

CHAPTER I

THE DEVELOPMENT OF MANAGEMENT CONCEPTS

Any attempt to formulate general management concepts is based on the assumption that there is a common set of principles underlying successful managerial performance in a diversity of fields. The purpose of this chapter is to review briefly some of the influences on the development of management concepts during this century. From the standpoint of the history of human managerial activity, these are, of course, relatively recent influences. Thus, we shall discuss Taylor's scientific management, Fayol's general principles of management, the influence of the behavioral sciences, and the systems approach to management. We conclude the chapter by considering some of the cultural factors which have influenced managerial decisions during the past decade.

A. TAYLOR'S SCIENTIFIC MANAGEMENT

Frederick W. Taylor is generally acknowledged to be the founder of the scientific management movement. His overall goal was higher industrial efficiency, in the form of either higher productivity or lower unit cost. What distinguishes scientific management from other approaches is not so much its goal, but the basic assumptions, specific objectives, and techniques by which industrial efficiency is to be achieved. The techniques of scientific management reflect Taylor's belief that the planning of tasks needs

to be separated from the doing. His book, *The Principles of Scientific Management*, was first published in 1911.

1. One of the assumptions underlying scientific management is that the application of the methods of science to problems of management will lead to high industrial efficiency. It was in this sense that Frederick Taylor believed management should be "scientific"
2. Observation, measurement, and experimental comparison are among the principal methods of science that can be applied to problems of management.
3. A second basic assumption is that the incentive of high wages will promote the mutuality of interest between workers and managers that will result in high industrial efficiency.
4. Thus two basic assumptions underlying the techniques of scientific management are that industrial efficiency can be improved through the application of the methods of science and the payment of high wages.
5. Several specific objectives are included in the scientific management approach to improving industrial efficiency. One is the standardization of working conditions. Determining the best temperature and humidity for achieving productivity has to do with the standardization of

working conditions.

6. The provision for work breaks of optimum duration and frequency is another example of standardization of working conditions to achieve higher industrial efficiency.
7. Closely related to the objective of standardizing working conditions is the standardization of work methods. Determining the best procedure for doing a job is an example related to standardization of work methods.
8. Motion study is the observation of all the motions that compose a particular job and the determination of the best set of motions that leads to the greatest efficiency. Therefore, motion study is a technique used to attain the specific objective of standardizing work methods.
9. Taylor concentrated on observing and measuring performance of high producers in order to discover and develop standardized work methods for particular jobs.
10. The use of motion-picture cameras to record worker movements and work methods is included in the technique of motion study.
11. In addition to the standardization of working conditions and the standardization of work methods, Taylor believed that the planning of a large daily task promotes industrial efficiency.

12. Just as motion study is a technique related to the standardization of work methods, time study is related to the planning of a large daily task for each worker.
13. The use of a stopwatch is related to the technique of time study.
14. Determining the appropriate production standard for a particular job can be accomplished by using the technique of time study.
15. On the other hand, observing the detailed job performance of a number of workers in order to discover the best way to do a job is related to the technique of motion study.
16. Another specific objective of scientific management is that encouragement to stay in a job should be given to (high producers), whereas encouragement to transfer to a different job should be given to (low producers).
17. Accordingly, for those producing above standard the per unit pay under the Taylor Differential Piecework Plan is (higher) than is for those producing below standard.
18. As a result, job transfers for employees producing above standard are (discouraged) by the use of the Taylor Differential Piecework Plan, whereas job transfers for

those producing below standard are (encouraged)

19. Thus two basic assumptions of scientific management are that industrial efficiency can be attained through the application of the methods of science and the payment of high wages.
20. Of the techniques of scientific management, studies of rest breaks, lighting, and the like are related to the objective of defining standardized working conditions.
21. Motion study is related to the objective of defining standardized work methods.
22. The use of the Taylor Differential Piecework Plan is related to the objective of encouraging high producers to stay in the job while encouraging low producers to transfer to another job.
23. The production standard to be used in a wage incentive system can be determined by using the technique of time study.
24. Although the historical connection is not direct recent work in operations research, which emphasizes the application of the methods of science to managerial decision making, is a further development of one of the operating assumptions of Taylor's scientific management.

B. FAYOL'S GENERAL PRINCIPLES OF MANAGEMENT

In contrast to Taylor's emphasis on management techniques applicable at the working, or operative, level. - Henri Fayol's approach to developing management concepts is oriented toward the higher levels of the organization. The so-called "functional approach" to the study of management is a direct outgrowth of Fayol's work. Because all of Chapter 2 is devoted to describing the functional approach to management, our coverage of Fayol's work in this chapter is restricted to providing a brief exposure to the overall frame work that Fayol followed in his development of management concepts.

Henri Fayol was a French industrialist who published his observations about general management principles in 1916 in French, under the title *Administration Industrielle et Générale*. However this monograph was not translated into English until 1929 and was not published in the United States until 1949.

25. Fayol identified six activities which he believed had to be accomplished all organizations. Referring to Figure 1.1 we see that organizational activity concerned with the optimum use of capital is the financial activity.

Figure 1.1 Fayol's identification of the activities to be accomplished in all organizations.

26. Continue referring to Figure 1.1 for the following frames. The buying selling and exchange functions in an organization are related to the commercial activity.
27. Production would be classified as a technical activity in Fayol's analysis.
28. The determination of present financial position is included in the accounting activity.
29. Protection of property would be included in the security activity.
30. Finally, Fayol identified the functions of planning, organizing, commanding, coordinating, and controlling as being included in managerial activity.
31. Most of Fayol's analysis of organizational activities was devoted to the area listed in the preceding frame, i.e., the analysis of managerial activity.
32. Fayol held that the importance of managerial ability in creases as one goes up the chain of command. Consequently, one would expect that managerial skill is the most important component of job performance in (top) management positions.

TOP

33. Fayol also identified a number of principles of management listed in Figure 1.2 which apply in varying degrees in all managerial situations. We shall discuss some of these principles briefly in the frames that follow, in order to illustrate his approach to managerial problems. These fourteen concepts, then are considered to be the most important principles of management.

- 1.- DIVISION OF WORK
- 2.- AUTHORITY AND RESPONSIBILITY
- 3.- DISCIPLINE
- 4.- UNITY OF COMMAND
- 5.- UNITY OF DIRECTION
- 6.- SUBORDINATION OF INDIVIDUAL INTEREST TO GENERAL INTEREST
- 7.- REMUNERATION OF PERSONNEL
- 8.- CENTRALIZATION
- 9.- SCALAR CHAIN
- 10.- ORDER
- 11.- EQUITY
- 12.- STABILITY OF TENURE OF PERSONNEL
- 13.- INITIATIVE
- 14.- ESPRIT DE CORPS

Figure 1.2 Fayol's general principles of management.

34. Remuneration of personnel concerns the importance of the remuneration system being fair and affording maximum satisfaction to employee and employer. This principle