Historical and Contemporary Theories of Management

Overview

The idea of management is not new. Early forms of management concepts have been applied throughout history in order to progress as a society. Could Stonehenge have been built without the management of all of the required tasks? What about the Mayan or Egyptian pyramids? Could the stones for these monuments have been found, cut, and moved without a plan? Management activities were needed in order to complete these massive projects.

In this reading, we will explore some of the early theories of management, although we will not be able to go as far back as the Mayans or Egyptians. We will start in the late 18th century and then work our way up to current and contemporary 21st century concepts.

Early Management Theories

The Industrial Revolution as well as the growth of factories and mass production created a need for strong management processes. Better and more efficient ways of manufacturing goods were needed in order to maximize productivity, bring down costs, and increase profitability. As a result, since the late 1800's, theorists have developed a wide range of methods for improving management practices.

As discussed earlier in this subunit, Frederick Winslow Taylor was an early pioneer of management theory. In this reading, we will discuss Taylor's management approach and other early management theories, and then move on to more modern approaches.

The Scientific Approach

Taylor was the founder of the Scientific Approach to management, which focused on efficiency of movement and the task at hand. By designing the job appropriately, his theory postulates that the worker would be motivated to be more efficient and productive. Taylor's Scientific Approach to management changed the purpose and scope of factory employees. His practices changed the role of managers from one of bullying workers to complete their jobs and turned them into skilled employees who could supervise an individual aspect of production with the goal of efficiently increasing production.

There were, of course, criticisms of this approach, which claimed that workers were not allowed to express any individuality in their work. Critics also claimed that this approach gave greater power to management and reduced workers to automatons. However, Taylor's intentions were good in that he linked productivity and output with financial gain so that more productive workers would earn more money. His goals also included making the workplace safer so that workers would have fewer injuries on the job. In fact,

many of Taylor's methods can still be seen in today's modern management approaches. The assembly line, pay-related performance, financial incentives, bonuses, and total quality management are among some of the current practices commonly used by management.

The Administrative Approach and the Bureaucratic Approach

Within the Scientific Approach to management are two other sub-theories: the Administrative Approach and the Bureaucratic Approach. The *Administrative Approach* was pioneered by Henri Fayol, who developed his management theory in 1916. Influenced by Taylor's publication of *The Principles of Scientific Management* in 1911, it is unclear whether Fayol was a theorist with original ideas or whether he was a good manager who took management practices to their next level of evolution. Like Taylor, Fayol was an engineer who was a manager in French mines. Fayol believed that management was part of all aspects of our lives and society including home, work, and government. He believed that all of the tasks required to conduct our lives could be categorized into one of five functions: *planning, organizing, commanding, coordinating,* and *controlling*. He believed that individuals could become good managers if they understood and implemented proper management principles.

- *Planning* refers to forecasting and determining what will be needed in the future.
- *Organizing* involves gathering all the necessary resources, both in terms of raw materials and manpower.
- *Commanding* results in all of the required activities being done, as needed.
- *Coordinating* is the logistics of ensuring that all jobs are conducted in a synchronized manner and that everyone involved is working as a unified team.
- *Controlling* means that all rules and regulations are followed and adhered to.

Also, during the time of Taylor's *Scientific Approach,* the *Bureaucratic Approach* was proposed by Max Weber, a sociologist from Germany. His approach focused on hierarchical structure, which provided clear designations of authority, giving managers a type of legal control over their employees. Managers, he stated, would be followed simply because of their elevated position. Weber viewed each organization as a bureaucracy with goals to be met at the expense of individuality or personal contribution. His practices enabled companies to operate more efficiently. However, requiring all managers and workers to adhere to a strict set of guidelines limited workers' creativity and the ability to adapt to change.

The Human Relations Approach

In the early 1920's, Elton Mayo, a professor at Harvard, observed the importance of human interaction and personal relationships in the work place. Led by Mayo, experiments in working conditions and social factors were conducted at the Western Electric company at their Hawthorne plant. These became known as the *Hawthorne*

Studies. The experiments sought to understand the effects of various working conditions on employees' productivity. Conditions incorporated into the experiments included varying the room's lighting levels, number of employee rest breaks, required working hours, availability of meals, room temperature variations, and other environmental workplace changes.

The results were quite surprising: at each stage of the experiments, productivity climbed! Employees felt that management valued them as individuals simply because of the implemented changes. It signaled that they were cared about. Additionally, employees who were part of the experimental groups formed great social bonds, saw themselves as part of a select group, and felt that they had the freedom to make workplace choices. Even when employees went back to their original working hours and conditions, productivity continued to be at high levels.

The Hawthorne Studies proved that meeting social needs of workers could enhance the workplace and positively impact productivity. Just as the *Scientific Approach* brought a new perspective to management, the Hawthorne Studies changed the role of management yet again. The scientific movement focused on required tasks and viewed managers as taskmasters, while the Human Relations Approach took into consideration the importance of group dynamics, teamwork, and the positive impact of social interaction. In this new era, managers' roles included care and concern for the workers' needs and well-being.

As the Human Relations Approach to management continued to progress through the early 20th century, it became more and more apparent that one's employment was not only for making money and being able to support a family. In fact, people had social needs that were also being met in the workplace. In 1943, Abraham Maslow presented his Hierarchy of Needs Theory, which was all about motivation and personal development.

Other humanist theorists followed—e.g. Herzberg's studies to increase motivation and involvement resulted in his motivation-hygiene theory of job satisfaction. McGregor proposed his Theory X/Theory Y approach. Theory X was a negative theory; this theory said that managers should assume that workers are lazy and required threats as a means of motivation. Theory Y categorized workers as able to and wanting to work hard. This theory takes the view that individuals can be defined by either of these extremes, an approach that today's managers are hesitant to adopt.

Modern Theories of Management

Systems Approach

The *Systems Approach* to management sought to find an equal balance between the extremely impersonal Scientific Approach and the individually-focused Human Relations Approach. In this approach, we look at all of the components of an

organization as part of one larger system. However, in order to understand the entire system, we must first be able to recognize the role each division and department plays within the whole system. These divisions or departments are known as sub-systems. Each sub-system can be viewed as its own entity to see how it fits into the entire organization and to determine the role it plays in the larger system.

Biologist Ludwig von Bertalanffy first introduced the idea of a systems approach as part of his General Systems Theory, which he used to explore the relationships between organisms and the environment. Von Bertalanffy wanted to further identify the connection between business organizations and their environment. To do this, he explored the relationships between employees, customers, and company output. His theories can best be illustrated by this quote from his compilation of articles titled *General System Theory: Foundations, Development, Applications.*

> "We may state as characteristic of modern science that this scheme of isolable units acting in one-way causality has proved to be insufficient. Hence the appearance, in all fields of science, of notions like wholeness, holistic, organismic, gestalt, etc., which all signify that, in the last resort, we must think in terms of systems of elements in mutual interaction." (Bertalanffy 1968, p. 45)

What he means is that each element must be looked at individually. Additionally, the result of the interactions must be explored, as well as the whole that is created as a result of those interactions.

Bertalanffy built his approach based on the theories of Stafford Beer and Kenneth Boulding, both management scientists. Born in 1926, Beer was involved in British operational research and the study of complex social systems. He also was instrumental in the idea of combining cybernetics with management systems. His first book, *Cybernetics and Management,* was published in 1959. Boulding was an economist who ventured into many disciplines outside of his original area of study. A spiritual man, his beliefs led him to identify three types of social systems. These systems are:

- exchange systems: activity is organized through the marketing function, and this system is driven by self-interest;
- threat systems: outcomes are based on the threat of loss, and this system is driven by fear and love; and
- integrative, or love systems: there is an integration of utility functions, which results in the situation of "what you want, I want," and this system is also driven by fear and love, where we express our passions and compassion for others.

These systems, he proposed, were essential for society to thrive.

The Systems Approach also looks at the interaction between the social aspect of business and technological changes. In the 1940's, studies conducted at the Tavistock Institute of Human Relations in London looked at how technological changes in coal-mining impacted the workers. With the development of new methods to extract coal, workers' roles and skills changed. As a result, the workers experienced more stress, called in sick more often, and found that their social work structure had been altered. These changes in this sub-system caused a ripple effect that impacted the entire system. Once technology and the social needs of employees formed a new equilibrium, productivity was restored.

The Systems Approach, therefore, relies on all components, or sub-systems, to work in harmony and coordination in order to ensure the success of the larger system.

Contingency Perspective

Founded in the 1960's, the *Contingency Perspective* builds upon the Systems Approach yet recognizes that there are numerous factors that may impact an organization's performance. This approach also looks at other theories that claim to be *the* defining management approach with skepticism. The claim is that there is no one *best* way to manage.

The Contingency Approach recognizes that all business situations are different. Each event comes with its own set of problems, challenges, and internal and external environmental factors.

Some of these macro-environmental factors, or contingencies, to be considered include:

- changes in technology,
- demographic shifts,
- economic conditions,
- cultural factors, and
- government and legislation.

If management is flexible, then management can respond to each of these factors and act accordingly. Interestingly, studies of companies that operate in uncertain environments are more successful with a flexible approach to management, while companies in a more stable environment do better with a more rigid and structured management style of operations.

In order to determine the most effective management approach, each situation should be evaluated separately to determine how best to apply any individual management theory.

Chaos Theory

Finally, we come to *Chaos Theory*. Recognized in the 1980's, Chaos Theory's premise is that any system can exist without any specific direction or predictability.

Henri Poincaré was a 19th century French mathematician and early chaos theorist. His studies can be best described in his quote: "It may happen that small differences in the initial conditions produce very great ones in the final phenomena. A small error in the former will produce an enormous error in the latter. Predication becomes impossible." (Poincaré 1908) What this illustrates is the unpredictability of events and systems. Energy is produced but without any specific direction or expectation of results. One of the most popular examples of this is the leaky faucet, which will drip without a specific pattern. This is considered chaotic behavior. It is impossible to determine the timing of the drops, the direction in which they will flow, or the impact each individual drop may have. Another example is described below with the Butterfly Effect.

Poincaré's theory went unnoticed until the 1960's when meteorologist Edward Lorenz discovered the *Butterfly Effect*. The foundation of his research was that the flapping of a butterfly's wings in one part of the world could have a dramatic impact on the weather somewhere else. In other words, one small action in one place can greatly impact conditions elsewhere. Similarly, a small change in a system, while considered minor, could potentially have a significant effect on the system itself.

In the years that followed, many scientists and theorists explored Chaos Theory and came to understand that the theory was real and that it could be successfully applied to organizational management. By recognizing that chaos was part of the normal order of things, techniques could be employed that would anticipate, and take advantage of, ensuing chaos.

Businesses can apply the Chaos Theory by allowing groups to form and develop on their own. Patterns will begin to emerge, enabling management to identify the most effective ways of shaping the organization. Good managers understand that effective relationships develop among workers, and those relationships will be in constant states of change.

Contemporary business writer Tom Peters' book, *Thriving on Chaos: Handbook for a Management Revolution,* illustrates how organizations can thrive by allowing their employees to function on their own. His ideas reinforce Chaos Theory in our modern world of management.

Summary:

- Early forms of management practices have existed throughout history.

- Industrial growth due to the Industrial Revolution highlighted the need for new management practices.
- The Scientific Approach to management, developed by Frederick Winslow Taylor, focused on efficiency of movement, stating that a properly designed job would motivate an employee to be more productive.
- The Administrative Approach, developed by Fayol, identified five functions for conducting all of life's activities. These functions are: *planning, organizing, commanding, coordinating,* and *controlling*.
- The Bureaucratic Approach, proposed by Max Weber, focused on hierarchical structures and clear designations of authority.
- The Human Relations Approach, identified by Elton Mayo, proved that meeting social needs of workers could enhance the workplace and positively impact productivity.
- The Systems Approach looks at all components of an organization to see how they interact and to create one larger system.
- The Contingency Perspective recognizes that all business situations are different and can have many internal and external factors that may impact outcomes.
- Chaos Theory states that any system can exist without any specific direction or predictability. A small change in one situation can have a significant impact elsewhere in an organization or system.

References:

Bertalanffy, Ludwig von. 1968. *General System Theory: Foundations, Development, Applications.*

Poincaré, Henri. 1908. *Science and Method*.