

management for better supervision of its workers as well as reduction of disputes between them.

In a nutshell, productivity and efficiency were the primary ends of scientific management. Standard work procedures, scientific selection of workers, fusing together the science of work and trained workers and sharing of responsibility between management and workers were the means to achieve those ends. Scientific Management is a combination of all these principles and these principles cannot be isolated.

Basic components of scientific management

There were four important components of scientific management.

a. *Determination of standards of performance*: The real problem that Taylor found from his experience was that no one exactly knew how much work a worker was expected to do in a specific/given time. The standards of work performance were determined on the basis of *rule of thumb* rather than providing any scientific basis. Taylor introduced his famous **time and motion study**¹ to determine the standard of work performance.

b. *Functional foremanship/functional organization*: Taylor called for a drastic reorganization of supervision and recommended functional foremanship in the organization in which the worker receives orders from eight functional specialists. In other words, he proposed using specialized experts known as functional foreman each of whom was responsible for some specific aspect of the worker's task. He also advocated the division of work between managers and workers favoring a complete separation of the planning function from the doing function. [He opposed the linear system or military type of organization in which each worker is subordinate to only one boss]

¹ Time study is an act of observing and recording the time required to do a particular work. Motion study involves the study of the movement of a worker to eliminate unnecessary motions and to determine the best method of doing a work.