

F.W. Taylor's scientific Management

Fredrick Winslow Taylor is called "father of scientific management." He joined as a labour at Midvale steel company in U.S.A at 1878. He became chief engineer in the year 1884 in the same company. He published papers on "price rate system" and shop management. He published a book on "the principles of scientific management" in 1911.

Taylor attempted a more scientific approach to management as well as the problems and the approach was based upon four basic principles.

Observation and measurement should be used in the Organizations.

The employees should be scientifically selected and trained

Due to scientific selection and training of employee has the opportunity of earning a high rate of pay.

A mental revolution in the form of constant cooperation between the employer and employees should be given the benefits of scientific management.

Principles of scientific management

Taylor conducted various experiments at the work place to find out how human beings could be made more efficient by standardization of the work. The following are the features of scientific management.

1. Separation of planning and doing:

Taylor suggests the separation of planning from actual doing.

Taylor says that supervisor should be done the planning.

The workers only concentrate on doing the work.

Functional foremanship:

Taylor developed a theory called functional foremanship based on specialization of functions.

In this system eight foremen were involved to direct and control the activities of the workers.

3. Job analysis:

Every job that requires minimum movements and less cost and least time is the best way of doing the job. This can be determined by motion, time and fatigue study.

Time study:

The movement, which takes minimum time, is the best one. This helps in fixing the fair work for a period.

Motion study:

Taylor suggested that eliminating wasteful movements and performing only necessary movements.

Fatigue study:

Employees are both physically as well as mentally fatigued easily. Fatigue study indicates the amount and frequency of rest required in completing the job. Taylor suggests a fair day's work requiring certain movements and periods to complete it.

Standardization:

Standards must be maintained in respect a instruments and tools, period of work, amount of work, working conditions, cost of production etc. Normally these standards will be fixed in advance on the basis of various experiments.

Scientific selection and training:

- Taylor has suggested that workers should be selected on scientifically.
- A worker should be physically and technically most suitable.
- After selection should be given on the training of workers which makes them more efficient and effective.

Financial incentives:

- Financial incentives can motivate the workers to put in their maximum efforts.
- According to this scheme a worker who completes the normal work gets wages at higher rate.
- Who does not complete gets at a lower rate.
- Taylor has suggested that wages should be based on individual performance and not on the position which he occupies.

Economy:

- Scientific management enhances profit and economy.
- The economy and profit can be achieved by making the resources more productive as well as by eliminating the wastages.

Mental Revolution:

- Scientific management is based on co-operation between management and workers.
- Co-operation enhances the effective managerial activities.
- Mutual conflict should be replaced by mutual co-operation which is beneficial to both.

Henry Fayol's Contribution

Henry Fayol, a French industrialist concentrated on that administrative aspect of scientific management. His contributions and concentrated in his famous book "The general and industrial administration". Fayol's famous book into two parts. The first is concerned with the theory of administration in which Fayol divided the total industrial activities into six categories which are given below:

Technical (Production, Manufacture)

Commercial (Buying, Selling, Exchange)

Financial (Search for and optimum use of capital)

Security (Protection of property and person)

Accounting (Balance sheets, Cost statistics)

Management (Planning, Organizing, Coordinating, Directing, Controlling)

The second is concerned with the fourteen principles of management .They are

Division of work.

Authority and Responsibility.

Discipline

Unity of Command.

Unity of Direction.

Subordination of individual interest to general interest.

Remuneration of personnel.

Centralization.

Scalar chain.

Order.

Equity.

Stability of tenure of personnel.

Initiative

Esprit decorps.

Division of work:

Work should be divided in a proper way with reference to the available time. In general worker on the same job and the managers on the same duty acquire ability sureness and accuracy which increase their output.

Authority and Responsibility:

Authority: It is the power given to a person to get work from his subordinates.

Responsibility: It is the kind and amount of work expected of from a man by his superior. One of the essential elements of a good management is delegation of authority to the lower levels of management and fixing responsibility on town.

Discipline:

Discipline is very essential for the smooth running of organizations. To Fayol, discipline will result from good leadership at all levels of the organization, fair agreements and judiciously enforced penalties for infractions.

Unity of command:

An employee must receive orders and instructions from one supervisor only. Multiple commands will cause conflicts and confusions. A sound management should avoid dual commands.

Unity of Direction

Unity of direction signifies each group of activities having the same objectives must have one head and one plan. All the groups should coordinate and work together to achieve the common goal.

Subordination of individual interest to general interest:

Every employee is working in an organization and his interest is to earn money to meet his personal needs. The general interest of the organization is development and the progress of the organization.

The employees should give importance first to the general interest than his individual interest. It will lead to effective management of the organization.

Remuneration of personnel:

Remuneration should be fair for both the employees and employers. The wage Payment systems should satisfy the employees.

Centralization:

The organization is centralized when the power is connected with one person. If the power is fully distributes to the subordinates of the organization is fully decentralized. For effective management of people decentralization is necessary. Decentralization helps to take a quick decision on all important problems.

Scalar chain:

Scalar chain principles states that instructions and orders should be sent from the top management to the lower management.

Order:

Two types of order 1) Materials order 2) Social order.

In any organization materials and for men are correct places provided. So that materials can be easily taken out and men easily located and also save time.

Materials order: "A place for everything in its place"

Social order: "A place for everyone and everyone in place".

Equity:

Equity refers to the treatment of employees equally. Equal treatment of the employees helps to achieve organizational goals.

Stability of staff:

A high employee turnover rate is not good for the efficient functioning of any organization.

Initiative:

It is concerned with thinking and execution of a plan. When employees come forward with new ideas, they must be encouraged by the superiors. It will create the morale of the employees.

Esprit-de-corps:

This means union is strength. There should be employees union in the organization. In organization employees should be harmony and unity. It improves employee morale.