

# **Management Theory**

**Dr. Stephen W. Hartman**  
**New York Institute of Technology**

## Introduction and Main Points

Civilization is the product of those who came before us. The evolution of modern management thinking begins in the nineteenth century and flourished during the twentieth. The twentieth century has witnessed a revolution in management theory ranging from classical theory to the Japanese management approach.

Today's management theory is the result of the interdisciplinary efforts of many people.

## The Founders

The beginning of the modern organization occurred primarily during the middle of the nineteenth century with the rise of the factory system, principally in the textile industry, where automation and mass production became the cornerstone of productivity. Management thinking, however, was slow to evolve during the century. The need existed to define what management was in the first instance as well as to operationalize it in meaningful terms for an organization. During this period two principal management theorists took up this challenge and emerged as the so-called Pre-Classicists of management thought.

## Pre-Classicists

In the nineteenth century, Robert Owen and Charles Babbage seriously addressed the quest for the development of management theory. Owen was an entrepreneur and social reformer while Babbage was a noted mathematician with a strong managerial interest.

### Robert Owen (1771-1858)

Robert Owen's ideas stemmed from his ownership of a cotton mill in New Lanark, Scotland where he developed a strong interest in the welfare of the 400 to 500 child employees. Owen spearheaded a legislative movement to limit child employment to those over the age of ten while reducing the workday to 10 1/2 hours.

In 1813 Owen published a pamphlet, *A New View of Society*, where he described his vision of society. He also became active in improving living conditions of employees through the implementation of improvements in housing, sanitation, public works and establishing schools for the children. Owen strongly believes that character is a product of circumstances and that environment and early education is critical in forming good character. While being extremely controversial during his lifetime, Owen is credited with being the forerunner of the modern human relations school of management.

### Charles Babbage (1792-1871)

Charles Babbage, a noted English mathematician, is credited as being the "father of the modern computer" for performing the fundamental research for the first practical mechanical calculator as well as doing basic research and development on an "analytical engine" acknowledged to be the forerunner of today's modern computer. His interest in management stemmed largely from his concerns with work specialization or the degree to which

work is divided into its parts. This is now recognized as being the forerunner of contemporary operations research.

Babbage's other major management contribution came from the development of a modern profit-sharing plan including an employee bonus for useful suggestions as well as a share of the company's profits.

While both Owen and Babbage were important nineteenth century management innovators, their efforts lacked the central tenets of a theory of management. Owen was primarily credited with making specific suggestions regarding management techniques in the areas of human relations while Babbage is credited with developing the concepts of specialization of labor and profit sharing. These pre-classicists paved the way for the theoretical ferment of the classical school of management.

## The Classical School

The twentieth century witnessed a period of tremendous management theory ferment and activity. Calls were heard for the development of a comprehensive management theory. The classical school of management was primarily concerned with developing such a theory to improve management effectiveness in organizations.

However, the classical school theorists went a step further. Not only did they seek to develop a comprehensive theory of management, but they also wanted to provide the tools a manager required for dealing with their organizational challenges. Within the classical school there are the bureaucratic management, administrative management and scientific management branches.

## Bureaucratic Management

Max Weber can be classified in the bureaucratic management branch of the classical school. Weber, the son of a prominent Bismarckian era German politician, was raised in Berlin and studied law at the University of Berlin. After assuming an appointment teaching law at the University of Berlin, Weber assumed teaching appointments in economics at the Universities of Freiburg, Heidelberg, Vienna, ending with his death after a bout with pneumonia at the University of Munich.

Weber's interest in organizations evolves from his view of the institutionalization of power and authority in the modern Western world. He constructed a "rational-legal authority" model of an ideal type bureaucracy. This ideal type rested on a belief in the "legality" of patterns of normative rules and the right of those elevated to authority to issue commands (legal authority). Weber postulated the rules and regulations of a bureaucracy serve to insulate its members against the possibility of personal favoritism.

## Max Weber (1864-1920)

Weber believes all bureaucracies have certain characteristics:

1. A well defined hierarchy. All positions within a bureaucracy are structured in a way permitting the higher positions to supervise and control the lower positions. This provides a clear chain of command facilitating control and order throughout the organization.
2. Division of labor and specialization. All responsibilities in an organization are rationalized to the point where each employee will have the necessary expertise to master a particular task. This necessitates granting each employee the requisite authority to complete all such tasks.

3. Rules and regulations. All organizational activities should be rationalized to the point where standard operating procedures are developed to provide certainty and facilitate coordination.

4. Impersonal relationships between managers and employees. Weber believes it is necessary for managers to maintain an impersonal relationship with the employees because of the need to have a rational decision making process rather than one influenced by favoritism and personal prejudice. This organizational atmosphere would also facilitate rational evaluation of employee outcomes where personal prejudice would not be a dominant consideration.

5. Competence. Competence should be the basis for all decisions made in hiring, job assignments, and promotions. This would eliminate personal bias and the significance of “knowing someone” in central personnel decisions. This fosters ability and merit as the primary characteristics of a bureaucratic organization.

6. Records. Weber feels it is absolutely essential for a bureaucracy to maintain complete files regarding all its activities. This advances an accurate organizational “memory” where accurate and complete documents will be available concerning all bureaucratic actions and determinations.

Weber’s bureaucratic principles have been widely adopted throughout the world. Yet, there are many critics.

The primary criticism of Weber’s theory of bureaucracy is the overwhelming acceptance of authority as its central tenet. This inevitably fosters an unrelenting need to develop additional authority causing the bureaucracy to be unresponsive and lack effectiveness.

The emphasis on impersonality can lead to personal frustration for its employees while generating red tape to reinforce previously authorized decisions. The bureaucracy is increasingly viewed both by its employees and the public as a passionless instrument for responding to human needs.

The need to divide labor and specialize can foster feelings of employee alienation and estrangement. As the demands of society become every more complex, the need increases for interpersonal communication and sharing between employees of the resulting organizations.

Unwittingly, Weber helped to foster an extremely negative attitude toward the concept of bureaucracy conjuring up images of a highly inflexible and inhumane organization often working at cross purposes with the needs of those it is supposed to serve.

## Scientific Management

Another branch of the classical school of management is the scientific management approach. The scientific management approach emphasized empirical research for developing a comprehensive management solution. Scientific management principles are to be applied by managers in a very specific fashion. A fundamental implication of scientific management is the manager is primarily responsible for increasing an organization’s productivity. This has major implications for the American economy in the face of a consistent lack of competitive productivity and GNP growth. The major representatives of this school of thought are Frederick Winslow Taylor and Frank and Lillian Gilbreth.

### Frederick Winslow Taylor (1856-1915)

Frederick Taylor is known as the “father of scientific management.” Taylor began work at the age of 18 as an apprentice to a pattern-maker, and as a machinist. He later joined the Midvale Steel Company as a laborer ris-

ing in eight years to chief engineer. During this period at the steel mill he performed exhaustive experiments on worker productivity and tested what he called the “task system,” later developing into the Taylor System and eventually progressing into scientific management. His experiments involved determining the best way of performing each work operation, the time it required, materials needed and the work sequence. He sought to establish a clear division of labor between management and employees.

Taylor’s task management methodology rests on a fundamental belief that management, the entrepreneurs in Taylor’s day, were not only superior intellectually to the average employee, but had a positive duty to supervise them and organize their work activities. This would eliminate what Taylor called “the natural tendency of workers to soldier” on the job.

In 1911 a paper Taylor originally prepared for presentation to the American Society of Mechanical Engineers was published as *The Principles of Scientific Management*. Taylor positioned scientific management as the best management approach for achieving productivity increases. It rested on the manager’s superior ability and responsibility to apply systematic knowledge to the organizational work setting.

Taylor developed four principles of scientific management:

1. A scientific management methodology be developed.
2. Managers should assume the responsibility for selecting, training and developing the employee.
3. Managers should fully cooperate with employees to insure the proper application of the scientific management method.
4. Management should become involved with the work of their employees as much as possible.

Scientific management consisted of a system for supervising employees, improving work methods, and providing incentives to employees through the piece rate system. While Taylor assumed there was an unquestioned necessity to supervise employees, he also sought the best way of performing a job as well as to provide financial incentives for increased productivity by paying employees by the piece through the piece rate system.

Taylor’s *Principles* became enormously popular in America as well as in Europe providing organizational theory an aura of science. Scientific management led to time and motion studies, efficiency experts and others spreading the gospel. Taylor’s optimistic belief that study of the organization through his scientific method would provide the answers necessary to resolve the most difficult productivity problems is extremely important to contemporary management. He is the first to point out that it is management’s primary responsibility to make an organization productive.

However, other areas of his methodology have proven to be flawed. In particular, Taylor’s insistence on close supervision flies in the face of all contemporary organizational research demonstrating close supervision is counterproductive. Additionally, the piece rate system all too often is either inapplicable in today’s computerized assembly lines or is compromised by management continually raising the quota.

Frank (1868-1924) and Lillian (1878-1972) Gilbreth

The Gilbreths were strong advocates of scientific management. Frank Gilbreth made his first management studies of bricklayers. After extensive studies of bricklayers, he was able to reduce the motions in bricklaying from 18 1/2 to 4. This produced an almost 170% increase in the bricklayer’s productivity while not increasing the

amount of effort needed.

Gilbreth was interested in developing the one best way of doing work. His system later became known as “speed work” which was achieved by eliminating unnecessary motions.

Frank, working with his wife, Lillian, subsequently became heavily involved in time and motion studies isolating 17 basic work motions that they termed therbligs (therblig is Gilbreth spelled backwards). Their studies of work included the use of a cyclograph, a form of stereoscopic movie camera, whereby the time and motions of a worker could be carefully studied.

Lillian Gilbreth published one of the earliest works on the psychological study of management, *The Psychology of Management*. She was also the earliest female pioneer in scientific management.

The Gilbreths were immortalized by two of their children who wrote *Cheaper by the Dozen* chronicling life under the scientific management method of their parents.

### Administrative Management

Henri Fayol belongs to the administrative management branch of the classical school. His entire working career was spent with a mining company, *Commentary-Fourchambault Company*, where he rose from an apprentice to General Manager in 1888 remaining there until his retirement in 1918. He is credited with turning the company around from a threatened bankruptcy into a strong financial position by the time of his retirement at age 77.

As a result of his management experience, Fayol strongly believed management theories could be developed and taught to others. His first writing on administration, *Administration Industrielle et Generale*, was published in 1916 in the *Bulletin of the Society of Mineral Industries* and later appeared as a book. The book became prominent in the United States after a second English translation appeared in 1949 under the title *General and Industrial Management*.

Henri Fayol (1841-1925)

As a result of his long management career, Fayol developed fourteen management principles:

1. **Division of Work.** Division of work, specialization, produces more and better work with the same effort. It focuses effort while maximizing employee efforts. It is applicable to all work including technical applications. There are limitations to specialization which are determined by its application.
2. **Authority and responsibility.** Authority is the right to give orders and the power to exact obedience. Distinction must be made between a manager’s official authority deriving from office and personal authority created through individual personality, intelligence and experience. Authority creates responsibility.
3. **Discipline.** Obedience and respect between a firm and its employees based on clear and fair agreements is absolutely essential to the functioning of any organization. Good discipline requires managers to apply sanctions whenever violations become apparent.
4. **Unity of command.** An employee should receive orders from only one superior. Employees cannot adapt to dual command.
5. **Unity of direction.** Organizational activities must have one central authority and one plan of action.

6. Subordination of Individual Interest to General Interest. The interests of one employee or group of employees are subordinate to the interests and goals of the organization and cannot prevail over it.

7. Remuneration of Personnel. Salaries are the price of services rendered by employees. It should be fair and provide satisfaction both to the employee and employer. The rate of remuneration is dependent on the value of the services rendered as determined by the employment market.

8. Centralization. The optimum degree of centralization varies according to the dynamics of each organization. The objective of centralization is the best utilization of personnel.

9. Scalar chain. A chain of authority exists from the highest organizational authority to the lowest ranks. While needless departure from the chain of command should be discouraged, using the “gang plank” principle of direct communication between employees can be extremely expeditious and increase the effectiveness of organizational communication.

10. Order. Organizational order for materials and personnel is essential. The right materials and the right employees are necessary for each organizational function and activity.

11. Equity. In organizations equity is a combination of kindness and justice. The desire for equity and equality of treatment are aspirations to be taken into account in dealing with employees.

12. Stability of Tenure of Personnel. In order to attain the maximum productivity of personnel, it is essential to maintain a stable work force. Management insecurity produces undesirable consequences. Generally the managerial personnel of prosperous concerns is stable, that of unsuccessful ones is unstable.

13. Initiative. Thinking out a plan and ensuring its success is an extremely strong motivator. At all levels of the organizational ladder zeal and energy on the part of employees are augmented by initiative.

14. Esprit de Corps. Teamwork is fundamentally important to an organization. Creating work teams and using extensive face-to-face verbal communication encourages this.

While subsequent organizational research has created controversy over many of Fayol’s principles, they are still widely used in management theory.

Chester Barnard (1886-1961)

Another strong member of the administrative management school is Chester Barnard. Barnard led a highly successful management career rising to the position of the President of New Jersey Bell Telephone Company. He was also very active professionally including acting as the head of the Rockefeller Foundation. After giving a series of lectures on management, Barnard published his only book, *The Functions of the Executive*, in 1938.

Basically, Barnard feels organizations are communication systems. He feels it is particularly important for managers to develop a sense of common purpose where a willingness to cooperate is strongly encouraged. He is credited with developing the acceptance theory of management emphasizing the willingness of people to accept those having authority to act. He feels the manager’s ability to exercise authority is strongly determined by the employee’s “zone of indifference” where orders are accepted without undue question.

Contrary to Weber beliefs that communication flows from the top of the organization to the bottom, Barnard

feels organizational communication flows from the bottom to the top. He states there are four factors affecting the willingness of employees to accept authority:

1. The employees must understand the communication.
2. The employees accept the communication as being consistent with the organization's purposes.
3. The employees feel their actions will be consistent with the needs and desires of the other employees.
4. The employees feel they are mentally and physically carry out the order from the higher authority.

Barnard also feels informal organizations within formal organizations perform necessary and vital communication functions for the overall organization. This is consistent with his belief that the executive's main organizational function is acting as a channel of communication and maintaining the organization in operation.

Barnard's sympathy for and understanding of employee needs in the dynamics of the organizational communication process positions him as a bridge to the behavioral school of management many of whose early members were his contemporaries.

### The Behavioral Movement

As management research continued in the twentieth century, questions were increasingly raised regarding the interactions and motivations of the individual in organizations. Management principles developed during the classical period were simply not useful in dealing with many management situations and could not explain the behavior of individual employees.

The principles of classical management theory were helpful in placing management objectives in the perspective of an organization; however, they failed to fulfill one of their earliest goals, i.e., providing management tools for dealing with organizational personnel challenges. In short, classical theory ignored employee motivation and behavior.

Curiously, an experiment, the Hawthorne experiment, rigorously applied classical management theory only to reveal its shortcomings. The behavioral school was a natural outgrowth of this revolutionary management experiment. Its theorists include Mary Parker Follett and Herbert Simon as well as numerous psychologists who turned from studying individual behavior to organizational behavior.

### Mary Parker Follett (1868-1933)

One of the earliest pioneers in the behavioral movement was Mary Parker Follett. Follett received an education in political science and pursued a professional career as a social worker where she became absorbed in work place related issues. She strongly believes in the inherent problem solving ability of people working in groups. Rather than assuming classical management's strongly hierarchical position of power in organizations, Follett asserts power should be cooperatively shared for the purpose of resolving conflict.

She is best known for her integration method of conflict resolution as opposed to the three choices she sites of domination, compromise or voluntary submission by one side over another. If, for example, an individual is sitting in a library on a warm spring day near an open window and a second person decides to share the table but wishes to close the window to avoid the draft, we have the basis of a conflict. Now one person could try and dominate the other and force the window to either be open or closed leaving the other person unhappy. A second

alternative is for one person to simply submit to the wishes of the other, but be very unhappy. The third alternative is to compromise and close the window half way which will not satisfy either person.

Follett states the best way to handle this situation is to resolve the issue jointly through “creative conflict resolution” where, in our example, the newcomer may voluntarily agree to sit in another part of the library adjusting the window according to his/her preference. In this case, both parties to the conflict are happy as the issue has been resolved according to their own desires. Creative conflict resolution involves cooperatively working with others to devise inventive new ideas often providing strong interpersonal benefits.

## The Hawthorne Experiments

The Hawthorne Experiments consist of two studies conducted at the Hawthorne Works of the Western Electric Company in Chicago from 1924 to 1932. The study’s particular focus is on lighting and attempts to operationalize many of the principles of scientific management.

The initial study in 1924 was conducted by a group of engineers seeking to determine the relationship of lighting levels to worker productivity. The study was done in connection with the National Research Council of the National Academy of Sciences.

The results of the study findings are extremely interesting since worker productivity increases as the lighting levels decrease until the employees are unable to see what they are doing after which performance naturally declines.

Beginning in 1927 a second group of experiments commenced with a group of five women in the bank wiring room. During the course of the experiment, the experimenters conducting the study supervise the women. Additionally the workers in the experimental group are given special privileges including the right to leave their workstation without permission, rest periods, free lunches and variations in pay levels and workdays. As with the first set of experiments, the second group of experiments result in significantly increased rates of productivity.

In the second experimental study in 1928 the Harvard researchers, F. J. Roethlisberger, Professor of Human Relations, and Elton Mayo, a Professor of the Industrial Research Department, became associated with it. After extensive research, the results were not published until 1939, they conclude the primary determinant of the increase in productivity is the change in the supervisory arrangement rather than the changes in lighting or other associated worker benefits. Since the experimenters became the primary supervisors of the employees, the intense interest they displayed for the workers was the basis for the increased motivation and resulting productivity.

Essentially the experimenters became a part of the study and influenced its outcome. This is the origin of the term Hawthorne Effect describing the special attention researchers give to a study’s subjects and the impact it has on its findings.

While the result of the Hawthorne studies failed to answer the specific question of the relation between illumination and worker productivity, the study did create a strong theoretical foundation for the human relations view of management.

## Herbert Simon

The death knell of classical management theory was pronounced by Herbert Simon in his book Administrative

Behavior: A Study of Decision-Making Processes in Administration Organization published in 1947. Simon is particularly critical of the principles of administration including span of control and unity of command while saying all of the principles collectively were “no more than proverbs”. Simon found the principles of classical administration to be contradictory and vague.

Simon’s greatest management contribution is in decision making theory for which he received a Nobel prize. Simon states decision makers perform in an arena of bounded rationality and that the approach to decision making must be one of satisficing where satisfactory rather than optimum decisions are often reached. Satisficing successfully adapts to and is a realistic solution for the limited time and resources a manager has when considering alternatives in the decision making process.

## Human Relations Movement

The work of Mary Parker Follett, the Hawthorne experiments and the criticism of the Classical School by Herbert Simon led to a deeper consideration of the needs of the employees and the role of management as a provider for these needs. The two major organizational theorists in the human relations movement are Abraham H. Maslow and Douglas McGregor.

### Abraham H. Maslow (1908-1970)

Receiving his doctorate in psychology, Abraham Maslow was the first psychologist to develop a theory of motivation based upon a consideration of human needs. Maslow’s theory of human needs has three assumptions. First, human needs are never completely satisfied. Second, human behavior is purposeful and is motivated by need satisfaction. Third, needs can be classified according to a hierarchical structure of importance from the lowest to highest.

Maslow believes the needs hierarchy can be classified into five specific groups. To reach successive levels of the hierarchy required the satisfaction of the lower level needs:

1. Physiological needs. Maslow groups all physical needs necessary for maintaining basic human well being into this category. These needs become acute and predominant if any or all of these needs are unsatisfied. However, consistent with Maslow’s theory of motivation, once a need is satisfied, such as thirst, it no longer is a motivator.
2. Safety needs. These needs include the need for basic security, stability, protection, and freedom from fear. A normal state exists for an individual to have all of these needs generally satisfied. Otherwise, they become primary motivators.
3. The belongingness and love needs. Once the physical and safety are satisfied and no longer are motivators, then the belongingness and love needs emerge as primary motivators. The individual will strive to establish meaningful relationships with significant others. Deprivation of the belongingness and love need will result in significant personality maladjustment.
4. The esteem needs. An individual must develop self confidence. In order to do this it is essential to the individual to have adequacy from achieving mastery and competence leading to the achievement of status, reputation, fame and glory. This achieves satisfaction of the self-esteem needs.
5. The need for self-actualization. Assuming all of the previous needs in the hierarchy are satisfied, a “new discontent and restlessness will soon develop... A musician must make music, an artist must paint, a poet must

write ... What a man can be, he must be.”

Maslow’s hierarchy of needs theory helps the manager to visualize employee motivation. It helps in understanding the motivations and needs employees have and the requirement to satisfy basic needs in order to achieve higher level motivation.

Douglas McGregor (1906-1964)

McGregor is the other major theorist associated with the Human Relations school of management. McGregor believes there are two basic kinds of managers. One type of manager, Theory X, has a negative view of employees assuming they are lazy, untrustworthy and incapable of assuming responsibility while the other type of Manager, Theory Y, assumes employees are trustworthy and capable of assuming responsibility having high levels of motivation. Table 2.1 illustrates McGregor’s main theoretical assumptions.

Table 2.1

Theory X and Theory Y

Theory X

1. Employees normally do not like to work and will try to avoid it.
2. Since employees do not like working, they have to be coerced, controlled, directed and threatened with punishment to motivate them to work.
3. The average employee is lazy, shuns responsibility, is not ambitious, needs direction and principally desires security.

Theory Y

1. Work is as natural as play and therefore people desire to work.
2. Employees are responsible for accomplishing their own work objectives.
3. Comparable personal rewards are important for employee commitment to achieving work goals.
4. Under favorable conditions, the average employee will seek and accept responsibility.
5. Employees can be innovative in solving organizational problems.
6. Most organizations utilize only a small proportion of their employees’ abilities.

McGregor’s Theory X and Y is appealing to managers and dramatically demonstrate the divergence in management viewpoints toward employees. As such, Theory X and Y has been extremely helpful in promoting management understanding of supervisory styles and employee motivational assumptions.

Behavioral Research Models

A great deal of behavioral research has been done on organizations attempting to delineate the best supervisory management models. Two of these researchers are Renesis Likert and Frederick Herzberg.

## Rensis Likert

While being the director of the Institute of Human Relations at Ann Arbor, Michigan, Likert conducted a series of empirical studies on the differences between good and bad supervisors defined on the basis of high and low productivity. His research is based on employee interviews in separate departments in many different organizations where a scale of feelings is developed, the Likert scale, regarding employee attitudes toward their supervisors. This was correlated with their productivity.

Based on his research, Likert developed a four level managerial classification system. System 1 utilizes a supervisory system based primarily on fear and punishment. This results in an authoritarian supervisory system where employees are usually not consulted concerning major decisions.

In System 2 organizations rewards are used to motivate employees with some freedom being allowed to comment on organizational decisions. However, managers have the primary decision making responsibility and employees in a System 2 organization must act cautiously.

System 3 organizations are more open to employee consultation regarding the managerial decision making process and overt managerial threats are avoided.

Likert states the System 4 organization is the most open and participative and is the ideal state managers should strive to achieve. This is termed the democratic model. Likert states the more an organization's management approximates the System 4 model, the more productive it will be.

## Frederick Herzberg

Additional empirical research was performed by Herzberg on 200 engineers and accountants. The research objective was to determine work situations where the subjects feel highly satisfied and motivated as opposed to those where the reverse is true. The research reveals that the work itself and achievement as well as recognition for the achievement are the primary motivators. Herzberg terms these factors satisfiers or motivators.

Factors having a negative motivation impact on the research subjects are the working conditions, salary, job security, supervisory methods and the general company management climate. Herzberg terms these factors hygiene factors or dissatisfiers.

From this research Herzberg developed the motivation-hygiene model of management. The model states that employee motivation is achieved with challenging enjoyable work where achievement, growth, responsibility and advancement are encouraged and recognized. The environmental or hygiene factors, such as poor lighting, ventilation, poor working conditions, low salaries, and poor supervisory relations, serve as dissatisfiers.

The difference between motivators and hygiene factors is that motivators cause an employee to develop his/her own internal motivations, whereas hygiene factors can make an employee unhappy and dissatisfied, but cannot motivate him/her. The job itself is the motivator.

## David C. McClelland

David C. McClelland of Harvard University performed research on motivation patterns. Using the Thematic Apperception Test (TAT) where an individual writes a descriptive analysis of their individual reactions from unstructured pictures, McClelland determines the motivational state of the subjects.

Based upon this research, McClelland developed an achievement motivation theory consisting of four sets of needs: achievement, affiliation, competence and power.

Achievement motivation is a need people have to succeed through overcoming challenges. The affiliation motivation is similar to Maslow's belongingness and love need where people relate to others on a social basis. The competence need is the desire to accomplish a job well done, and the power motivation is the need to control others and make a difference in the outcome of a given situation.

McClelland believes people have strong needs. His achievement motivation theory is important for managers seeking understanding of employee motivational patterns.

## Contemporary Management Thought

There is recognition by management theorists that many management theories have been developed since the beginning of the twentieth century. These include classical management, scientific management, the behavioral movement, the human relations approach, behavioral research models, and MBO. While the findings of one management school of thought often overlap others, all too often the findings are contradictory.

This creates a plethora of management theories for the management student and confusion for the practitioner. Several management paradigms have emerged subsequent to the behavioral school which have merged or meshed the various management schools of thought. This includes the two major management theorists W. Edwards Deming and Peter Drucker. It also includes the systems and contingency theoretical paradigms.

## W. Edwards Deming

Deming received his doctorate in physics from Yale and was invited by the Union of Japanese Scientists and Engineers to visit Japan in 1950. In addition to urging the Japanese to use sampling methods to test for quality control, he also taught them the best way to lowered production costs was improved quality. Dr. Deming was concerned with increased organizational productivity by applying statistical quality controls as well as improving organizational communication

Although well known in Japan, Deming was ignored for years in the U.S.; however, this began to change after he was featured on an American TV show dealing with the reasons why the Japanese competition was threatening American business. American corporations coping with the mounting international competitive threat soon sought him after.

## Deming's 14 Points for Managers

1 Create constancy of purpose toward improvement of product and service, with the aim to become competitive, to stay in business, and to provide jobs.

2 Adopt a new philosophy. We are in a new economic age, created by Japan. We can no longer live with commonly accepted styles of American management, nor with commonly accepted levels of delays, mistakes, or defective products.

3 Cease dependence on inspection to achieve quality. Eliminate the need for inspection on a mass basis by building quality into the product in the first place.

4 End the practice of awarding business on the basis of price tag. Instead, minimize total cost.

5 Improve constantly and forever the system of production and service to improve quality and productivity, and thus constantly decrease costs.

6 Institute training on the job.

7 Institute supervision: the aim of supervision should be to help people and machines and gadgets do a better job. Supervision of management is in need of overhaul, as well as supervision of production workers.

8 Drive out fear, so that everyone may work effectively for the company.

9 Break down the barriers between departments. People in research, design, sales, and production must work as a team to foresee problems of production and use that may be encountered with the product or service.

10 Eliminate slogans, exhortations, and targets for the work force which ask for zero defects and new levels of productivity. Such exhortations only create adversarial relationships. The bulk of the causes of low productivity belong to the system, and thus lie beyond the power of the work force.

11 Eliminate work standards that prescribe numerical quotas for the day. Substitute aids and helpful supervision.

12 Remove the barriers that rob the hourly worker of his right to pride of workmanship. The responsibility of supervisors must be changed from sheer numbers to quality. Remove the barriers that rob people in management and engineering of their right to pride of workmanship. This means abolishment of the annual rating, or merit rating, and management by objective.

13 Institute a vigorous program of education and retraining.

14 Put everybody in the company to work to accomplish the transformation.

Deming is extremely important for American management. Similar to Taylor, he emphasized the essential role management must play in increasing organizational productivity. Additionally, he underscored the importance of communication between management, employees and all units of the organization.

Peter Drucker

Drucker is termed by some sources the greatest management thinker of the Twentieth Century. His prolific writing has contributed greatly to management thought. He also is the father of management by objectives (MBO). Early in the 1950's he developed this extremely popular management concept where strategic management decisions are developed through management and employee interaction and cooperation.

When utilizing MBO, subordinate and management joint consultations produce agreement on areas of organizational responsibility. This results in the mutual establishment and acceptance of organizational goals. The employee is involved in the larger management issues of the organization and a new level of communication is developed with management. For its part, MBO permits management to spend more time on strategic policy development and implementation rather than being distracted with supervisory issues.

Drucker has been extremely important in demonstrating the necessity for management to foster organizational innovation in order to remain competitive because of what he feels are the new realities of the international

environment of business.

While Drucker's wide ranging management interests have been extremely important to management thinking, he is criticized because of the lack of a coherent theory of management as well as having later contradicted at least some of his conclusions.

### The Systems Approach

One answer to this was to create the systems approach to management which attempts to synthesize and integrate the various schools of management into one coherent and cohesive management theory. Systems theory blends many different theories into one common functional system where all of the activities of the organization are grouped into processes such as inputs, homeostasis, parameters, processing, outputs and feedback.

Systems theorists emphasize that every system has interacting and interrelated subsystems. These systemic interactions with other systems are continually adapting to dynamically changing internal and external environmental processes. Systems exist within a continuum of change.

Organizational systems can be analyzed in terms of their subsystems such as operations, production, finance, marketing, personnel etc. These organizational subsystems are further analyzed in terms of their interactional processing with their internal subsystems and external systems.

Systems theory provides the manager with a tool for analyzing organizational dynamics without providing a specific theory about how an organization should be managed. The recognition of systems theory that all organizations consist of processing inputs and outputs with internal and external systems and subsystems is helpful in providing a functional overview of any organization.

### The Contingency Approach

Contingency theory represents another alternative managerial theoretical paradigm. Similar to systems theory, contingency theory does not prescribe the application of certain management principles to any situation. Contingency theory is a recognition of the extreme importance of individual manager performance in any given situation. It rests on the extent of manager power and control over a situation and the degree of uncertainty in any given situation.

The role of management in the contingency approach is to develop an appropriate management solution for any given organizational environment. The contingency approach is devoid of management principles. It is a heuristic management paradigm highly dependent on the experience and judgement of the manager in a given organizational environment. It is principally directed at the management practitioner seeking to control a distinct organizational environment.

### Japanese Management

A great deal of writing has occurred in recent years regarding the Japanese style of management. One of the principal writers is William Ouchi in his books *Theory Z* and *The M-Form Society*.

Japanese management has achieved respect because of its ability to increase productivity. This is the Achilles heel of American management. America's productivity increase has seriously underperformed Japan's. The principal villain is American management.

This raises the question of why Japanese management has been so successful. One answer has been the high level of trust Japanese management has in its employees. This level of trust permits Japanese employees to have a great deal of decision-making authority. Japanese management also stresses the concept of intimacy in its managerial relationships where personal relationships are highly valued, respected and rewarded.

In organizational terms the large Japanese company has a balance between teamwork and individual effort. Ouchi calls this the M Form organization. It is a combination of a large decentralized organization where each unit competes with every other unit in order to obtain budgetary resources based upon earnings while at the same time having to draw upon the same centralized corporate services. It is essentially a “loose-tight organization” where individual initiative is rewarded while still being controlled through centralized corporate management systems.

Finally, Japanese organizations have what Ouchi terms a social memory. The past efforts of individual employees receive future rewards even though the employee may no longer be as productive. Their past contributions provide a form of organizational endowment. This insures their loyalty while acting as role models for present employees. This is somewhat similar to Weber’s concept of an organizational “memory”.

Essentially, the Japanese school of management argues that personnel policies provide for an investment in human capital endow the organization with the resources necessary to achieve increased productivity.

### Concluding Comments

The evolution of management thought has followed societal trends of the nineteenth and twentieth centuries. The nineteenth century works of Charles Babbage and Robert Owen were concerned with the early factory system as well making social progress. The classical school and bureaucratic school of the early twentieth century were the first efforts to generate a comprehensive theory of management.

Frederick Taylor, the engineer, made a major effort to establish a form of the scientific method of management. Henri Fayol was the father of the administrative management school. He had a profound affect on much of administrative theory during the early part of the twentieth century.

The behavioral school made a profound influence on management theory. It is a revolutionary period of management theory. It includes the Nobel prize winning critic of the early proverbs of administration, Herbert Simon, as well as the landmark Hawthorne Experiment ushering in the human relations branch of the bureaucratic method. The behavioral school also includes the first female organizational theorist, Mary Parker Follett. A major result of the behavioral school is the demise and repudiation of the classical school of management.

The human relations school of management is extremely important in dealing with the concept of employee motivation. Herbert Maslow developed the hierarchy of needs theory while Douglas McGregor developed Theory X and Y. The behavioral research school applies much of the needs theory developed by Maslow in actual organizational settings.

The contemporary management school brings a more interdisciplinary approach to the field of management. The very important writings of W. Edwards Deming in the area of productivity improvement and those of Peter Drucker on MBO and management innovation have a major impact on the way today’s organizations are managed. The integrative methodologies of the systems approach and contingency theory give managers the latitude they need to integrate the research of the many management schools.

Finally, the Japanese management school is extremely important in presenting a comparative management model.