
1   2   3   4   5

12. I insist we both give in a little.
1   2   3   4   5

13. I fight for a good outcome for myself.
1   2   3   4   5

14. I examine ideas from both sides to find a mutually optimal solution.
1   2   3   4   5

15. I try to make differences loom less severe.
1   2   3   4   5

16. I adapt to the other parties' goals and interests.
1   2   3   4   5

17. I strive whenever possible toward a 50–50 compromise.
1   2   3   4   5

18. I do everything to win.
1   2   3   4   5

19. I work out a solution that serves my own as well as others' interests as much as possible.
1   2   3   4   5

20. I try to avoid a confrontation with the other person.
1   2   3   4   5

Scoring
This inventory can be broken down into five sections:
(A) Add together your scores for items 1, 6, 11, and 16: _____
(B) Add together your scores for items 2, 7, 12, and 17: _____
(C) Add together your scores for items 3, 8, 13, and 18: _____
(D) Add together your scores for items 4, 9, 14, and 19: _____
(E) Add together your scores for items 5, 10, 15, and 20: _____

Interpreting the Score
Here is what your score means.

If you completed the inventory, you have generated five scores:

- (A) corresponds to a tendency to *yield* to the other party during a conflict.
- (B) corresponds to a student's tendency to seek *compromise* as a resolution to a conflict.
- (C) indicates the extent to which you *force* your solution on the other party as a means to end conflict.
- (D) indicates how inclined you are to take a *problem-solving* approach to a conflict.
- (E) indicates your predisposition to *avoid* conflict.

Higher scores for each subscale indicate that you have a greater tendency to want to use that means of conflict resolution. Likewise, looking at all subscales, your highest score of the five represents your primary method of responding to conflict, while the next highest score is your secondary method for responding to conflict.
        De Dreu's study talks about these five strategies in terms of Dual Concern Theory—that is, concern for others and concern for self. In the diagram on the next page, high concern for self and low

concern for the other leads to a forcing style, characterized by imposing one's own will on the other party. According to de Dreu's research, "Forcing involves threats and bluffs, persuasive arguments and positional commitments." In contrast, yielding connotes a high concern for the other and a low concern for self. People who prefer a yielding strategy will give unilateral concessions and offers of help. Low concern for self and others indicates preference toward an avoiding style of conflict management, which "involves reducing the importance of the issues, and attempts to suppress thinking about the issues." Conversely, high concern for both self and others is evidence of a preference for the problem-solving strategy, which "is oriented towards an agreement that satisfies both own and others' aspirations."

Some researchers have identified a middle point in the Dual Concern Theory as being compromise. Researchers, however, cannot agree that compromise is a distinct strategy. Some simply think of compromising as a half-hearted problem-solving strategy, but de Dreu's study results give further evidence of compromise as a separate and valid strategy for conflict resolution.
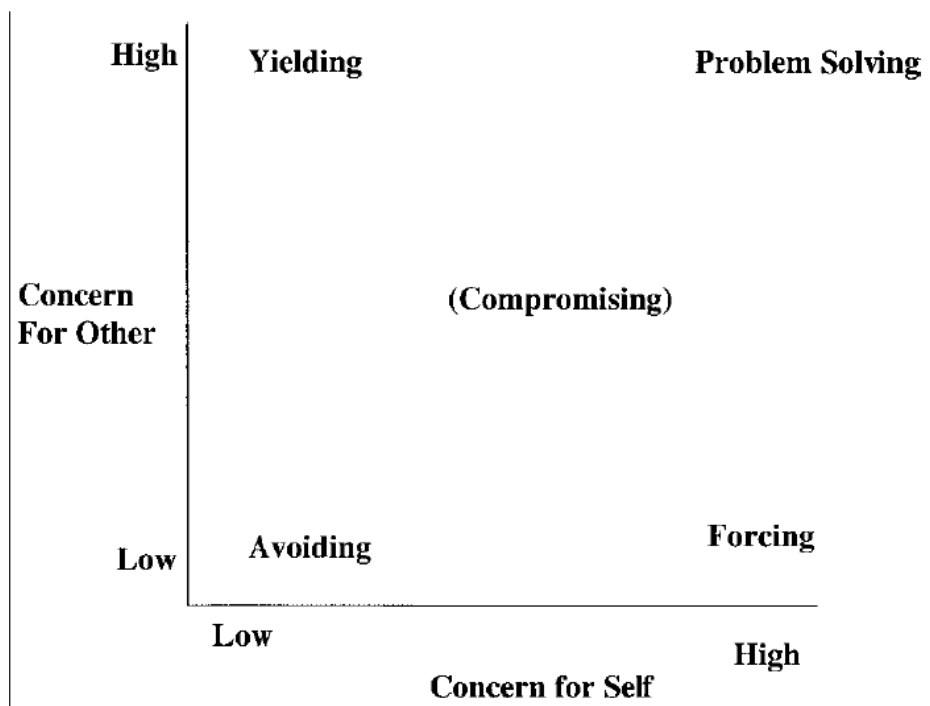
Source: C. K. W. de Dreu, A. Evers, B. Beersma, E. S. Kluwer, and A. Nauta, "A Theory-Based Measure of Conflict Management Strategies in the Workplace," *Journal of Organizational Behavior* 22 (2001) 645–668.

Tough Love?

As a manager with lots of experience in negotiations, you've experienced a lot of different conflicts. There was that one case where a worker argued that he should be allowed to smoke his (legally prescribed) marijuana at his desk. Another time, someone asked you to mediate between two executives who were having a strategic disagreement—one thought that the company should

invest in tulip futures, while the other thought that pork bellies were the future. But even with all of this experience, you haven't seen a case like the one going on at a Mott's apple juice factory that you've been called in to consult on.

Mott's, a division of Dr. Pepper Snapple Group, employs 305 people at its juice factory in Williamson, N.Y., near Rochester. All 305 employees, however, have been on strike for more than three months. They are protesting the fact that the company wants to make severe cuts in pay and benefits—a reduction of wages by $1.50 (about $3,000 per year), a pension freeze, a reduction in 401K contributions, and a decrease in the health insurance subsidy.

On the surface, these cuts seem to make some business sense because companies all over the world are struggling. But what is so unusual in this case is that Dr. Pepper Snapple Group is more profitable than it ever has been. In the last year, its net income was $550 million, a dramatic improvement from the previous year, when it lost $312 million. Because of this success, employees are accusing the company of being greedy. Stuart Applebaum, the president of the factory workers' union, says "[Dr. Pepper Snapple doesn't] even show the respect to lie to us. They just came in and said, 'We have no financial need for this, but we just want it anyway because we figure we can get away with it.'"

The company, meanwhile, defends the pay and benefits cut by arguing that its current labor costs are considerably higher than other local companies. The average pay at the Mott's plant is $21, whereas other factories and transportation companies in the area pay closer to $14. In a public statement, the company defends the move, saying in part, "As a public company, Dr. Pepper Snapple Group has a fiduciary responsibility to operate in the best interests of all its constituents, recognizing that a profitable business attracts investment, generates jobs, and builds communities."

You have been assigned to a task force with representatives from management and labor that has been charged with resolving the crisis. As all of you review the files, you realize that this is a critical case; if the employees lose, other companies might be motivated to take similar actions and cut labor costs (and increase profits) even when they are not struggling financially.

For this Management Team Decision, form a group of three or four with other students, to act as the task force, and answer the following questions.

Source:
Steven Greenhouse "In Mott's Strike, More than Pay at Stake" *The New York Times*, August 17, 2010, accessed September 30, 2016, from
www.nytimes.com/2010/08/18/business/18motts.html?_r=1&adxnnl=1&adxnnlx=1297947774-W3u9XoLkFQ6q+a7OmuVx1A.

Questions

1. How could you help steer negotiations between labor and management so that the conflict between them is healthy and productive? Is that even possible?

   Students' answers will vary. Rather than the management trying to dominate the workers or both parties losing something by arriving at a compromise, Mary Parker Follett wrote that they should pursue integrative conflict resolution. In this process, both parties in the conflict indicate their preferences and then work together to find an alternative that meets both of their needs. In the case of the Mott's factory, the company wants to establish some costs control, while the employees receive reasonable salaries, benefits, and assurance that their jobs will be safe. Rather than solving the problem by giving one party (or the other) all that it wants, integrative conflict resolution can be used so that the parties reach a third alternative.

2. Is the company justified in trying to cut costs even when it has made a huge profit? Are the employees justified in not working to protest what they perceive as unfair cuts?

   Students' responses will vary. It is likely that some students will side with the company by reasoning that a company has the right to use its resources as it chooses. On the other hand, some groups will argue that companies have a certain responsibility toward its employees.

Practice Being a Manager

Observing History Today

The topic of management history may sound like old news, but many of the issues and problems addressed by Max Weber, Chester Barnard, and other management theorists still challenge managers today. *How can one structure an organization for maximum efficiency and just treatment of individuals? What is the basis for, and limits to, authority in organizations?* It is rather amazing that these thinkers of the late 19th and early 20th centuries generated a theory that still influences the discussion of management and leadership challenges in the 21st century. This exercise will give instructors the opportunity to draw upon some ideas that trace their roots back to the pioneers of management thinking.

Preparing in Advance for Class Discussion

Step 1: Find an observation point. Identify a place where you can unobtrusively observe a group of people as they go about their work. You might select a coffee shop, bookstore, or restaurant.

Step 2: Settle in and observe. Go to your selected workplace and observe the people working there for at least 20 minutes. You should take along something like a notebook or PDA so that you can jot down a few notes. It is a good idea to go during a busy time as long as it is not too crowded for you to easily observe the workers.

Step 3: Observe employees at work. Observe the process of work and the interaction among the employees. Consider some of the following issues:

- Identify the steps that employees follow in completing a work cycle (e.g., from taking an order to delivering a product). Can you see improvements that might be made, particularly steps that might be eliminated or streamlined?
- Observe the interaction and mood of the workers. Are they stressed, or are they more relaxed? Does it seem to you that these workers like working with each other?
- Listen for signs of conflict. If you see signs of conflict, is the conflict resolved? If yes, how did the workers resolve their conflict? If not, do you think that these workers suppress (bottle up) their conflict?
- Can you tell who is in charge here? If yes, how do the other workers respond to this person's directions? If not, how does the work group sort out who should be doing each task, and in what order?

Step 4: Consider what you saw. Immediately after your observation session, look through this chapter on management history for connections to your observations. For example, do you see any signs of the "Hawthorne Effect"? Would Fredrick Taylor approve of the work process you observed, or might he have suggested improvements? What might Chester Barnard's theory have to say about how the workers you observed responded to instructions from their "boss"? Write a one-page paper of bullet-point notes describing possible connections between your observations and the thinking of management pioneers such as Mary Parker Follett.

Class Discussion

Step 5: Share your findings as a class. Discuss the various points of connection you found between pioneering management thinkers and your own observations of people at work. Are some of the issues of management "timeless"? If so, what do you see as timeless issues of management? What are some ways in which work and management have changed since the days of the management pioneers?

Teaching Notes—Practice Being a Manager

Exercise Overview and Objective

In this exercise, students will spend some time (20 minutes minimum) observing people at work. The objective of this exercise is for students to see—in a live context—the problems and challenges that interested management thinkers of the past. One of the most basic starting points for understanding the field of management is simply to observe people at work. Observation was the starting place for such pioneers as Fredrick Taylor, Charles Barnard, and Max Weber. And it is the starting place for many of today's most influential management scholars. Also, this exercise should help students understand that historical contributions were made by pioneering individuals who wrestled with questions and issues that continue to challenge management thinkers today.

The instructor should assign Step 1 at least one class session prior to the session in which he or she would like to complete this exercise. The instructor may want to allow more time, as the observation requires students to identify an appropriate site and unobtrusively observe the work performed there for at least 20 minutes. The instructor may want to explain "unobtrusive." Students should be able to naturally observe the work at this site for at least 20 minutes without drawing attention to themselves or otherwise changing the natural flow of work. Some good examples are given in the instructions to Step 1:

- Coffee Shop
- Bookstore
- Restaurant

These worksites are places where patrons commonly hang out and enjoy a latte or browse the bookshelves. The instructor may want to caution students not to attempt to spy on anyone and/or to misrepresent themselves to a security guard, manager, etc. It is ethical to observe work or workers in public spaces but a serious ethical violation to spy on workers in private spaces and/or to misrepresent one's intentions. Students may want to number or otherwise identify workers (e.g., Worker 1, Manager, and Worker 2). Students should use a shorthand (e.g., W-2 for Worker 2) to ease note taking. Discourage students from using real names or other means of personal identification and from recording anything of a sensitive or private nature. Instead of capturing the word-by-word dialogue of two workers gossiping about a third worker, simply record "W-1 and W-2 in private conversation for 3 minutes."

Announce that students should read the bullet items in Step 3 before they arrive at their place of observation. This will help them to know what they are looking out for and also to better organize their observation notes. Finally, remind students that Step 2 instructs them to take along whatever they need to take notes (e.g., notepad, laptop, smartphone).

The one-page paper (see Step 4) should be completed soon after the observations. It is best if students plan to write this paper immediately after writing their observations.

In-Class Use

Class discussion should follow the submission of the papers. Some instructors prefer to read the papers and discuss them in a subsequent session. Other instructors prefer to discuss the findings on the day that the papers are submitted. Either approach is fine here as long as the time lag between student observations and class discussion is kept to a minimum.

The class discussion may proceed in a linear fashion through the major sections of the chapter, with discussion of connections to the student observations by section. Alternatively, the instructor may want to lead a nonlinear discussion of students' observations or connections. In either case, discussion should aim to accomplish the following objectives:

- Share the experience of observing people at work—what might observation contribute to the students' understanding (vs., say, reading about a particular workplace)?
- Identify at least a few of the timeless themes in management study. (See the questions in Step 4 of the exercise related to the Hawthorne Effect, Chester Barnard's theory on acceptance of authority, etc.)
- Identify at least a few of the ways in which work and management may have changed since the time it has been studied by pioneers in management thought (e.g., shifts in communication driven by email, computer networks).

Develop Your Career Potential

Purpose

This assignment is designed to encourage students to begin tracking management trends and theories on a daily basis. As patterns emerge, students will be able to anticipate shifts in management ideas better prompted by changes in complex general and specific environments.

Organizing the Discussion

Students are given three activities: finding a press article that discusses some of the topics covered in the book (all chapters), writing a brief summary of that article and researching unfamiliar terms, and situating the material in the context of the history presented in Chapter 2 (if possible).

One way instructors can use this activity in class is by having each student give a single-sentence description of his or her article and identify the periodical in which it was published and the date of publishing. By doing this, students will be able to listen for recurring themes and think about them in a temporal fashion. Then, instructors should write or project the table of contents on the board. They should ask students to raise their hand when they call out a chapter to which they

think their article relates. Students may raise their hand more than once, depending on the article they read. Alternatively, after students give their brief summaries, instructors can simply indicate which chapters seem to be more frequently represented. Then, instructors should divide the students into groups based on the chapters to which their articles most closely relate. In small groups, instructors should have each student share his or her article's brief summary and how he or she thinks that the subject of the article relates to the management theories presented in the chapter. Ask each group to think about implications of the articles or conclusions they can draw about how their topic is evolving in the real world. For example, if a group of students chose articles on teams and teamwork, can it draw any conclusions about challenges (or lack thereof) companies seem to be facing when implementing teams?

Another way to organize the discussion is to ask students about the connections they made between management history and current management news. Ask if, based on their article, they think historical management theories are relevant for today's workforce. If they answer yes, have them say why. If they answer no, ask them to explain why not.

Remind students that most business periodicals have sections related to management. The *Wall Street Journal* has features titled "Cubicle Corner," "In the Jungle," "Work and Family," and others that focus on management issues. *Fortune* has regular features like "Ask Annie," and *Fast Company* includes a column called "Corporate Shrink" and an interview with a manager called "What I Know Now."

Know Where Management Is Going

As you read in the chapter, management theories are dynamic. In other words, they change over time, sometimes very rapidly. In addition, management theories have often been cumulative, meaning that later theorists tend to build on theories previously advanced by other scholars. Thus, a new theory becomes the starting point for yet another theory that can either refine or refute the management thinking of the day.

One way to prepare for your career as a manager is by becoming aware of management trends today. The best (and easiest) way to do that is by regularly combing through business newspapers and periodicals. You will always find at least one article that relates to management concepts, and as you scan the business press over time, you will see which theories are influencing current management thinking the most. By understanding management history and management today, you will be better able to anticipate changes to management ideas in the future. This exercise is designed to introduce you to the business press and to help you make the connection between the concepts you learn in the classroom and real-world management activities. Done regularly, it will provide you with invaluable insights into business activities at all types of organizations around the world.

Activities

1. Find a current article of substance in the business press (for example, the *Wall Street Journal*, the *Financial Times, Fortune, BusinessWeek, Inc.*) that discusses topics covered in this course. Although this is only Chapter 2, you will be surprised by the amount of terminology you have already learned. If you are having trouble finding an article, read through the table of contents on pages v–viii to familiarize yourself with the names of concepts that will be presented later in the term. Read your article carefully, making notes about relevant content.

2. Write a one-paragraph summary of the key points in your article. List the terms or concepts critical to understanding the article, and provide definitions of those terms. If you are unfamiliar with a term or concept that is central to the article, do some research in your textbook or see your professor during office hours. Relate these key points to the concepts in your text by citing page numbers.

3. How does your article relate to the management theories covered in this chapter? Explain the situation detailed in your article in terms of the history of management.

Management Workplace

Management workplace videos can support several in-class uses. In most cases, the instructor can build an entire 50-minute class around them. Alternatively, they can provide a springboard into a group lesson plan. The management workplace video for Chapter 2 would be a nice companion to the instructor's introduction to the course on the first day teaching this chapter.

Video: Profile on Barcelona Restaurant Group

The Evolution of Management Thinking

Summary

Andy Pforzheimer is a renowned chef and the co-owner of Barcelona Restaurant Group, which is a collection of seven wine and tapas bars in Connecticut and Atlanta, Georgia. When customers dine at any of Pforzheimer's restaurants, they experience the local color and personal touch of a neighborhood eatery. The wait staff is personable and strives to get to know the customers' tastes. Delivering this unique dining experience requires a unique approach to management. The company gives employees the freedom and control that they need to impress customers. It recruits self-confident individuals who can take ownership over the establishment and its

success. Further, Pforzheimer is adamant that his staff be mature and willing to take responsibility for their work and success.

Ask your students

1. What aspects of restaurant work are especially challenging to the wait staff, and how does Barcelona's approach to management help employees overcome the downsides of the job?

   In the video, Andy Pforzheimer identifies the challenging aspects of restaurant life: "It is work sometimes to smile. It is work to have somebody yelling at you because they weren't seated fast enough or their steak was cooked wrong, and you must pat them on the back and say, 'You know, it was our fault, I'll do everything I can'—yeah, that's work, and it's not always fun."

   Barcelona's leadership team believes that such challenging aspects of restaurant work can be managed best when employees are given significant responsibility over the restaurant and its success. New hires learn at the outset that the restaurant is their responsibility, and if the place does well, the members of the wait staff get all the credit.

2. What steps do the leaders of Barcelona Restaurant Group take to ensure cooperation and acceptance of authority from their employees?

   Andy Pforzheimer says that he accepts other's opinions, wants managers to communicate with him at all times, and wants to hire people who are self-starting. He allows people in his company to use their creativity to come up with innovative solutions. Rather than telling people what to do and how to do it, the leadership at Barcelona expects all employees to make their own decisions about what they think will be the best for the company and best for the customer. Pforzheimer also ensures cooperation and acceptance of authority by setting clear goals and standards. At Barcelona, everything is about customer satisfaction, and achievement is defined as giving the customer a great dining experience. Whatever authority Pforzheimer exercises over employees is centred on that goal.

3. Would the management style of Barcelona Restaurant Group best be described as scientific management or contingency management?

   The leadership at Barcelona is looking for people who are comfortable taking ownership. The leaders want people who can make their own decisions instead of having to be told how to do everything. In this way, Barcelona aims to be the opposite of other restaurants, in which every procedure and action is regulated. Barcelona employees are empowered to

make guests happy, and the leadership of the company puts a high degree of emphasis on the contributions that everyone can make. In this way, Barcelona reflects the contingency approach to management, which clearly states that there are no universal management theories and that the most effective management theory or idea depends on the kinds of problems or situations that managers or organizations are facing at a particular time. In short, the best way depends on the situation.

Workplace Video Quiz

Video Segment 1

*Video segment title	Evolution of Management Thought
*Start time (in sec)	0:00
*Stop time (in sec)	4:44
*Quiz Question 1	The leaders of Barcelona Restaurant group believe that success depends on employees who are self-starting, confident, willing, and empowered. This idea is most associated with:
*Option a	Scientific Management
*Option b	Gantt Charts
Option c	Constructive Conflict and Coordination
Option d	W. Edwards Deming's quality management
*Correct option	c: constructive conflict and coordination
*Feedback for option a	Incorrect. According to Mary Parker Follett, who pioneered the idea of constructive conflict and coordination, a leader's power should be thought of as "with" rather than "over." In her view, leadership involves setting the tone for the team rather than being aggressive or dominating.
*Feedback for option b	Incorrect. According to Mary Parker Follett, who pioneered the idea of constructive conflict and coordination, a leader's power should be thought of as "with" rather than "over." In her view, leadership involves setting the tone for the team rather than being aggressive or dominating.
Feedback for option c	Correct. According to Mary Parker Follett, who pioneered the idea of constructive conflict and coordination, a leader's power should be thought of as "with" rather than "over." In her view, leadership involves setting the tone for the team rather than being aggressive or dominating.
Feedback for option d	Incorrect. According to Mary Parker Follett, who pioneered the idea of constructive conflict and coordination, a leader's power should be

	thought of as "with" rather than "over." In her view, leadership involves setting the tone for the team rather than being aggressive or dominating.
*Quiz Question 2	Barcelona owner Andy Pforzheimer states that many restaurant companies create highly regulated work rules that control nearly every aspect of employee behavior in order to find the most efficient way to do a job. This management approach is characteristic of:
*Option a	Scientific management
*Option b	Systems perspective on management
Option c	Contingency perspective on management
Option d	Behavioral perspective on management
*Correct option	a: Scientific management
*Feedback for option a	Correct. Scientific management involves thorough study and testing of different work methods to identify the most efficient way to do a job.
*Feedback for option b	Incorrect. Scientific management involves thorough study and testing of different work methods to identify the most efficient way to do a job.
Feedback for option c	Incorrect. Scientific management involves thorough study and testing of different work methods to identify the most efficient way to do a job.
Feedback for option d	Incorrect. Scientific management involves thorough study and testing of different work methods to identify the most efficient way to do a job.
Quiz Question 3	Leaders at Barcelona Restaurant believe that employees can achieve organizational goals through a variety of different approaches, tasks, and decisions, based on the situation. This is consistent with:
Option a	Classical and universalist perspectives on management
Option b	Systems perspective on management
Option c	Contingency perspective on management
Option d	Behavioral perspective on management
Correct option	c: Contingency perspective on management
Feedback for option a	Incorrect. The contingency approach to management holds that there are no universal management theories.
Feedback for option b	Incorrect. The contingency approach to management holds that there are no universal management theories.
Feedback for option c	Correct. The contingency approach to management holds that there are no universal management theories.

Feedback for option d	Incorrect. The contingency approach to management holds that there are no universal management theories.

Video Segment 2

*Video segment title	Evolution of Management Thought
*Start time (in sec)	4:45
*Stop time (in sec)	6:50
*Quiz Question 1	When Barcelona owner Andy Pforzheimer rejects management philosophies that stress employee social relations and employee happiness, he is refuting ideas championed by:
*Option a	The human relations movement
*Option b	Scientific management
Option c	Management science
Option d	Total quality management
*Correct option	a: The human relations movement
*Feedback for option a	Correct. Human relations management focuses on people and the psychological and social aspects of work.
*Feedback for option b	Incorrect. Human relations management focuses on people and the psychological and social aspects of work.
Feedback for option c	Incorrect. Human relations management focuses on people and the psychological and social aspects of work.
Feedback for option d	Incorrect. Human relations management focuses on people and the psychological and social aspects of work.
*Quiz Question 2	Scott Lawton says that job satisfaction at Barcelona comes from all the following sources except:
*Option a	Performing satisfying tasks
*Option b	Serving customers well
Option c	Being empowered by leaders
Option d	Earning financial rewards
*Correct option	d: Earning financial rewards
*Feedback for option a	Incorrect. As Lawton states, there are better ways to make money than to be in the restaurant business.
*Feedback for option b	Incorrect. As Lawton states, there are better ways to make money than to be in the restaurant business.
Feedback for option c	Incorrect. As Lawton states, there are better ways to make money than to be in the restaurant business.
Feedback for option d	Correct. As Lawton states, there are better ways to make money than

to be in the restaurant business.

Quiz Question 3	Barcelona's leaders borrow ideas and tactics from multiple historical approaches to management. This is typical of:
Option a	Classical management approaches
Option b	Contingency management
Option c	Theory X
Option d	Fayol's principles of management
Correct option	b: contingency management
Feedback for option a	Incorrect. The contingency approach to management holds that there are no universal management theories.
Feedback for option b	Correct, The contingency approach to management holds that there are no universal management theories.
Feedback for option c	Incorrect. The contingency approach to management holds that there are no universal management theories.
Feedback for option d	Incorrect. The contingency approach to management holds that there are no universal management theories.

Review Questions

1. Why do modern companies need managers?

   Different from cottage industries and craftsmen, modern companies employ thousands of workers (unskilled, skilled, and professional) who produce both standardized and customized products and services. As a result, managers are needed to impose order and structure, to motivate and direct these large groups of workers and to plan and make decisions that optimize overall company performance by effectively coordinating the different parts of complex organizational systems.

2. How are historical management ideas and practices related to the topics you will study in this textbook?

   Each management theorist presented in Chapter 2 has left his or her imprint on modern management study. Therefore, throughout this book, the students will experience the extensions of many of their theories. Henri Fayol's classic management functions—distilled down to planning, organizing, leading, and controlling—provide the underlying architecture for the contents of the book. Frederick Taylor's scientific management theories have implications for issues of job design and specialization covered in Chapter 9, teamwork covered in Chapter 10, and compensation covered in Chapter 11. Henry Gantt's contributions are evoked in Chapter 6 on planning and decision making, and Mary Parker

Follett's work resurfaces in Chapter 5 in the section on group decision making and managing conflict, and in Chapter 10 on teams. Elton Mayo's work described in Chapter 10 informs on managing teams, and Chester Barnard's theories can be seen in Chapter 9 on designing organizational structures. Systems management is covered in Chapter 5, information management in Chapter 17, and operations management in Chapter 18.

As seen from the textbook, the early management theories are still providing a foundation on which the modern study of management is being built.

3. Explain the contributions of Taylor, the Gilbreths, and Gantt to the theory of scientific management.

In contrast to seat-of-the-pants management, scientific management recommended studying and testing different work methods to identify the best, most efficient ways to complete a job. According to Frederick W. Taylor, the father of scientific management, managers should follow four scientific management principles to find "one best way" to do it. First, "develop a science" by studying each element of work to determine the one best way for each element. Second, scientifically select, train, teach, and develop workers to reach their full potential. Third, cooperate with employees to ensure implementation of the scientific principles. Fourth, divide the work and the responsibility equally between management and workers. Above all, Taylor felt that these principles could be used to align managers and employees to determine "a fair day's work,"—what an average worker could produce at a reasonable pace. Once that was determined, it was the management's responsibility to pay workers fairly for that effort. Taylor believed incentives were one of the best ways to align management and employees.

The husband and wife team of Frank and Lillian Gilbreth are best known for their use of motion studies to simplify work. While Taylor used time study and how long it took a "first-class man" to complete each part of his job to determine "a fair day's work," the Gilbreths used film cameras and microchronometers to conduct motion study to improve efficiency by categorizing and eliminating unnecessary or repetitive motions. Lillian Gilbreth, one of the first contributors to industrial psychology, established ways to improve office communication, incentive programs, job satisfaction, and management training. Her work also convinced the government to enact laws regarding workplace safety, ergonomics, and child labor.

Henry Gantt is best known for the Gantt chart, which graphically displays when a series of tasks must be completed to perform a job or project, but he also developed ideas regarding pay-for-performance plans (where workers were rewarded for achieving higher levels, but not punished if they didn't) and worker training (all workers should be trained and their

managers should be rewarded for training them).

4. Compare bureaucratic and administrative management.

    German sociologist Max Weber is credited with the development of bureaucracy and bureaucratic management theories. That is, running organizations on the basis of knowledge, fairness, and logical rules and procedures rather than on the basis of nepotism, the prospects for personal gain, and arbitrary decision making. Bureaucracies are characterized by seven elements: qualification-based hiring; merit-based promotion; chain of command; division of labor; impartial application of rules and procedures; all administrative decisions, acts, rules, or procedures are recorded in writing; and managers are separate from owners. Nonetheless, bureaucracies are often inefficient and can be highly resistant to change.

    Administrative management was the brainchild of Frenchman Henri Fayol, who argued that the success of an organization depended more on the administrative ability of its leaders than on their technical ability. Out of that postulate, Fayol developed 5 management functions (planning, organizing, coordinating, commanding, and controlling) and 14 principles of management (division of work, authority and responsibility, discipline, unity of command, unity of direction, subordination of individual interests to the general interest, remuneration, centralization, scalar chain, order, equity, stability of tenure of personnel, initiative, and esprit de corps). He is also known for his belief that management could and should be taught to others.

5. Explain the principles of Mary Parker Follett's human resource management.

    Unlike most people who view conflict as bad, Mary Parker Follett, the mother of modern management, believed that conflict could be beneficial, that it should be embraced and not avoided, and that, of the three ways of dealing with conflict (domination, compromise, and integrative conflict resolution), the latter was the best because it focuses on developing creative methods for meeting both or all the conflicting parties' desires. Follett also used four principles to emphasize the importance of coordination where leaders and workers at different levels and in different parts of the organization directly coordinate their efforts to solve problems and produce the best overall outcomes in an integrative way. Her work added significantly to modern understandings of the human, social, and psychological sides of management.

6. What lessons did we learn from the Hawthorne studies? Summarize Barnard's contributions on cooperation and acceptance of authority.

The Hawthorne Studies conducted at the Western Electric Company occurred in several stages. In the first stage of the Hawthorne Studies, production went up because the amount and quality of attention paid to the workers in the study and their development into a cohesive work group led to significantly higher levels of job satisfaction and productivity. In the second stage, productivity dropped because the workers had been an existing work group for some time and had already developed strong negative norms, in which individual rate busters who worked faster than the rest of the team were ostracized or "binged" (hit on the arm) until they slowed their work pace. The Hawthorne Studies demonstrated that workers were not just extensions of machines (workers' feelings and attitudes affected their work), that financial incentives weren't necessarily the most important motivator for workers, and that group norms and behavior play a critical role in behavior at work.

Chester Barnard emphasized the critical importance of willing cooperation in organizations, noting that most managerial requests or directives will be accepted because they fall within the zone of indifference. Ultimately, he says, workers grant managers their authority, not the other way around.

7. Discuss the contributions of Whitney and Monge to operations management.

Operations management uses a quantitative or mathematical approach to find ways to increase productivity, improve quality, and manage or reduce costly inventories. Eli Whitney invented the concept of interchangeable parts, which ultimately led to companies being able to standardize their products and produce them in mass quantities. Efficient standardization, however, would not have been possible without the contributions of Gaspard Monge, who developed and outlined techniques for proportional rendering of three-dimensional objects. Monge's drafting techniques are the foundation of modern CAD (computer-aided drafting) software and CAM (computer-aided manufacturing capabilities) software.

8. How do companies use systems management to make sense of organizational and environmental complexity?

Organizational systems obtain inputs from the general and specific environments. Rather than viewing one part of an organization as separate from the other parts, a systems approach encourages managers to look for connections between the different parts of the organization. The systems approach also forces managers and workers to view their organization as part of and subject to the competitive, economic, social, technological, and legal or regulatory forces in their environment. Managers then use knowledge gained from those understandings to create products and services, which are then consumed by persons or organizations in the environment. Then, those consumers provide feedback to the

organization, allowing managers and workers to modify and improve their products or services.

9. Identify the major milestones in the history of managing information.

   Historically, some of the most important technologies that have revolutionized information management were the use of horses by post messengers in Italy in the 1400s, the creation of paper and the printing press in the 14th and 15th centuries, the manual typewriter in 1850, the telegraph in the 1860s, cash registers in 1879, the telephone in the 1880s, the personal computer in the 1980s, and the Internet in the 1990s.

10. Explain contingency management.

    The contingency approach to management clearly states that there are no universal management theories and that the most effective management theory or idea depends on the kinds of problems or situations that managers or organizations are facing at a particular time and place. This type of management is much harder than it looks and because managers must look for key contingencies that differentiate today's situation or problems from yesterday's situation or problems by spending more time to analyze problems, situations, and employees before taking action to fix them.

Assignment

Ask students to read the first three chapters of the book *Cheaper by the Dozen* written by Frank Gilbreth Jr. and his sister Ernestine Gilbreth Carey about their parents, specifically, their father, Frank Gilbreth. Ask students to respond to the following questions: What management theories are described in the book? How did the Gilbreths apply their theories in their family situation? How did their family situation inspire new management ideas?

Large Section

Assign the electronic case homework and quiz on *ISG Steelton.*

Additional Resources

Out-of-Class Project: "Peer Review"
Each group of four to five students should work through the Management Team Decision. The case deals with developing peer review systems for conflict management and gives the example of a convenience store employee who foils a robbery, breaking a company policy against heroism. Students will need to draft guidelines for a peer-review process, make a decision using

that process, and then they should determine if peer review was the most appropriate method for deciding the outcome in the case.

"Management Who's Who"

Many business college students are no doubt aware that business colleges are named after historical figures. Joseph Wharton (University of Pennsylvania) and Alfred Sloan (Massachusetts Institute of Technology) may be well known, but who were Amos Tuck (Dartmouth), M. J. Neeley (Texas Christian), Max M. Fisher (Ohio State) or McDonough (Georgetown) or Cox (Southern Methodist)? Use the Internet to locate a recent ranking of business colleges. Pick ten schools that are not named for their institution (like Columbia School of Business and Harvard Business School). Ask students to continue to use the Internet to find out who the colleges are named for and those persons' contribution to business, management, or business education.

"Explore Project Management Software"

Ask students to go to the website for Microsoft Project at http://office.microsoft.com/en-us/project/ and investigate some of the features of the software. If a free trial is available, ask them to consider downloading it to manage their individual and group projects for that semester. Ask them whether the software seems easy to navigate. Ask them to also consider researching about a competing project management software to find out what users and technology specialists are saying about the various programs.

"Bureaucratic Management"

The word *"bureaucracy"* conjures up a host of word associations, and some have interesting histories. Ask students to use the Internet to find the origins of the following terms: red tape, Peter principle, and Parkinson's Law. Ask them to respond to the following question: Do any of them relate to management, or are they all sociological in nature?

"Information Management"

Ask students to go to the website of *CIO* magazine at http://www.cio.com and peruse the current issue. Ask them to respond to the following questions—What topics are covered? Why do students think they are of interest to chief information officers? Ask them to read a sampling of articles to see what direction information management is taking today.

"Cheaper by the Dozen"

Ask students to read the first three chapters of *Cheaper by the Dozen,* written by Frank Gilbreth, Jr. and his sister Ernestine Gilbreth Carey about their parents, specifically their father Frank Gilbreth. Ask them to respond to the following questions: What management theories are described in the book? How did the Gilbreths apply their theories in their family situation? How did their family situation inspire new management ideas?