



History of Management





An Ancient Practice of Management

- The practice of management is as old as organizations, which makes it very old indeed. Clay tablets dating back to 3000 B.C. record business transactions and laws in ancient Sumeria, clear evidence of organizational practices. The use of organizations can be traced back even further through archeological evidence indicating that prehistoric peoples often lived in organized groups.



An Ancient Practice of Management

- However, both management and organizations of antiquity were quite different from nowadays. Although management is old, the idea of management as a discipline, profession, and field of scholarship is relatively new. Management did not become a recognized field until the twentieth century. First, let us briefly trace the history of organizations and their management to show what they were like in times past.



Ancient Organizations:1

- The accomplishments of large ancient organizations clearly indicate that they were managed formally and had levels of management. The Hanging Gardens of Babylon, the Inca city of Machu Picchu, and the pyramids of Egypt could have been built only through coordinated organized endeavor.



Ancient Organizations:2

- There also were large political organizations long before the birth of Christ. Those of the Macedonians under Alexander the Great, the Persians, and later the Romans stretched from Asia to Europe. Kings and generals are managers, of course. So were the lieutenants, keepers of graineries, slave drivers, territorial governors, and keepers of the treasury who helped keep these early organizations operating.



Ancient Organizations: The Roman Empire:1

- As the years passed, management in some organizations became even more distinct and sophisticated, and the organizations themselves grew more powerful and enduring. The Roman Empire, which lasted hundreds of years, is a good example. The legions of Rome, with their well-defined structure of generals and officers, troop divisions, discipline, and planning, marched roughshod over the poorly organized peoples of Europe and the Middle East.

Ancient Organizations: The Roman Empire:2



- Conquered lands were administered by governors responsible to Rome, and roads were built to speed communication with Rome. Communication, as we shall learn, is essential for organizational success. The famous roads, some of which are still in use, helped get taxes and tribute to the emperor. Perhaps more important, the roads enabled home legions to reach outlying provinces quickly, if either the natives or local administrators rebelled against Roman rule.



Ancient Organizations: Characteristics

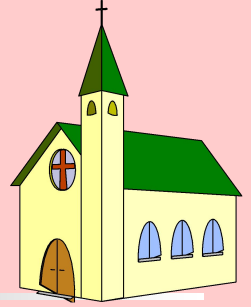
- Forms of almost every basic activity of contemporary management practice can be found in these large, successful organizations of antiquity, but, in general, the pattern of management then was different from that of today. For example, the ratio of managers to nonmanagers was much smaller, and there were few middle managers. Early organizations tended to have a small core of top managers who made almost every significant decision themselves.



Ancient Organizations: Characteristics

- Frequently management was practically a one-man show. If the top man (and it almost always was a man) was an effective leader and administrator like Julius Caesar things went fairly smoothly. When an ineffective leader like Nero took charge, life could become uncertain.

Ancient Organizations: Roman Catholic Church



There were instances of organizations being managed much as they are today. A notable example is the Roman Catholic Church. The simple structure— pope, cardinal, archbishop, bishop, parish priest—chosen by the Church's founders and still used today is more "modern" than structures of many organizations begun this year. This may be one reason why the Catholic Church has prospered for centuries, while nations and businesses have come and gone. Contemporary military organizations, too, are strikingly similar in many respects to those of ancient Rome.



Comparison of Old and Contemporary Organization:1

■ OLD

- Few large organizations, no giant business
- Relatively few managers, almost no middle managers

■ NEW

- Many extremely large, powerful organizations, both business and nonprofit
- Many managers, large middle-management group



Comparison of Old and Contemporary Organization:2

■ OLD

- Managerial work often not clearly distinguished and separated from nonmanagerial activities
- Succession to top management based primarily on birth or violence

■ NEW

- Well-defined managerial group; managerial work clearly recognized and separated from nonmanagerial activities
- Succession to top management based primarily on competence with orderly transition



Comparison of Old and Contemporary Organization:3

■ OLD

- Few people able to make important organizational decisions
- Emphasis on command and intuition

■ NEW

- Many people able to make important organizational decisions
- Emphasis on teamwork and rationality



Emergence of Systematic Management

The first genuine burst of interest in management came in 1911. This, the year in which Frederick W. Taylor published **Principles of Scientific Management**, is traditionally considered the starting point of management as a recognized field of scholarly inquiry.



Emergence of Systematic Management: Why management was born in USA:1

- But, of course, the notion that organizations can be systematically managed to attain objectives more effectively did not really emerge at any specific moment in time. The concept evolved over an extended period ranging from the mid-nineteenth century to the 1920s. The major force that first spurred serious interest in management was the Industrial Revolution, which began in England. But the idea that management could in itself make a major contribution to organizations first arose in **America.**



Emergence of Systematic Management: Why management was born in USA:2

- Several factors help account for why America was the birthplace of modern management. Even as late as the early twentieth century, the United States was practically the only place where a person could readily overcome the circumstances of birth through personal competence. Millions of Europeans, anxious to improve their lot in life, immigrated to America during the nineteenth century, creating an enormous pool of hardworking laborers.



Emergence of Systematic Management: Why management was born in USA:3

- The United States, almost from its inception, strongly supported education for everyone who wanted it. Education created an increasingly large body of people intellectually capable of filling various business roles, including management.



Emergence of Systematic Management: Why management was born in USA:4

- The transcontinental railroads, completed in the late nineteenth century, made America the largest unified market in the world. Significantly, there was almost no governmental regulation of business at the time. Nonregulation allowed the early successful entrepreneurs to create **monopolies**. These factors and others made it possible to form big businesses—businesses so large they had to be managed formally.



Emergence of Systematic Management

- Management's emergence as a discipline, a field of scholarly inquiry and research, was partly a response to big business's needs, partly an effort to reap more of the benefits of technology created during the Industrial Revolution, and partly the achievement of a handful of curious individuals with a burning interest in finding the most efficient way of accomplishing a job.



Management's Evolution as a Discipline:1

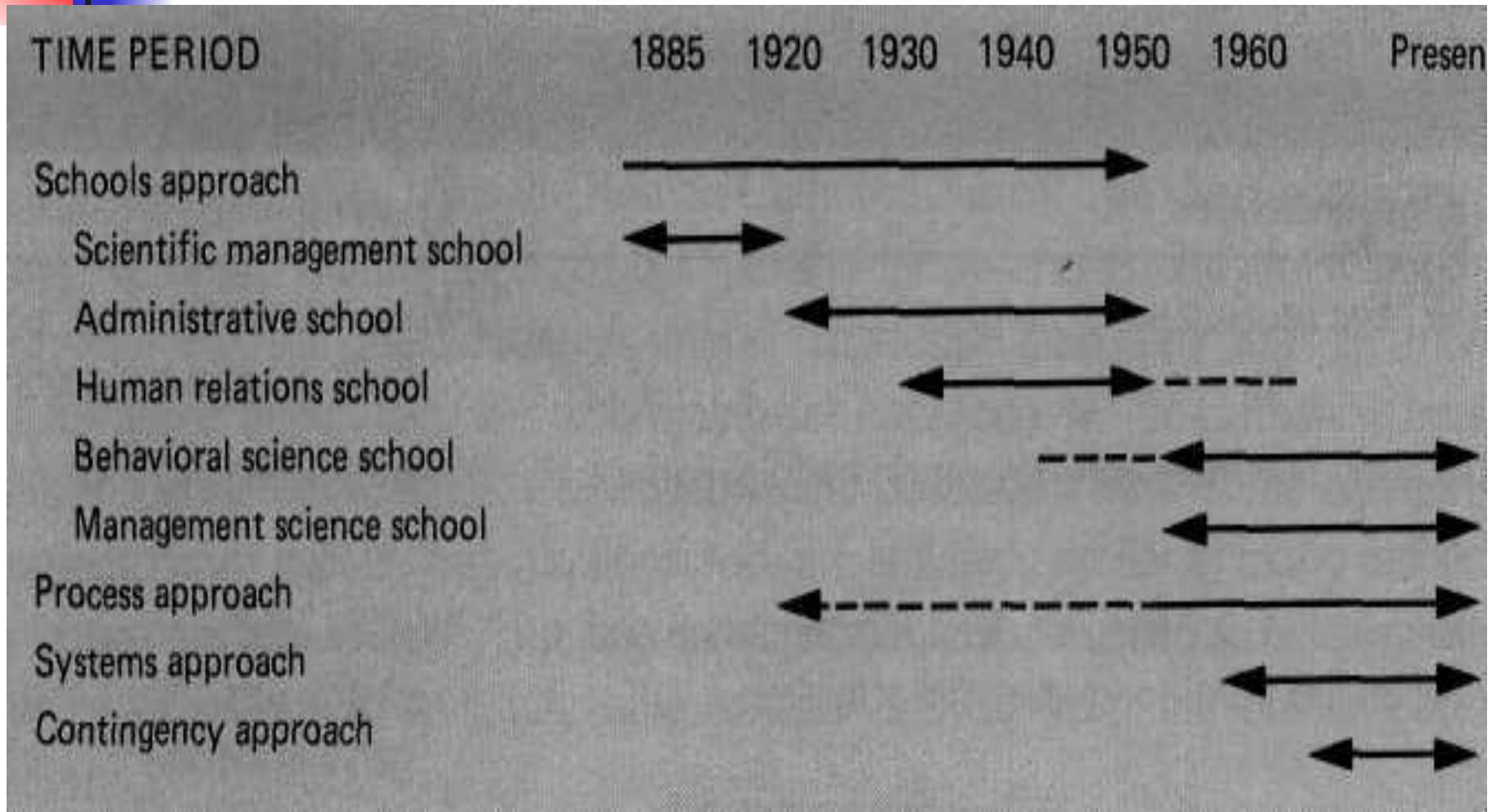
Management's development as a discipline has not been one series of steps. Rather, there have been several approaches that often overlapped chronologically. Management deals with both technology and people. Consequently, advances in management theory have always depended on advances in supporting disciplines such as mathematics, engineering, psychology, sociology, and anthropology.



Management's Evolution as a Discipline:2

As these fields advanced, management researchers, theorists, and practitioners became more knowledgeable about the factors affecting organizational success. This knowledge helped the experts to perceive why certain earlier theories sometimes did not hold up and to develop new approaches to management.

Approaches to Management





Approaches to Management: 1

The *schools approach* (actually four approaches) views management from four distinct perspectives. These schools are scientific management, administrative, human relations and behavioral science, and management science or quantitative.

The *process approach* sees management as an ongoing series of interrelated management functions.



Approaches to Management:2

- The *systems approach* stresses that managers should view an organization as a set of interdependent parts, such as people, structure, tasks, and technology, that try to attain diverse objectives in a changing environment.
- The *contingency approach* stresses that the appropriateness of various management techniques is determined by the situation. Because there are so many factors in both the organization and the environment, there is no single "best" way to manage. The most effective technique in a particular case is the one most appropriate for that situation.



Schools approach:1

Four distinct schools of management thought evolved during the first half of last century.

In chronological order they are:

the scientific management school,

the administrative school,

the human relations and behavioral school,

the management science (quantitative) school



Schools approach:2

The strongest adherents of each at one time believed that they had found the key to attaining organizational objectives most effectively. Later studies and breakdowns in application proved that many of their answers to management problems were at best partially correct in certain limited situations. Yet, each of these schools has made a lasting contribution to the field. Even the most progressive contemporary organization still uses some concepts and techniques originated by these schools.



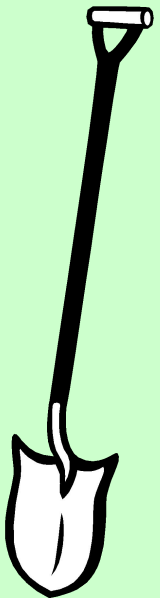
Scientific Management (1885-1920)

- Scientific management is most closely associated with the work of Frederick W. Taylor, Frank and Lillian Gilbreth, and Henry L. Gantt. These writers of the scientific management school believed that by using observation, measurement, logic, and analysis, many manual tasks could be redesigned to make their execution far more efficient.



Scientific Management: Frederick W. Taylor

The first phase of the scientific management approach was to analyze a job and determine its basic components. Taylor, for example, painstakingly measured the amount of iron ore and coal a man could lift with shovels of varying size. Taylor discovered, for example, that the maximum amount of iron ore and coal could be moved if every worker used a shovel with a 21-pound capacity. In comparison to the earlier system in which each worker provided his own shovel, the gain in output was phenomenal



Scientific Management: Gilbreths and Therbligs:1



- As an apprentice bricklayer, Frank Gilbreth noticed that the men teaching him to lay bricks used three different sets of motions. He wondered which of these was most efficient, so he methodically studied them and the tools used. The result was an improved method that reduced the number of motions needed to lay a brick from 18 to 4, increasing productivity by 250 percent.

Scientific Management: Gilbreths and Therbligs:2



- In the early 1900s Frank and his wife Lillian began to study motions using a motion picture camera in combination with a microchronometer. A microchronometer is a clock Frank invented that could record time intervals as small as $1/2000$ of a second. With stop-motion photography the Gilbreths were able to identify 17 different operations in hand motions. They called these therbligs, which is "gilbreth" spelled backward.



Scientific Management: Characteristics:1

- Scientific management did not ignore the human element. An important contribution of the school was the systematic use of financial incentives to motivate people to produce as much as possible. They also allowed for rest and unavoidable delays, so that the amount of time estimated for a job was fair and realistic. This enabled management to set standards of performance that were attainable and give added pay to those who exceeded the minimum. A key element in this school was that people who produced more were rewarded more. Scientific management writers also recognized the importance of selecting people physically and mentally suited to their work, and they emphasized training.



Scientific Management: Characteristics:2

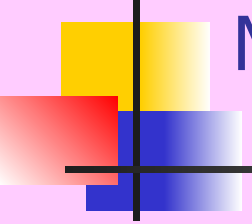
- Scientific management also advocated the separation of thinking and planning—managerial work—from the actual performance of tasks. Taylor and his contemporaries recognized, in effect, that the work of managing is a distinct specialty and the organization as a whole would benefit if each group concentrated on what they did best. This approach contrasted sharply with the old system in which workers planned their work themselves.



Scientific Management: Main Contribution

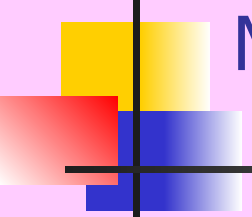
- Scientific management was a major conceptual breakthrough. Largely because of it, management became widely recognized as a distinct field of scholarly inquiry. For the first time managers and scholars saw that the methods and approaches of science and engineering could be applied effectively to help attain organizational objectives.

Classical or Administrative Management (1920-1950): Differences from Scientific Management



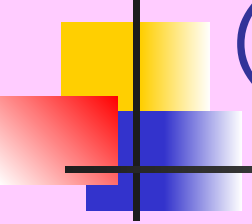
- **Scientific management** writers focused on what is called **shop management**. They concentrated on improving efficiency **below the managerial level**. It was not until the rise of the **administrative school** that writers systematically approached making the management of the **overall organization more effective**.

Classical or Administrative Management (1920-1950): Differences from Scientific Management



- Taylor and Gilbreth began as **common laborers**, which doubtless influenced their thinking about managing organizations. In contrast, the major contributors to administrative management had more direct experience with upper-level management in big business. Henri Fayol, credited with originating the school and sometimes called the father of management, **managed a large French coal mining firm.**

Classical or Administrative Management (1920-1950): Characteristics



Like scientific management, the classical school writers did not show strong concerns for the social aspects of managing. The classical school's objective was to identify universal principles of management. The underlying idea was that following these principles would invariably lead to organizational success. These principles covered two major areas.



Classical or Administrative Management: the 1-st area

- One was the design of a **rational system for administering** an organization. By identifying the major functions of a business, the classical theorists believed they could determine the best way to divide the organization into work units or departments. Traditionally, these business functions are finance, production, and marketing. Closely related to this was the identification of the basic functions of management. Fayol made a major contribution to management by viewing management as a universal process consisting of several related functions such as planning and organizing.



Classical or Administrative Management: the 2-nd area

- The second category of classical principles was concerned with **structuring organizations** and managing employees. An example is the principle of **unity of command**, which holds that a person should receive orders from only one superior and answer only to that superior.

Classical or Administrative Management: Fayol's Principles of Management:1



- **1. Division of work.** Specialization belongs to the natural order of things. The object of division of work is to produce more and better work with the same effort. It is accomplished through reduction in the number of objects to which attention and effort must be directed.
- **2. Authority and responsibility.** Authority is the right to give orders and responsibility is its essential counterpart. Wherever authority is exercised responsibility arises.
- **3. Discipline.** Discipline implies obedience and respect for the agreements between the firm and its employees.

Classical or Administrative Management:

Fayol's Principles of Management:2

- **4. Unity of command.** An employee should receive orders from one superior only.
- **5. Unity of direction.** Each group of activities having one objective should be unified by having one plan and one head.
- **6. Subordination of individual interest to general interest.** The interest of one employee or group of employees should not prevail over that of company or broader organization.
- **7. Remuneration of personnel.** To maintain the loyalty and support of workers, they must receive a fair wage for services rendered.

Classical or Administrative Management: Fayol's Principles of Management:3

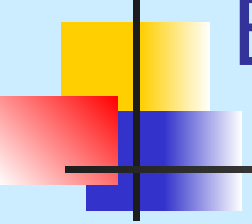


- **8. Centralization.** Like division of work, centralization belongs to the natural order of things. However, the appropriate degree of centralization will vary with a particular concern, so it becomes a question of the proper proportion.
- **9. Scalar chain.** The scalar chain is the chain of superiors ranging from the ultimate authority to the lowest ranks.
- **10. Order.** A place for everything and everything in its place.

Classical or Administrative Management: Fayol's Principles of Management:4

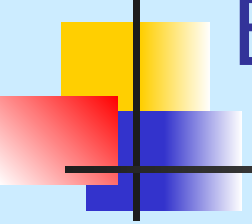
- **11. Equity.** Equity is a combination of kindness and justice.
- **12. Stability of tenure of personnel.** High turn over increases inefficiency.
- **13. Initiative.** Initiative involves thinking out a plan and ensuring its success. This gives zeal and energy to an organization.
- **14. Esprit de corps.** Union is strength, and it comes from the harmony of personnel.

Human Relations (1930-1950) and Behavioral Science (1950-Present)



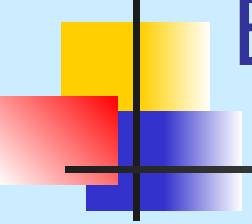
- The scientific management and classical schools developed when the science of psychology was in its infancy. Moreover, since persons interested in psychology were rarely interested in management, the scant existing knowledge of the human mind was not related to the problems of work. Consequently, although scientific and classical writers recognized the importance of people, they limited their discussion to such factors as fair pay, economic incentives, and establishing formal relationships.

Human Relations (1930-1950) and Behavioral Science (1950-Present)



- Mayo found that an efficiently designed job and adequate pay would **not always lead to improved productivity**, as the scientific management school believed. Forces arising from interaction between people could and often did override managerial efforts. People sometimes responded more strongly to pressure from others in the work group than to management's desires and incentives.

Human Relations (1930-1950) and Behavioral Science (1950-Present)



- Later research conducted by Abraham Maslow and other behavioral scientists (also described later) helped explain why. Human beings, Maslow proposed, are primarily motivated not by economic forces, as the scientific management writers believed, but by various needs that money only partially and indirectly fulfills.
- Based on these findings, writers of the human relations school believed that if management showed more concern for their employees, employee satisfaction should increase, which would lead to an increase in productivity.

Management Science or Quantitative Approach (1950-Present)



- Mathematics, statistics, engineering, and related fields have contributed significantly to management thought. Basically, operations research is the application of scientific research methods to operational problems of organizations. After the problem is identified, the operations research group develops a model of the situation. A model is a representation of reality. Usually, the model simplifies reality or represents it abstractly. Models make it easier to comprehend the complexities of reality.
- A key characteristic of the management science school is this substitution of models, symbols, and quantification for verbal and descriptive analysis



Contributions of the Schools of Management: **Scientific Management School**

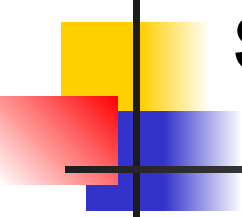
- 1. Application of scientific analysis to determine the best way of performing a task
- 2. Selection of workers best suited to the task and provision for training them
- 3. Providing workers with the resources required to perform their tasks efficiently
- 4. Systematic, fair use of pay incentives to improve productivity
- 5. Separation of planning and thinking from the actual work



Contributions of the Schools of Management: **Classical Management School**

- 1. Development of principles of management
- 2. Description of the functions of management
- 3. Systematic approach to management of overall organization

Contributions of the Schools of Management: **Human Relations and Behavioral Science Schools**



- **1.** Application of *human relations* techniques to increase satisfaction and productivity
- **2.** Application of *behavioral science* to management and the design of organizations so that each employee is used to full potential



Contributions of the Schools of Management: **Management Science School**

- 1. Improved understanding of complex management problems through development and application of models
- 2. Development of quantitative techniques to help managers make decisions in complex situations



The process approach

- This major conceptual breakthrough is widely accepted today. The process approach was first suggested by writers of the administrative management school, who attempted to describe the functions of the manager. However, administrative writers tended to consider these functions to be independent of one another. The process approach, in contrast, considers management functions to be interrelated.



The process approach

- Management is considered a process because the work of attaining objectives through others is not a one-time act but an ongoing series of interrelated activities. These activities, each a process by itself, are essential to organizational success, and are referred to as the management functions. Each managerial function is also a process because each consists of a series of interrelated activities.

- We consider the management process to consist of the functions of planning, organizing, motivating, and controlling. These four primary functions are interrelated through the linking processes of communicating and decision making.

Planning

The planning function involves deciding what the organization's objectives should be and what its members should do to attain them. Basically, the planning function addresses three fundamental questions:

1. Where are we now? Managers must assess the organization's strengths and weaknesses in important areas such as finance, marketing, production, research and development, and human resources.

2. Where do we want to go? By assessing the opportunities and threats in the organization's environment, such as competitors, customers, laws, political factors, economic conditions, technology, suppliers, and social and cultural changes, management decides what the organization's objectives should be and what could hinder the organization in attaining objectives.

3. How are we going to get there? Managers need to decide both generally and specifically what the organization's members must do to attain objectives.



Organizing

- Organizing is the creation of structure. There are many elements that must be structured for the organization to carry out plans and thereby attain its objectives.

Motivating

- The manager must always keep in mind that the best-formulated plans and finest organizational structures have no value whatsoever unless somebody actually performs the work of the organization. The role of the motivating function is to get members of the organization to perform their delegated duties according to plan.
- From the late eighteenth century to the twentieth it was widely believed that people would always work harder if given an opportunity to earn more. We now realize that to motivate effectively a manager must determine what the needs of workers actually are and provide a way for workers to satisfy them through performance.



Controlling

- Almost everything the manager does involves an event in the future. Controlling is the process of ensuring that the organization is actually attaining its objectives.



The Linking Processes

The four management functions of planning, organizing, motivating, and controlling have **two** elements in common: All require **making decisions** and all require **communication**, both to obtain information for making a good decision and to get that decision understood by others in the organization. Because of this bond and because they connect and interrelate the four functions, communication and decision making are often referred to as the linking processes.



The system approach

- The application of **systems theory** to management has made it easier for managers to see the organization as an entity of interrelated parts that is inextricably intertwined with the outside world. It also has helped to integrate the contributions of the schools that dominated early management thought.
- A **system** is an entity composed of interdependent parts each of which contributes to the characteristics of the whole

The system approach:

Open and Closed Systems

- There are two major types of systems, closed and open. A closed system has firm, fixed boundaries; its operation is relatively independent of the environment outside the system. A watch is a familiar example of a closed system. The interdependent parts of a watch move continuously and precisely once the watch is wound or a battery is inserted. As long as the watch has sufficient energy stored within it, its system is independent of the external environment.

The system approach:

Open and Closed Systems

- An open system is characterized by interaction with the external environment. Energy, information, and material are exchanged with the environment through the system's permeable boundaries. The system is not self-sufficient but dependent on energy, information, and materials from outside. In addition, the open system has the capacity to adapt to changes in the external environment and must do so to continue operating.

The system approach:

Open and Closed Systems

- Managers are concerned primarily with open systems because **all organizations are open systems**. All organizations are dependent on the world outside themselves for survival. Even a monastery needs to bring in people and supplies and to maintain contact with its parent church in order to operate over the long term. Early schools approaches to management failed to hold up in all situations because they assumed, at least implicitly, that organizations are closed systems.

The system approach: Open and Closed Systems

Inputs

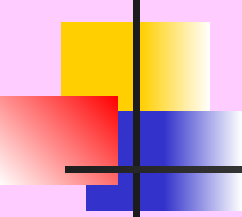
Information
Materials
Capital
Human resources

Throughput

Processing
and
transforming
inputs
(dependent on
management
effectiveness)

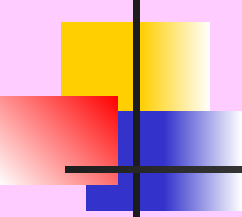
Outputs

Products or services
Profit (business)
Social responsibility
Market share
Growth
Employee satisfaction



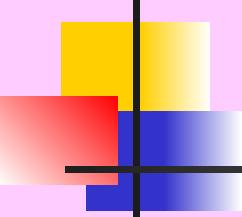
The contingency approach

- The contingency approach tries to match specific techniques or concepts of managing to the specific situation at hand in order to attain organizational objectives most effectively.
- The contingency approach focuses on situational differences both between and within organizations. It tries to determine what the significant variables of the situation are and how they influence organizational effectiveness. The methodology of the contingency approach can be expressed as a four-step process.



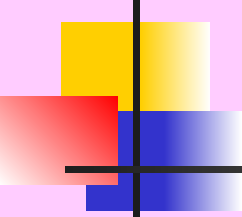
The contingency approach

- 1. The manager must become familiar with the tools of the management profession that have proven effective. These include understanding the management process, individual and group behavior, systems analysis, techniques for planning and control, and quantitative decision-making techniques.



The contingency approach

- 2. Every management concept and technique has both advantages and disadvantages, or trade-offs, when applied to a specific situation. The manager must be able to predict the probable consequences, both good and bad, of applying a given technique or concept. To give a simple example, offering to double the salary of all employees in exchange for added work would probably increase their motivation considerably, at least temporarily. Traded off against this are the added costs, which may cause the organization to go broke.



The contingency approach

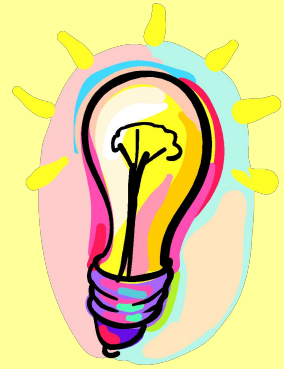
- 3. The manager needs to be able to interpret the situation properly. It must be determined correctly which factors are most important in a given situation and what effect changing one or more of these variables would probably have.
- 4. The manager must be able to match the specific techniques with the fewest potential drawbacks to the specific situation, thereby attaining organizational objectives in the most effective way under the existing circumstances.

SUMMARY



- 1. The practice of management is as old as organizations, but management did not become a **recognized discipline** or widely appreciated until about 1910.

SUMMARY



- 2. Scientific management focused on redesigning tasks to improve efficiency at the nonmanagerial level. The classical school tried to identify broad, universal principals for administering an organization. The behavioral school's view was that understanding human needs and social interaction were the key to organizational success. All these schools made important, lasting contributions to management, but because they advocated a "one best way," examined only part of the internal environment, or ignored the external environment, none proved wholly successful in all situations.

SUMMARY



- 3. The management science school uses quantitative techniques such as models and operations research to aid decision making and improve efficiency. Its influence is growing as an adjunct to the current widely accepted conceptual frameworks: the process approach, the systems approach, and the contingency approach.

SUMMARY



- 4. The concept of a management process applicable to all organizations originated with the classical school. This book considers the core functions to be planning, organizing, motivating, and controlling. Communicating and decision making are considered linking functions because they are required to perform all four basic functions.

SUMMARY



- 5. The systems approach views the organization as an open system consisting of several interrelated subsystems. It imports resources from its environment, processes them, and exports goods and services to the environment. Systems theory helps managers grasp the interrelationships among parts of the organization and between the organization and its environment.

SUMMARY



- 6. The contingency approach extended the practical application of systems theory by identifying major internal and external variables that affect the organization. Because it holds that concepts or techniques must be appropriate to the specific situation at hand, the contingency approach is often called situational thinking. In the situational perspective there is no "best" way to manage.