Historical and Contemporary Theories of Management

Overview

The idea of systematically managing human capital is not something new, yet the process has changed dramatically over the years. Managerial concepts have been applied throughout history in order to promote societal progress, economic expansion, and technological advances. The construction of the prehistoric monument Stonehenge would not have been possible without effective management, coordination, and planning. What about the Mayan or Egyptian pyramids? Could the stones for these monuments have been found, cut, and moved, if carefully thought out plans had not been put into place? Without question, management activities were a necessary function for all of these massive human achievements.

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 ancient Britons, Mayans, or Egyptians. Instead, we will start in the late 18th century and then work our way up to contemporary concepts.

Early Management Theories

The Industrial Revolution—deeply rooted in the rapid advancement in production methodologies, fossil fuel technologies, and increased access to the global marketplace—created a need for well defined management processes. Better and more efficient ways of manufacturing goods were long needed in order to maximize productivity, bring down costs, and increase profitability. As a result there was a tremendous push throughout much of the 1800's by theorists, business owners, and governments to develop effective methods for improving global management practices.

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 we will move on to more modern approaches.

The Scientific Approach

Taylor was the founder of the Scientific Approach to management, which focused on movement efficiencies especially at the individual worker level. By carefully designing the tasks of a given job, his theory postulates that the worker will be motivated to achieve higher efficiency and productivity quotas. Taylor's Scientific Approach to management changed the purpose and scope of the work for many factory employees. His practices not only affected the health and well-being of workers, it also caused dramatic changes to the responsibilities of leadership. Managers in factories are no

longer expected to bully or scare their employees into accomplishing their tasks; instead they have become highly skilled at coordinating different aspects of projects, increasing the efficiency and overall quality of the manufacturing process.

There were, of course, many criticisms to this approach. Detractors protested that workers were not allowed to express any individuality in their work—they had previously been allowed to take on projects from start to finish, in essence giving them more control of their daily activities. Critics also claimed that this approach gave greater power to management and reduced workers to automatons. While there may exist some valid arguments against Taylors' approach, his intentions were mostly good in that he linked productivity and output with financial gain so that more productive workers would earn more money. He also prioritized improving industrial safety standards 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, payrelated performance, financial incentives, bonuses, and high quality management are among some of the current practices commonly used by most manufacturers.

The Administrative Approach and the Bureaucratic Approach

The Administrative Approach and the Bureaucratic Approach have both had a tremendous impact on management practices during the past 100 years and are deeply rooted in the principles established by Taylor's *Scientific Approach*. The Administrative Approach was pioneered by Henri Fayol, who developed his management theory in 1916. Clearly 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 just an extremely gifted manager who took management practices to their next stage in the evolutionary process. Like Taylor, Fayol was an engineer who was a manager in French mines. Fayol 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 argued that individuals could become good managers if only they understood and implemented proper management principles.

- *Planning*—forecasting and determining what will be needed in the future.
- *Organizing*—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*—ensuring that all jobs are conducted in a synchronized manner and that everyone involved is working as a unified team.
- *Controlling*—making sure rules and regulations are followed and adhered to.

The *Bureaucratic Approach* was crafted by Max Weber, a well-renowned sociologist from Germany. His approach focused on a hierarchical structure, which provided clear designations of authority, giving managers a type of legal control over their employees. Managers, he asserted, would be followed simply because of their elevated position in the leadership hierarchy. 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 the results were not always seen as optimal—by requiring all managers and workers to adhere to a strict set of guidelines, Weber's theory tends to stifle worker creativity and their abilities to quickly adapt to change.

The Human Relations Approach

In the early 1920's, Elton Mayo, a professor at Harvard University, analyzed 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*. These 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 and not just as a means of production. 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 remain at increased levels.

The Hawthorne Studies proved that meeting the basic social needs of workers and providing them with an environment conducive to teamwork could significantly enhance employee morale, and positively impact productivity levels. Just as the *Scientific Approach* was a game changer for managerial practices, 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.

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 no *Saylor URL: www.saylor.org/bus208*

longer just a means for making money or being able to support a family. In fact, people have a variety of social needs that can also be met in the workplace. In 1943, Abraham Maslow presented his Hierarchy of Needs Theory, which took a critical look at variables that affect motivation and personal development.

Other humanist theorists soon 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, which stated that managers should assume that workers are lazy and require threats as a means of motivation. Theory Y categorized workers as capable individuals who want to work hard. This theory takes the view that workers fall into either of these two extremes and should be managed accordingly, 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 take into account all of the components of an organization as part of one larger system. In order for us to fully understand the entire system, we must first be able to recognize the role that each division and department plays. These divisions or departments are known as sub-systems with well defined duties and responsibilities. Each sub-system can be viewed as an independent entity which allows us to observe how its actions affect the rest of the organization.

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 their habitats. He soon expanded his research into the social sciences arena when he decided to study the connections between business organizations and the workplace environment. To do this, he explored the relationships between employees, customers, and company output. His theories are best 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)

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What he means is that each element of an organization should be studied individually. Afterwards, interactions between sub-systems should be explored, as well as the entity that is created as a result of those interactions.

Bertalanffy built his approach based on the theories of two management scientists, Stafford Beer and Kenneth Boulding. 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 by trade who ventured into many disciplines outside of his original area of study. He eventually identified the following three types of social systems: exchange systems, threat systems, and integrative/love systems.

- *Exchange Systems*—activity is organized through the marketing function, and is driven by self-interest.
- *Threat Systems*—outcomes are based on the threat of loss, and are driven by fear and love.
- Integrative/Love Systems—there is an integration of utility functions, which results in the situation of "what you want, I want." This system is also driven by fear and love, especially in regards to how we express our passions and compassion for others.

The Systems Approach also explores the connection between social aspects of business and technological advances. In the 1940's, studies conducted at the Tavistock Institute of Human Relations in London examined the impacts that technological advances had on workers in coalmines. With the development of new methods to extract coal, workers' roles and duties drastically changed. As an unintended consequence of these changes, the workers experienced higher levels of stress, called in sick more frequently, and found that their social structure had been irreparably altered. These changes in this particular sub-system caused a ripple effect that impacted the entire organization. It took several years, but once technology and the social needs of employees were able to form a new equilibrium, productivity was eventually 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 *Saylor URL: www.saylor.org/bus208*

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 they can carefully address 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.

Chaos Theory

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

Henri Poincaré was a 19th century French mathematician and early chaos theorist. His studies are best illustrated by the following 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) This quote illustrates 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 theory is the leaky faucet, which will continue to drip without a specific pattern until the leak is fully sealed. 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 by the so-called 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 credible 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 succeed by allowing their employees to function with a great deal of independence. His ideas reinforce Chaos Theory in our modern world of management.

Summary

- Management practices have existed throughout history.
- Industrial growth due to the Industrial Revolution highlighted the need for new and improved 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 improve the workplace environment and positively impact productivity.

- The Systems Approach looks at all components of an organization to see how they interact and to create efficiency in the larger system.
- The Contingency Perspective recognizes that all business situations are unique and can have many internal and external factors that may impact outcomes.
- Chaos Theory states that systems 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.