APPENDIX A
A Brief History of Management

Learning Outcomes
After studying this appendix, you should be able to:
1. State the major similarities and differences between the classical and behavioral theorists. PAGE 39
2. Describe how systems theorists and contingency theorists differ from classical and behavioral theorists. PAGE 41
3. Define the following key terms:
   - classical theorists
   - behavioral theorists
   - management science theorists
   - systems theorists
   - sociotechnical theorists
   - contingency theorists

LEARNING OUTCOME 1
State the major similarities and differences between the classical and behavioral theorists.

There are two primary reasons why you should be concerned about the history of management: to better understand current developments and to avoid repeating mistakes. Early literature on management was written by management practitioners who described their experiences and attempted to extrapolate basic principles. More recent literature comes from researchers. There are different classifications of management approaches, or schools of management thought. In this appendix you will learn about five management theories: the classical, behavioral, management science, systems, and contingency theories.

CLASSICAL THEORY
The classical theorists focus on the job and management functions to determine the best way to manage in all organizations. In the early 1900s, managers began an organized approach to increasing performance by focusing on the efficiency of managing jobs. This focus later changed to a concern for managing departments and organizations. Scientific management stressed job efficiency through the development of technical skills, while administrative theory stressed rules and the structure of the organization.

SCIENTIFIC MANAGEMENT
Frederick Winslow Taylor (1856–1915), an engineer known as the Father of Scientific Management, focused on analyzing jobs and redesigning them so that they could be accomplished more efficiently. As he searched for the best way to maximize performance, he developed “scientific management” principles, including the following:
classical theorists
researchers who focus on
the job and management
functions to determine the
best way to manage in all
organizations.

1. Develop a procedure for each element of a worker's job.
2. Promote job specialization.
3. Select, train, and develop workers scientifically.
4. Plan and schedule work.
5. Establish standard methods and times for each task.
6. Use wage incentives such as piece rates and bonuses.¹

Frank Gilbreth (1868–1924) and his wife Lillian Gilbreth (1878–1972) used time and
motion studies to develop more efficient work procedures. Their work was popularized
in a book entitled Cheaper by the Dozen (and later two movies and a television comedy
of the same name)—which described their application of scientific management practices
to their family of 12 children. When Frank died, the children ranged in age from 2 to 19
years old. Lillian continued her work as a consultant but changed the focus of her work
to become a pioneer in industrial psychology. Lillian became a professor of management
at Purdue University and is commonly referred to as the First Lady of Management.

Another person who made important contributions to scientific management
was Henry Gantt (1861–1919). He developed a method for scheduling work over a
period of time that is still widely used today. You will learn how to develop a Gantt chart in Chapter 4.

ADMINISTRATIVE THEORY

Henri Fayol (1841–1925) was a French engineer who is sometimes referred to as the
Father of Modern Management. Fayol was a pioneer in the study of the principles and
functions of management. He made a clear distinction between operating and manage-
rial activities. Fayol identified five major functions of management: planning, coordi-
nating, organizing, controlling, and commanding. In addition to his five management
functions, Fayol also developed 14 principles that are still used today.² Most principles
of management textbooks are organized on the basis of the functions of management.

Two other contributors to administrative management are Max Weber (1864–
1920) and Chester Barnard (1886–1961). Max Weber was a German sociologist
who developed the bureaucracy concept. The aim of his concept of bureaucracy was
to develop a set of rules and procedures to ensure that all employees were treated
fairly. Chester Barnard studied authority and power distributions in organizations.
He raised awareness of the informal organization—cliques and naturally occurring
social groupings within formal organizations.

Mary Parker Follett (1868–1933) stressed the importance of people rather than
engineering techniques. Follett contributed to administrative theory by emphasizing
the need for worker participation, conflict resolution, and shared goals. The trend
today is toward increasingly higher levels of employee participation. Barnard and
Follett's contributions led to the development of behavioral theory.

Many companies still use classical management techniques successfully today.
McDonald's system of fast-food service is one good example of a company that uses
these techniques. Managers at Monsanto also use classical techniques, such as time
and motion studies and organization principles that you will learn about in Chapter 5.
Large organizations that are downsizing to cut costs by laying off employees and
becoming more efficient are using a classical management approach.

BEHAVIORAL THEORY

The behavioral theorists focus on people to determine the best way to manage in
all organizations. In the 1920s, management writers began to question the classical
approach to management and changed their focus from the job itself to the people
who perform the job. Like the classicalists, behaviorists were looking for the best way
to manage in all organizations. However, the behavioral approach to management
stressed the need for human skills rather than technical skills.
Elton Mayo (1880–1949) pioneered the human relations movement. Mayo headed a group of Harvard researchers in conducting the Hawthorne studies, a landmark series of studies of human behavior in Western Electric's Hawthorne plant (Cicero, Illinois) from 1927 to 1932. Like Taylor, Mayo wanted to increase performance; however, he viewed determining the best work environment as the means to this end. Mayo's research suggested that a manager's treatment of people had an important impact on their performance. In other words, treating people well and meeting their needs frequently results in increased performance. The Hawthorne effect refers to the phenomenon that just studying people affects their performance.\(^3\)

Abraham Maslow (1908–1970) developed the hierarchy of needs theory.\(^4\) Maslow is one of the earliest researchers to study motivation, and motivation is still a major area of research. You will learn more about Maslow's hierarchy of needs and other motivation theories in Chapter 11.

Douglas McGregor (1906–1964) developed Theory X and Theory Y. McGregor contrasted the two theories, based on the assumptions that managers make about workers. Theory X managers assume that people dislike work and that only if managers plan, organize, and closely direct and control their work will workers perform at high levels. Theory Y managers assume that people like to work and do not need close supervision. McGregor did not give specific details on how to manage; he suggested a reorientation in managerial thinking.\(^5\)

Behaviorists believed that happy employees would be productive. However, later research suggested that a happy worker is not necessarily a productive worker. As you can see, the classical and behavioral theories are very different, yet both kinds of theorists claim that their approach is the best way to manage in all organizations.

The behavioral approach to management is still evolving and being used in organizations. The current term for studying people at work is the behavioral science approach, which draws from economics, psychology, sociology, and other disciplines. Most of the material in the chapters in Parts 3 and 4 is based on behavioral science research. Managers all over the globe use behavioral sciences in dealing with people.

**MANAGEMENT SCIENCE**

The management science theorists focus on the use of mathematics to aid in problem solving and decision making. During World War II, a research program began to investigate the applicability of quantitative methods to military and logistics problems. After the war, business managers began to use management science (math). Some of the mathematical models are used in the areas of finance, management information systems (MIS), and operations management. The use of computers has led to an increase in the use of quantitative methods by managers all over the globe. Because management science stresses decision-making skills and technical skills, it is more closely aligned with classical management theory than with behavioral theory. You will learn more about management science in the chapters in Parts 2 and 5. Management science is not commonly used in organizing and leading.

**LEARNING OUTCOME 2**

Describe how systems theorists and contingency theorists differ from classical and behavioral theorists.

**INTEGRATIVE PERSPECTIVE**

The integrative perspective has three components: systems theory, sociotechnical theory, and contingency theory.
systems theorists
researchers who focus on viewing the organization as a whole and as the interrelationship of its parts.

SOCIOTECHNICAL THEORY
The sociotechnical theorists focus on integrating people and technology. Sociotechnical theory was formulated during the 1950s and 1960s by Eric Trist, Ken Babforth, Fred Emery, and others. They realized, as today’s managers do, that a manager must integrate both people and technology. To focus on one to the exclusion of the other leads to lower levels of performance. Much of current behavioral science work is in agreement with sociotechnical theory.

CONTINGENCY THEORY
The contingency theorists focus on determining the best management approach for a given situation. In the 1960s and 1970s, management researchers wanted to determine how the environment and technology affected the organization. Tom Burns and George Stalker conducted a study to determine how the environment affects a firm’s organization and management systems. They identified two different types of environments: stable (where there is little change) and innovative (great changes). The researchers also identified two types of management systems: mechanistic (similar to bureaucratic classical theory) and organic (nonbureaucratic, similar to behavioral theory). They concluded that in a stable environment, the mechanistic approach works well, whereas in an innovative environment, the organic approach works well.
Joan Woodward conducted a study to determine how technology (the means of producing products) affects organizational structure. She found that organizational structure did change with the type of technology. Woodward concluded that the mechanistic or classical approach worked well with mass-production technology (such as that of an automobile assembly line), whereas the organic or behavioral approach worked well with small-batch (custom-made) products and long-run process technology (such as that for refining crude oil).

COMPARING THEORIES

Exhibit A reviews the theories covered in this appendix. Throughout this book, you will learn to take an integrative perspective using systems and contingency theories, combined with some management science, to ensure that you maximize development of your management skills. For example, Skill Builder 5 at the end of Chapter 1, uses a contingency approach.

Exhibit A • Comparing Theories

<table>
<thead>
<tr>
<th>Classical</th>
<th>Behavioral</th>
<th>Management Science</th>
<th>Systems Theory</th>
<th>Sociotechnical Theory</th>
<th>Contingency Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attempts to develop the best way to manage in all organizations by focusing on the jobs and structure of the firm.</td>
<td>Attempts to develop a single best way to manage in all organizations by focusing on people and making them productive.</td>
<td>Recommends using math (computers) to aid in problem solving and decision making.</td>
<td>Manages by focusing on the organization as a whole and the interrelationship of its departments, rather than on individual parts.</td>
<td>Recommends focusing on the integration of people and technology.</td>
<td>Recommends using the theory or the combination of theories that meets the given situation.</td>
</tr>
</tbody>
</table>

APPENDIX SUMMARY

1. State the major similarities and differences between the classical and behavioral theorists. Both classical and behavioral theorists wanted to find the best way to manage in all organizations. However, the classicalists focused on the job and management functions, whereas the behaviorists focused on people.

2. Describe how systems theorists and contingency theorists differ from classical and behavioral theorists. The classical and behavioral theorists and the systems theorists differ in the way they conceptualize the organization and its problems. The classical and behavioral theorists use a reductionist approach by breaking the organization into its component parts to understand the whole (sum of parts = whole). Systems theorists look at the organization as a whole and the interrelationship of its parts to understand the whole (whole = interrelationship of parts).

The classical and behavioral theorists seek the best management approach in all organizations. The contingency theorists propose that there is no best approach for all organizations; they seek to determine which management approach will work best in a given situation.

3. Complete each of the following statements using one of this appendix’s key terms.
   The _____ focus on the job and management functions to determine the best way to manage in all organizations.
   The _____ focus on people to determine the best way to manage in all organizations.
   The _____ focus on the use of mathematics to aid in problem solving and decision making.
   The _____ focus on viewing the organization as a whole and as the interrelationship of its parts.
   The _____ focus on integrating people and technology.
   The _____ focus on determining the best management approach for a given situation.

KEY TERMS

behavioral theorists, 40  
classical theorists, 40  
contingency theorists, 42  
management science theorists, 41  
sociotechnical theorists, 42  
systems theorists, 42