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The Principles of Scientific Management by Frederick Winslow Taylor

Frederick Winslow Taylor (1856-1915) was an American industrial engineer who originated scientific management in business. Taylor argued that the scientific method could be applied to all problems and applied as much to managers as workers. He explained:

The old fashioned dictator does not exist under Scientific Management. The man at the head of the business under Scientific Management is governed by rules and laws which have been developed through hundreds of experiments just as much as the workman is, and the standards developed are equitable.

Taylor believed that all humans possess a natural laziness, not just “working” men. He states: “I have found that there are a lot of schemes among my working friends, but no more among them than among us.” He proposed his ideas in order to increase productivity and efficiency in all endeavors. He believed that human beings are rational and would make economic choices based on the degree of monetary reward. There are four objectives to scientific management:

1. The development of a science for each element of a man’s work to replace the old-rule-of-thumb methods. “Gathering the great mass of traditional knowledge.” Data can sweep the world. After collecting the data he would record, tabulate and reduce it to laws and rules and turn the data into a

mathematical formula. Management performs scientific studies on motion and time.

2. The scientific selection, training and development of workers instead of allowing them to choose their own tasks and train themselves as best they could. The best workmen for tasks of the business.
3. The development of a spirit of hearty cooperation between workers and Management to ensure that work would be carried out in accordance With scientifically devised procedures. Make the workmen buy into the science or let him go. Use incentives to maintain the participation of the worker and the acceptance of this framework.
4. The division of work between workers and the management in almost all equal shares, each group taking over the work for which it is best fitted instead of the former condition in which responsibility largely rested with the workers. Self-evident in this philosophy are organizations arranged in a hierarchy, systems of abstract rules and impersonal relationships between staff. Teamwork through the managers example. Genuine division, cooperation and democracy. The great good comes from the fact under Scientific Management, they (workers) look upon their employers as the best friends they have in the world.

Taylor's framework for organization was:

- Clear delineation of authority
- Responsibility
- Separation of planning from operations
- Incentive schemes for workers
- Management by exception
- Task specialization

There was strong criticism of his theory because it was believed it treats human beings like machines and assumes that workers are satisfied by money alone. Taylor's impact has been so great because he developed a concept of work design, work-measurement, production control and other functions, that completely changed the nature of industry.

Before scientific management, such departments as work study, personnel, maintenance

and quality control did not exist. What was more his methods proved to be very successful.

The Principles of Scientific Management by Frederick Winslow Taylor, *Classics of Organizational Theory*, Shafritz et al, Thompson/Wadsworth, sixth edition, 2005.

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