

CHAPTER II

EVOLUTION OF MANAGEMENT

1.1. Early Management Pioneers (Contributors)

- Although examples of management practices go back several thousand years, the development of management as a field of knowledge is much more recent.
- Much of the impetus for developing management theories and principles grew out of the industrial revolution, which spawned the growth of factories in the early 1800s.
- With the proliferation of factories came the widespread need to coordinate the efforts of large numbers of people in the continual production of goods.

- The challenge posed by the factories brought forth a number of individuals who began to think in terms of innovative ways to run factories more effectively.
- This group, known as the pre-classical contributors to management focused largely on particular techniques that might be applied to solve specific problems.
- They were followed by individuals who began to develop broader principles and theories that make up major view points, or schools of management:
- *classical, behavioral, quantitative and contemporary.*

1.1.1. MAJOR PRE CLASSICAL CONTRIBUTORS

- 1. Robert Owen (1771 - 1858)** - was a British industrialist and an owner manager of several successful cotton mills in Scotland.
- he was known to be a reformer because he was one of the first managers to recognize the importance of human resource in an organization.
 - At that period in history, working and living conditions for employees were very poor.
 - Child workers were common and the standard working day was 13 hrs long.
 - Workers were treated in much the same terms as tools and machines.

- Owen was well ahead of his time in recognizing the importance of human resources.
- He was particularly interested in the working and living conditions of his employees.
- He said that workers in organizations need attention and dignity or respect.
- As a result, he introduced in his organization the following as a result of which he is called the **father modern personnel Management.**

- Reduce working hrs from 13 hrs to 10.5 hrs a day
- Set a minimum hiring age (10 year) to protect children from the abuses of employers□
- Provide meal, housing, and shopping facilities for employees
- Improved working conditions in the factory
- He argued, "Improving the condition of employees would inevitability lead to increased production and profits".

2. Charles Babbage (Prof.)

- built the first practical mechanical calculator and a prototype of modern computers.
- Although English mathematician, Charles Babbage (1792-1871) is widely known as **"the father of modern computing"**.
- He also made direct contributions to thinking about management.
- His management interest stemmed from his difficulties with directing his various projects.

- He became convinced that the application of scientific principles to work processes would both increase productivity and lower expenses.
- Like the 18th century economist Adam Smith,

Babbage was particularly enthralled with the idea of **work specialization**.

- He was an avid proponent of:
 - ✓ Division of labor
 - ✓ Economies of scale in manufacturing
 - ✓ Incentive pay
 - ✓ Profit sharing
 - ✓ Application of mathematical concepts in production
 - ✓ Harmonious relationship between management and workers

3. Adam Smith

- **Adam Smith:** Smith made an important contribution to the development of management thought regarding the impact of division of labor on manufacturing in his book '*The Wealth of Nations*' in 1776.
- His conclusion was specialization could lead to increased efficiency. This is because:
 - ✓ Specialization increases the dexterity in every particular work person.
 - ✓ Specialization saves the time lost in passing from one species of work to another.
 - ✓ Specialization helps to the invention of

1.1. THE ERA OF CLASSICAL MANAGEMENT

- The classical management theory emerged during the early years of the 18th century; i.e., it had its during the ***Industrial Revolution applications.***
- This new technology, combined with the concentration of vast amounts of raw material and labor, created a need for management.
- Its ideas represent the first well-developed framework of management.

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- The ***classical viewpoint*** is a perspective on management that emphasizes finding ways to manage work and organizations more efficiently.
- It is made up of two/three different approaches:
 - ✓ **Scientific management**
 - ✓ **administrative management (Classical Organization) theory and bureaucratic management.**
- This viewpoint is labeled as "classical" because it encompasses early works and related contributions that have formed the main roots of the field of management.

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- There were two factors that had contributed for the emergence of classical management theory.
- These are:
 - ✓ *The research or writings of pioneers such as Charles Babbage, and*
 - ✓ *The evolution of large-scale business management and practices.*

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- The classical approach to management can be better understood by examining it from two perspectives.
- One perspective concentrated on the problems of lower level managers dealing with the everyday problems of managing the work force.
- This perspective is known as **scientific management.**
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- The other perspective concentrated on the problems of top managers dealing with the everyday problems of managing the entire organization.
- This perspective is known as **classical organization theory.**

I. The Scientific Management Theory

Objective: boosting productivity through scientific study of work

- Scientific management is an approach within classical management theory that ***emphasizes the scientific study of work methods in order to improve worker efficiency.***
- Its objective was to find the most efficient method for performing any task and to

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- The emergence of industrial revolution gave rise to factory production system and it in turn caused management to focus on developing the most rational principles for handling its people, machines, materials and money.
- This challenge took two forms:
 - 1) How to increase productivity (output/input) by making the work easier to perform and
 - 2) How to motivate workers to take advantage of new methods and techniques.

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- The individuals who developed approaches for meeting these challenges helped lay the ***foundation for what is known as scientific management.***
- Scientific management grew up from the research of 5 pioneers.
 1. *Frederick W. Taylor* (the father of scientific management)
 2. *Frank and Lillian Gilbreth*
 3. *Henry Gantt and*
 4. *H. Emerson.*

1) F. W. Taylor

- Born to a relatively wealthy Philadelphia family, Taylor became an apprentice pattern maker and machinist for a local firm before moving on to Midvale steel.
- At Midvale, his meteoric rise from laborer to chief engineer in 6 years gave him an opportunity to tackle a serious problem that he had observed-soldiering by workers.

- At the beginning of 20th century business was expanding, resources were readily available but labor was in short supply.
- The primary goal of management during that time was to use the existing labor force efficiently, but there was no skilled manpower.
- It is at this time that Taylor saw how to use the available resource efficiently.
- He didn't start new research rather he started to study the problems of the factory production system.
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- The following were some of the problems of the factory system production as he called them:
 - a) Management had no clear concept of worker - management responsibility.*
 - b) Virtually no effective work standards were applied*
 - c) No incentive was used to improve labor's performance*
 - d) Managerial decisions were made based on intuition, rule of thumb methods or past experience.*

- He was angry or he was impressed with the degree of “soldiering” - systematic, deliberate delay in performance i.e., deliberately working at less than full capacity and producing less rather than more, due primarily to
 1. The workers’ fear that they might work themselves out of a job if they produce more,

2. Faulty wage systems set up by management encouraged workers to operate at a slow pace.

For example, pay by the hour or the day mainly encouraged attendance rather than output. On the other hand, companies that cut incentive pay when workers began to exceed standards also made workers reluctant to excel, and

3. Rule of thumb method permitted by managers. These factors led Taylor to conclude that managers, not workers, were responsible for the soldiering because it was up to the management to design jobs and wage systems that could encourage productivity.

- Taylor was very much obsessed with the idea of maximizing efficiency in an organization in order to maximize profits.
- The following are some of the studies he conducted

1. Time and Motion Study

- **Objective:** to standardize activities for workers or determine a full-day's work.
- Time and motion study involves:
 - ✓ breaking down the task into various elements, or motions
 - ✓ eliminating unnecessary motions
 - ✓ determining the best way to do the job, and
 - ✓ timing each motion to determine the amount of production that could be expected per day (without allowances for delays).

- In this study he wished to know how long it would and should take a machine or workman to perform a given process to produce a part using specified materials and methods under controlled stations.
- He used stop - watch system to start and finish the test.
- This study permitted the determination of practical, relatively precise and reliable standards of output.
- That is, the study enabled him to set feasible standards per man or machinery usually higher than the average of current performance of that time.

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2. Uniform Method of Routine Tasks

Objective: to adjust worker with work

- It is intended to prepare and direct the effort of those responsible for establishing the conditions under which these standards could be set and met.
 - With this objective in mind he worked out such techniques as:
 - ❖ instruction cards
 - ❖ order of work cards
 - ❖ material specialization
 - ❖ inventory control systems
 - ❖ material handling standards.

3. Functional foremanship study - which man for which work.

- **Objective:** to scientifically select the best worker for a given job.
- It was concerned with assuring which man will be best for which job, considering his initial skill and the potential for learning.

4. Individual Incentive

- **Objective:** to determine the appropriate wage or salary
- In order to solve the problem of wage systems that encouraged soldiering, Taylor also advocated the use of wage incentive plans.
- His study reached higher pay would serve as an incentive for workers that would result from the increased productivity.
- During his (Taylor's) time there was a reduction of rates if the workers earn beyond an acceptable limit. But his view was that, having scientifically measured the worker's jobs and set rates accordingly, and then efficient workers should be rewarded for their productivity without limit.

- After Taylor conducted the above studies in 1911 he wrote a book called **principles of scientific management**.
- He developed the following four principles.
 - 1) Develop a science for each element of a job, which replaces the old rule of-thumb method.
 - 2) Heartily cooperate with the workers so as to insure all of the work being done in accordance with the principles of the science which has been developed.

- 3) Scientifically select and then train, teach and develop the worker, whereas in the past a worker chose her own work and trained herself as best she could for their own and the company's -prosperity.
- 4) There is an almost equal division of work and responsibly between management and workers. The management takes over all work for which they are better fitted than workers, while in the past almost all of the work and the greater part of the responsibility were thrown upon the workers.

2. **Frank and Lillian Gilbreth** (The first dual career couple) 1868-1972

- The Gilbreths were contemporaries of Taylor and part of the original scientific management pioneers.
- Their accomplishments still stand out for their devotion to a single goal:
 - the elimination of waste and the discovery of the 'one best way' of doing work.

- Frank started as a bricklayer and then achieved a considerable success as an independent contractor and later as a management consultant.
- He was determined to learn to lay bricks the 'right' way.
- He began developing his own ideas and work methods.
- In the end, he was able to develop a method which cut the motions required to lay bricks.
- He known as **the Father of Motion Study**

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- After he died, Lillian was determined to continue his work.
- She argued that the purpose of scientific management is to help people reach their maximum potential by developing their skills and abilities.
- For her contribution to the field of management, Lillian was known as **‘The First Lady of Management’**.

3. Henry L. Gantt (1861-1919)

- Gantt worked with Taylor at the Midvale Steel Company and was early proponent of scientific management.
- If it wasn't for him, scientific management might have been lost in a storm of criticism.
- Gantt took every opportunity to humanize scientific management such as, inventing a task and bonus system that offered foremen a bonus for every worker who succeeded, which motivates foreman to show interest in their employees and help them achieve as much as they could.
- Gantt is perhaps known for his development of '**Gantt Chart**' - a simple graph method of scheduling work according to the amount of time required instead of the quantity of work to be performed.

Contributions of Scientific Management

- 1) Specialization of activities increases productivity.
- 2) The methods of scientific management can be applied to a variety of organizational activities, besides those of industrial organizations.
- 3) The efficiency techniques of scientific management, such as time and motion studies, have made us aware that the tools and physical movements involved in a task can be made more efficient.
- 4) The stress it placed on scientific selection and development of workers has made us recognize the importance of both ability and training in increasing worker effectiveness.

Limitations

- ✓ Taylor mistreated the human element: He equated people (worker) with machine; he said workers are extensions of machines, cogs of machines.
- ✓ Taylor saw only money as a motivator.
- ✓ The human desire for job satisfaction was overlooked. Workers usually are more willing to go out for strike over job conditions rather than salary and to leave a job if they were unhappy with it.

- ✓ The application of scientific principles was not smooth. Give money to workers and then work. If they don't work, penalize if not fire them out.
- ✓ Taylor didn't consider the organization as a whole but the production or the technical level.

II. **Classical Organization Theory...administrative management theory**

- The other branch of classical management classical organization theory-grew out of the need to find guidelines for managing complex organizations.
- That is, the classical organization theory focused on the management of the entire organization unlike the scientific management theory, which focused on production.
- Classical organization theory had two major purposes:

- a) Develop basic principles that could guide the design, creation and maintenance of large corporations, and
- b) Identify the basic functions of managing organizations.

The work of Henri Fayol's ideas clearly explain classical organization theory

Henri Fayol (1841-1925)

- A French industrialist and a well-known contributor to the administrative management theory, was born to a middle class family near Lyon-France.
- He is acknowledged as the prominent contributor and founder of the classical organization theory.
- Fayol was convinced that it should be possible to develop theories about management that could then be taught to individuals with administrative responsibilities.

- To him management (administration) was not a personal talent but a skill that could be taught.
- Henri Fayol is the one who identified:

1. The major types of activities involved in an industry or a business as

- Technical:** producing and manning products
- Commercial:** buying raw materials and selling products
- Security:** protecting employees and property
- Financial:** search for and optimum use of capital
- Accounting:** recording and taking stock of costs, profits, and liabilities, keeping balance sheets, profit and loss statements, etc
- Managerial:** planning, organizing, commanding, coordinating and controlling

- Fayol's primary focus was the managerial activity, because he put managerial skill had been the **most neglected, least understood** but the **most crucial** aspect of business operations.
- He defined managing in terms of the five functions: planning, organizing, commanding, coordinating and controlling which all are similar to the present-day five managerial functions of Planning, Organizing, Staffing, Directing, and Controlling.

2. Management as a separate field of study

- Fayol said management is a discipline worth studying because he believed that managerial ability could be applied to the home, the church, the military, the politics, and industry.
- Adding he said there is a need for the introduction of formal managerial training schools.

3. General management principles

- Fayol hastened to explain in his monograph that he employed the word **principles, not laws or rules**, because of the flexibility required in applying such concepts to people. In his words, he said:

- *“I prefer the word principles in order to avoid any idea of rigidity, as there is nothing rigid or absolute in administrative matters; everything is a question of degree.*
- *The same principle is hardly ever applied twice in exactly the same way, because we have to allow for different and changing circumstances, for human beings who are equally different and changeable, and for many other variable elements.*
- *The principles, too, are flexible, and can be adopted to meet every need; it is just a question of knowing how to use them.”*

14 Principles of Fayol

1. Division of labor or specialization

- Division of work (labor) encompasses three basic concepts:
 - ✓ Breaking down a task into its components.
 - ✓ Training workers to become specialist in specific duties, and
 - ✓ Putting activities in sequence so one person's efforts build on another's
- The theory is that the fewer the tasks a person does in his job, the more efficient, skilled and effective he becomes.
- Yet there are limitations to how much that work should be divided.

2. Authority and responsibility

- Authority is the right to give orders, to exact obedience. Responsibility, on the other hand, is a sense of obligation that goes with authority or a reward or penalty accompanying the use of this power.
- Authority should be delegated only to subordinates who are willing to assume commensurate responsibility.
- In later years this principle would be called parity of authority and responsibility, indicating that the two should always be equal.

3. Discipline

- Members in an organization need to respect the rules and agreements that govern the organization.
- To Fayol, discipline will result from good leadership at all levels of the organization, fair agreements (such as provision for rewarding superior performance), and judiciously enforced penalties for infractions.
- Fayol saw the necessity for discipline and precise and exact obedience at all levels for the smooth running of a business.

4. Unity of Command

- An employee should receive directives from only one superior.
- One person should have one boss.
- She should receive orders from one boss and report to the same boss.

5. Unity of Direction

- Where there are a group of activities with the same basic objective there must be one coordinated plan to accomplish the coordination of effort, and one person at the head of such coordination: **One head, One plan, and One set of objectives.**
- This improves coordination and ensures that energies are channeled in the proper direction

6. Subordination of individual interest to general interest or common good

- In any undertaking, the goals and interests of an organization must take precedence over those of individuals or groups of employees.
- The overall interest of the firm is more important than the interest of any person or group of people who work for it.

7. Centralization

- Centralization and its counter part, decentralization, mean how much authority is concentrated at the top of the organization or dispersed throughout the management hierarchy.
- Fayol believed that managers should retain final responsibility but also need to give their subordinates enough authority to do their jobs properly.
- The problem is to find the optimal amount of centralization.

8. Remuneration of personnel

- Compensation or wages for the work done should be fair and equitable to both to workers and the organization.
- Payment plans shouldn't lead to over payment but the amount and method of payment **should be fair to reflect the cost of living, general economic condition, the demand for labor**, the economic state of business and the value of employees.

9. Scalar Chain of Command

- Scalar chain is the line of authority that extends from the top to the bottom of an organization and defines the communication path.
- All organizational requests and directives must follow this chain.
- This must be the route to be followed by all communications via every link in the chain that starts from the bottom level of the organization to the ultimate authority.
- This preserves the integrity of the hierarchy, and ensures the unity of command.

10. Order

- Order is best defined as “a place for everything (everyone) and everything (everyone) in its place.
- Materials and people should be in the right place at the right time.
- People in particular should be in the job or positions most suited for them.

11. Equity

- In dealing with subordinates, managers should be friendly, fair, kind and lawful.
- Kindness and justice on the part of managers will help employees to be loyal and devoted workers.

12. Stability of tenure of personnel

- Trained and experienced workforce and management are crucial for organizational success.
- Both managers and workers need time to learn and master their jobs.
- *The longer these people stay in the organization or on their jobs, the higher their belongingness to the organization or/and the greater their effectiveness will be.*

- labor turnover should be minimized and stability has to be nurtured.
- Note, however that some turnover is expected and is desirable.
- Factors like retirement, death, dismissal or demotion because of incompetence could lead to turnover.

13. Initiative

- Members of an organization should be given the opportunity to:
 - ✓ demonstrate their creativity
 - ✓ exercise their judgment
 - ✓ chart out their own plans of discharging their responsibility within the bound of due respect for authority and discipline.

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- To Fayol, the keenest interest for an intelligent executive is to be able to scarify his personal vanity and instill those under him with the attribute to bake initiative.
- The organization in turn will enjoy high quality and forward-looking decisions and better performance

14. Esprit de corps

- The gist of this principle is that ' in union there is strength.
- ' Hence, workers, management as well as employers should work as a team.
- It is the responsibility of management to promote the spirit of cooperation rather than the spirit of divide and conquer.
- Fayol also said that oral communications should be preferred to written directives and explanations whenever possible for written communications could lack speed or clarity and breed dubiety and reservation rather than trust and cooperation.

