MODULE 1 INTRODUCTION TO MANAGEMENT

Basic Managerial Concepts

Introduction to Management

The 21st century has brought with it a new workplace, one in which everyone must adapt to a rapidly changing society with constantly shifting demands and opportunities. The economy has become global and is driven by innovations and technology and organizations have to transform themselves to serve new customer expectations.

Today’s economy presents challenging opportunities as well as dramatic uncertainty. The new economy has become knowledge based and is performance driven. The themes in the present context area ‘respect’, participation, empowerment, teamwork and self-management. In the light of the above challenges a new kind of leader is needed to guide business through turbulence.

Managers in organizations do this task.

A manager is someone who coordinates and oversees the work of other people so that organizational goals can be accomplished. It is not about personal achievement but helping others do their job. Apart from this, Managers may also have his/her own domain-specific additional work duties.

Definition(s) of Management

Management has been defined by various authors/authorities in various ways. Most of them have merit and highlight important aspects of management. A few often-quoted definitions are:

- "The process of planning, organising, leading, and controlling the work of organisation members and of using all available organisational resources to reach stated organisational goals"
- "Management is a distinct process consisting of activities of planning, actuating, and controlling, performed to determine and accomplish stated objectives with the use of human beings and other resources".
- "Management is the process of planning, organising, leading, and controlling an organisation’s human, financial, physical, and information resources to achieve organisational goals in an efficient and effective manner".

All these three definitions put emphasis on the attainment of organisational goals/objectives through deployment of the management process for the best use of organisation’s resources.

In general it would be apt to define management as "designing and maintaining an environment in which individuals, working together in groups, efficiently accomplish selected aims".

Significance of management

“No ideology, no ism or no political theory can win greater output with less efforts from a given complex of human and material resources, without effective management. And it is on such greater output lies a higher standard of life with more leisure, more amenities and more levels of perfections.”

The Concept of management and its underlying principles are significant due to following reasons..
1) **Effective utilisation of resources.** Management tries to make effective utilisation of various resources. The resources are scarce in nature and to meet the demand of the society, their contribution should be maximum for general interests of the society.

2) **Development of resources.** Management develops various resources this is true with human as well as non-human factors. Thus the development of resources, management improves the quality of lives of people in the society.

3) **Incorporating innovations.** Today, changes are occurring at a very fast rate in both technology and social process and structure. These changes need to be incorporated to keep the organisations alive and efficient.

4) **Integrating various interest groups.** In organised efforts, there are various interest groups and they put pressure over other groups for maximum share in the combined output.

5) **Stability in society.** Management provides stability in the society by changing and modifying the resources in accordance with the changing environment of the society.

**Management: Art or Science?**

Perhaps there had several debates on this fact that, whether Management better suited in a domain of Art/Science. In fact it is both an Art and a Science.

Management like any other practices - whether engineering, accountancy, law or medicine - is an art. Artistic application of management know-how is evident. It is understood that managing is doing things artistically in the light of the realities of a situation. But a modern manager can do better by using the knowledge, methods, concepts, theories, etc. of managing at his/her work place. As a matter of fact, these knowledge, methods, concepts, theories related to managing can be treated as science.

Thus it could be summerised that managing in practice is definitely an art but the underlying body of practice is a science. We can also interpret that, Management is an art struggling to become a science.

**Management as an Art**

The art of managing is a personal creative power of the manager which is, enriched by his skill in performance. In fact the ‘art of managing’ involves in drafting of an orderly whole, created from some disordered parts resulting in achievement of some vision. Managing is the "art of arts" because it organises and uses human talent.

**Management as a Science**

Management science is a body of systematised knowledge accumulated and accepted with reference to the understanding of general truths concerning management. It is true that the science underlying managing is inexact, or is better to be called as a soft science/pseudo-science. It is not so accurate or comprehensive as physical sciences (such as chemistry or biology) which deal with non-human entities. But, the study of the scientific elements in management methodologies can certainly improve the practice of management. Managers who attempt to manage without management science have to trust purely on their intuition or luck rather than their expertise or skill. So it is significant to define the knowledge-base of management and its best-acceptable-practices as a Science.
Levels of management

Depending on the size of the enterprise and its constitutional features, there could be a number of management levels in an enterprise. Generally there are three broad levels of managements,

- The Upper level of management/Top level of management
- The Middle level of management/Intermediate level of management
- The Lower level of management/First level/Supervisory level of management.

**Top level of management:** drives its powers or authority directly from the owners of the enterprise; who constitute the uppermost administrators of the enterprise. In a corporate enterprise, the owners collectively called as the body of members elect the top level of management, called the Board of Directors. The Board of Directors usually is aided by a Chief Executive (or an executive committee) for managing the corporate enterprise at the highest level of management.

Following are the important functions performed by this level of management:
- Setting out the fundamental objectives of the enterprise.
- Designing strategies for the attainment of such fundamental objectives.
- Policy formulation for guiding the decision-making by subordinates to help the attainment of fundamental objectives.
- Designing the organizational set-up at a macro level.
- Appointment of key managerial personnel at the middle and lower levels of management.
- Development of master plans in areas of finance, human resource, technology, marketing and other spheres of the functioning of the enterprise.

**The middle level of management:** consists of functional departmental managers like the Production Manager, the Finance Manager, the Personnel Manager, the Marketing Manager, the Accounts Manager and similar other managers.

The main functions performed at this level of management are summarized below:
- The middle level plays the role of a linking-pin between the top management and the lower management. It explains the objectives, strategies and policies laid down by the top management to the lower management; and communicate the problems, suggestions and viewpoint of the lower management to the top management.
- It prepares the departmental plans, keeping in view the aspirations of and the guidance by the top management.
• It designs the organizational set-up of various departments; i.e. division of work among subordinates and establishing superior-subordinate relationships.
• It provides for and looks after inter-departmental co-ordination and co-operation.
• It performs the background managerial work to assist the lower level of management in the discharge of managerial job by the latter.
• It submits reports on the performance of various departments to the top management.
• It offers suggestions and recommendations to the top management for the betterment of over-all management of the enterprise.

The Lower level of management: often called the operating level of management; because this is the level where actual operational work for the enterprise, in the areas of production, finance, marketing, personnel, accounting etc., is performed by operators (workers and others). It is also called the supervisory level of management. The operating level of management consists of managers like the supervisors, the foremen, the sales officers, the accounts officers, the sectional managers and the like.

The following are the important functions performed by this level of management:
• It does day-to-day operational planning, in view of the instructions imparted by the middle level of management.
• It does micro-level organizing i.e. the organization of the work of operators.
• It provides necessary instructions to the operators for the best performance of their assigned jobs.
• It arranges for all the facilities to the operators, and provide them with an environment conducive to their work.
• It provides leadership to operators; and motivates them towards best performance.
• It, as the name implies, supervises the work of operators to ensure that their best performance is in accordance with the standards laid down in plans.
• It takes in care co-ordination among the work of operators, working in a group; and also ensures inter group co-ordination.
Managerial Skills

Henri Fayol, a famous management theorist identified three basic skills for a Manager - Technical skill, Human skill and Conceptual skill. Diagnostic skills and analytical skills are prerequisites to managerial success.

**Technical skill:** Technical skill is the ability to use the specialised knowledge, procedures and techniques of a field of activities. Accountants, engineers, surgeons all have their technical skills necessary for their respective professions. Most managers, especially at the lower and middle levels, need technical skills for effective task performance. Technical skill enables a person to accomplish the mechanics of performing a particular job. This may be knowing how to maintain accounts, how to conduct an audit, how to write a program code or how to perform in the operation theatre.

Technical skills are important specially for first line managers, who spend much of their time training subordinates and supervising their work-related problems. In order to be effective as managers and also to command the respect of their subordinates, they must first know how to perform tasks assigned to their subordinates.

**Human skill:** Human skill is the ability to work with, understand, and motivate other people as individuals or in groups. Managers spend much of their time interacting with people both inside and outside their organisations. Mintzberg's survey indicates that the top and middle managers spend their time in following pattern: 59 percent → meetings, 6 percent → phone-calls, and 3 percent → tours. All of these managerial activities involve other people. Human skill includes the ability to work with others and get co-operation from people in the work group. In short, knowing what to do and being able to communicate ideas and beliefs to others and understanding what thoughts others are key qualities of a manager.

Not all managers exhibit good human (interpersonal) skill. Managers, who are harsh with their subordinates, would simply tend to increase personal turnover; moreover, it becomes increasingly difficult to replace those who leave. In short, the manager who has good human skill is likely to be more successful than the one with poor human skill.

**Conceptual skill:** Conceptual skill is the ability to co-ordinate and integrate all of an organisation’s interests and activities. It requires having the ability to visualise the enterprise as a whole, to envision all the functions involved in a given situation or circumstance, to understand how its parts depend on one another, and anticipate how a change in any of its parts will affect the whole. Conceptual skills, in fact, depend on the manager’s ability to think in the abstract and to view the organisation in a holistic manner. Conceptualisation requires imagination, broad knowledge and mental capacity to conceive abstract ideas. One example of conceptual skill may be that the managing director of a bank visualises the importance of better service for its clients which ultimately helps attract a vast number of clients and an unexpected increase in its deposits and profits.

Some other key-skill required by a Manager are *Intellectual Skills, Ethical Skills and Emotional Skills.*
Relationship between Managerial Skills and Levels of Management

Henry Fayol and Robert Katz suggest that although all the skills i.e. technical, human and conceptual, are essential to a manager, their relative importance depends specially on the manager's rank in organisational hierarchy.

Technical skill, is specially important for first line managers who spend much of their time training workers and answering questions about work-related problems.

Human skill, although important for managers at all levels, is specially needed by mid-level managers. Their ability to tap this resource of their subordinates is more important than their own technical proficiency.

Conceptual skill is mostly needed at the top level. In fact, the importance of conceptual skill increases as one rises through the ranks of management. At higher and higher levels of organisation, the full range of relationships, and the organisation’s place in time are important to understand. This is where a manager must have a clear grasp of the total picture of what his/her enterprise would look like in the remote future.
Managerial Roles

Henry Mintzberg identified Ten Management Roles (in the book titled Mintzberg on Management: Inside our Strange World of Organizations) required for a Manager. The ten roles are:

- Figurehead
  - Leader
  - Liaison
  - Monitor
  - Disseminator
  - Spokesperson
  - Entrepreneur
  - Disturbance Handler
  - Resource Allocator
  - Negotiator

These 10 roles are then divided up into three categories, as follows:

Interpersonal Category: The managerial roles in this category involve providing information and ideas.
- Figurehead – A manager, have social, ceremonial and legal responsibilities. He’s expected to be a source of inspiration. People look up to him as a person with authority.
- Leader – This is where the manager provide leadership for the team, department or perhaps the entire organization; and it’s where the manager manage the performance and responsibilities of everyone in the group.
- Liaison – Managers must communicate with internal and external contacts. She need to be able to network effectively on behalf of her organization.

Informational Category: The managerial roles in this category involve processing information.
- Monitor – a manager should regularly seek out information related to his organization and industry, looking for relevant changes in the environment. He would also monitor the team, in terms of their productivity, activities and well-being.
- Disseminator – This is where he communicate potentially useful information to the colleagues and team.
- Spokesperson – Managers represent and speak for their organization. He’s responsible for transmitting information about the organization and its goals to the people outside it.
**Decisional Category:** The managerial roles in this category involve using information.

- **Entrepreneur** – should create and control the change within the organization. This includes resolving problems, generating new ideas, and implementing them.
- **Disturbance Handler** – When an organization or team hits an unexpected roadblock, it’s the manager who must take charge, to help mediate disputes within it.
- **Resource Allocator** – Manager should determine where organizational resources are best applied. This involves allocating funding, as well as assigning staff and other organizational resources.
- **Negotiator** – to take part in, and direct, important negotiations within your team, department, or organization.
Management Functions

Different experts have classified the functions of management.

According to George & Jerry, “There are four fundamental functions of management i.e. planning, organizing, actuating and controlling”.

According to Henry Fayol, “To manage is to forecast and plan, to organize, to command, & to control”.

According to Luther Gullick a keyword ‘POSDCORB’ is devised, where P stands for Planning, O for Organizing, S for Staffing, D for Directing, Co for Co-ordination, R for reporting & B for Budgeting.

But the most widely accepted are functions of management given by Koontz and O’Donnel i.e. Planning, Organizing, Staffing, Directing and Controlling.

**Planning**

It is the basic function of management. It deals with preparing a future course of action & deciding in advance the most appropriate course of actions for achievement of pre-determined goals. “Planning is deciding in advance - what to do, when to do & how to do. It bridges the gap from where we are & where we want to be”. A plan is a future course of actions. It is an exercise in problem solving & decision making. Planning is determination of courses of action to achieve desired goals. Planning is necessary to ensure proper utilization of human & non-human resources. It is an intellectual activity and it also helps in avoiding confusion, uncertainties, risks, wastages etc.

**Organizing**

It is the process of bringing together physical, financial and human resources and developing productive relationship amongst them for achievement of organizational goals. According to Henry Fayol, “To organize a business is to provide it with everything useful or its functioning i.e. raw material, tools, capital and personnel’s”. To organize a business involves determining & providing human and non-human resources to the organizational structure. Organizing as a process involves:

- Identification of activities.
- Classification & grouping of activities.
- Assignment of duties.
- Delegation of authority and creation of responsibility.
- Coordinating authority and responsibility relationships.

**Staffing**

It is the function of manning the organization structure and keeping it manned. Staffing has assumed greater importance in the recent years due to advancement of technology, increase in size of
business, complexity of human behavior etc. The main purpose of staffing is to put right man on right job. According to Kootz & O’Donell, “Managerial function of staffing involves manning the organization structure through proper and effective selection, appraisal & development of personnel to fill the roles designed on the structure”.

Staffing involves:
- Manpower Planning (estimating man power & choose the person and giving the right place).
- Recruitment, Selection & Placement.
- Training & Development.
- Remuneration.
- Performance Appraisal.
- Promotions & Transfer.

**Directing**
It is a managerial function which actuates the organizational methods to work efficiently for achievement of organizational purposes. It is considered life-spark of the enterprise which sets it in motion the action of people because planning, organizing and staffing are the mere preparations for doing the work. Direction is that inert-personnel aspect of management which deals directly with influencing, guiding, supervising, motivating sub-ordinate for the achievement of organizational goals. Direction has following elements:
- Supervision
- Motivation
- Leadership
- Communication

- Supervision- implies overseeing the work of subordinates by their superiors. It is the act of watching & directing work & workers.

- Motivation- means inspiring, stimulating or encouraging the subordinates with zeal to work. Positive, negative, monetary, non-monetary incentives may be used for this purpose.

- Leadership- may be defined as a process by which manager guides and influences the work of subordinates in desired direction.

- Communications- is the process of passing information, experience, opinion etc from one person to another. It is a bridge of understanding.

**Controlling**
It implies measurement of accomplishment against the standards and correction of deviation if any to ensure achievement of organizational goals. The purpose of controlling is to ensure that everything occurs in conformities with the standards. An efficient system of control helps to predict deviations before they actually occur. According to Koontz & O’Donell “Controlling is the measurement & correction of performance activities of subordinates in order to make sure that the enterprise objectives and plans desired to obtain them as being accomplished”. Therefore controlling has following steps:
- Establishment of standard performance.
- Measurement of actual performance.
- Comparison of actual performance with the standards and finding out deviation if any.
- Corrective action.
EARLY CONTRIBUTIONS IN MANAGEMENT

Ever since human beings started living together in groups, techniques of organization and management were evolved. The Egyptian pyramids, the Chinese Civil Service, Sun-Tzu war theories, Chanakya’s ArthaSaasthra, The Roman Catholic Church, Structures like the Great Wall of China and TajMahal, are some tangible evidence that projects of tremendous scope, employing tens of thousands of people, were undertaken well before the modern times.

The pyramids are particularly interesting examples. The construction of a single pyramid occupied more than 1,00,000 workers for 20 years. Who told each worker what did one do? Who ensured that there would be enough stones at the site to keep the workers busy? The answer is Managers, regardless of what managers were called at that time. He had to plan what was to be done, organize people and material to do it, lead and direct the workers, and impose some controls to ensure that everything was done as planned. This example from the past demonstrates that, Management is not a new concept. It has been employed for thousands of years, as seen in the practices of the Sumerians, the Romans, and many Ancient Civilizations. However, the emergence of the factory system, presented management with a new challenge. With industrialization it became necessary to develop rational, scientific principles for handling workers, materials, money, and machinery. The scientific managers played a major role in helping attain this objective.

The primary goal of these managers was that of achieving the highest productivity possible by devising efficient work methods and encouraging employees to take advantage of these new techniques. In the United States, scientific management was made famous by people such as Frederick W. Taylor. His experiments illustrated the importance of time-and-motion study, and his differential piece-rate system provided a key benchmark for the types of wage incentive payment plans used during this period. Another important scientific manager of the day was Frank Gilbreth, renowned for his work in time-and-motion study and for a large body of work in management in which he collaborated with Lillian Gilbreth.

Another famous management theorist was Henri Fayol. Fayol’s outstanding contribution was the conceptual framework he provided for analyzing the management process, proposing the 14 Principles for management. In the behavioral area, Elton Mayo studied group behavior in organizations. The Hawthorne studies, however, had an even greater impact on the field, and they became the single most important foundation for the behavioral approach to management. Meanwhile, Chester Barnard, whose acceptance theory of authority is still regarded as a major landmark in the development of management theory, made the most memorable contribution to early behavioral knowledge.

All these groups—the scientific managers, the classical theorists, and the human relationists did have shortcomings. But, it must be realized that they complemented each other, helping to form the basis for solid management theories and practices. The efficiency goals of the scientific managers and classical theorists led to the human relations philosophy of treating people well, which in turn has been replaced, by a human resources philosophy of using people well, and forming the base for Modern Management.
Management Thought

The schools of management thought are theoretical frameworks for the study of management. Each of the schools of management thought are based on somewhat different assumptions about human beings and the organizations for which they work. Since the formal study of management began late in the 19th century, the study of management has progressed through several stages as scholars and practitioners working in different eras focused on what they believed to be important aspects of good management practice. Over period of time, management thinkers have sought some structured ways to organize and classify the voluminous information about management that has been collected and disseminated. These attempts at classification have resulted in the identification of management schools.

It is a reality that, there are still some disagreements existing to the exact number of management schools. Many thinkers have defined them in different fashion. One common framework discusses 5 Major Schools, as discussed below include

(1) the classical school, (2) the behavioral school, (3) the quantitative or management science school, (4) the systems school, (5) and the contingency school. Table below, provides a brief summary of these five major schools of management thought, their approximate dates of origin, and their relative areas of emphasis.

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<th>Emphasis</th>
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<td><strong>CLASSICAL SCHOOL</strong></td>
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<tr>
<td>Scientific Management</td>
<td>1880s</td>
<td>Managing workers and organizations more efficiently.</td>
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<td>Administrative Management</td>
<td>1940s</td>
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<td>Bureaucratic Management</td>
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<tr>
<td><strong>BEHAVIORAL SCHOOL</strong></td>
<td></td>
<td>Understanding human behavior in the organization.</td>
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<td>Human Relations</td>
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<td>Behavioral Science</td>
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<tr>
<td><strong>QUANTITATIVE SCHOOL</strong></td>
<td></td>
<td>Increasing quality of managerial decision-making through the application of mathematical and statistical methods.</td>
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<td>Management Science</td>
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<tr>
<td>Operations Management</td>
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<tr>
<td>Management Information Systems</td>
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<tr>
<td><strong>SYSTEMS SCHOOL</strong></td>
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<td>Understanding the organization as a system that transforms inputs into outputs while in constant interaction with its' environment.</td>
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<td>1950s</td>
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<tr>
<td><strong>CONTINGENCY SCHOOL</strong></td>
<td></td>
<td>Applying management principles and processes as dictated by the unique characteristics of each situation.</td>
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Classical Approach

The classical school is the oldest formal school of management thought. Its roots pre-date the twentieth century. The classical school of thought generally concerns ways to manage work and organizations more efficiently. The classical management approach is the theory of management that focuses on the productivity, output and efficiency of workers, rather than the differences in behavior that exist among them. It suggests that a manager increase efficiency within a business in order to increase the overall production of the organization, using a formal and rigid approach. This type of management uses a more mechanistic style, with much more discipline and rationality compared to a neoclassical approach.

Three areas of study that can be grouped under the classical school are scientific management, administrative management, and bureaucratic management.

Scientific Management

In the late 19th century, management decisions were often arbitrary and workers often worked at an intentionally slow pace. There was little in the way of systematic management and workers and management were often in conflict. Scientific management was introduced in an attempt to create a mental revolution in the workplace. It can be defined as the systematic study of work methods in order to improve efficiency. Frederick W. Taylor was its main proponent. Other major contributors were Frank Gilbreth, Lillian Gilbreth, and Henry Gantt.

Major Scientific management principles are detailed below

- Proposes the application of the scientific method to work in order to determine the best method for accomplishing each task.
- Recommends that workers should be scientifically selected based on their qualifications and trained to perform their jobs in the optimal manner.
- Advocates genuine cooperation between workers and management based on mutual self-interest.
- Suggests that management should take complete responsibility for planning the work and that workers’ primary responsibility should be implementing management’s plans.
- Demands the scientific development of fair performance standards and the implementation of a pay-for-performance incentive plan based on work standards.

Scientific management had a tremendous influence on management practice in the early twentieth century. Although it does not represent a complete theory of management, it has contributed to the study of management and organizations in many areas, including human resource management and industrial engineering. Many of the principles of scientific management are still valid today.

Administrative Management.

Administrative management focuses on the management process and principles of management. In contrast to scientific management, which deals largely with jobs and work at the individual level of analysis, administrative management provides a more general theory of management. Henri Fayol is the major contributor to this school of management thought. Fayol was a management practitioner who brought his experience to bear on the subject of management functions and principles. He argued that management was a universal process consisting of functions like, planning, organizing, commanding, coordinating, and controlling, and believed that these functions distinguished management as a separate discipline of study apart from accounting, finance, and production.
Although administrative management has been criticized as being rigid and inflexible and the validity of the functional approach to management has been questioned, this school of thought still influences management theory and practice. The functional approach to management is still the dominant way of organizing management knowledge, and many of Fayol’s principles of management, when applied with the flexibility that he advocated, are still considered relevant.

**Bureaucratic Management.**

Bureaucratic management focuses on the ideal form of organization. Max Weber was the major contributor to bureaucratic management. Based on observation, Weber concluded that many early organizations were inefficiently managed, with decisions based on personal relationships and loyalty. He proposed that a form of organization, called a bureaucracy, characterized by division of labor, hierarchy, formalized rules, impersonality, and the selection and promotion of employees based on ability, would lead to more efficient management. Weber also contended that managers’ authority in an organization should be based not on tradition or charisma but on the position held by managers in the organizational hierarchy.

Bureaucracy has come to stand for inflexibility and waste, but Weber did not advocate or favor the excesses found in many bureaucratic organizations today. Weber’s ideas formed the basis for modern organization theory and are still descriptive of some organizations.

**Contributions of Taylor**

Frederick Winslow Taylor (1856-1915) is generally acknowledged as “the father of scientific management.” Because of an eye problem, he could not attend Harvard University. As a result he started working as a common labourer in a small machine shop in Philadelphia, USA. Later on he worked as an apprentice, a foreman, a master mechanic and rose to the eminence of a chief engineer of a steel company after obtaining a degree in engineering through evening study. This varied experience gave him ample opportunity to have firsthand knowledge and intimate insight into the problems and attitude of workers and to explore great possibilities for improving the qualities of management in the workplace. Wherever he worked, he found a very ineffective use of employees, unsystematic methods of work, utterly poor co-operation between management and labour. He also observed gross inefficiency, waste and widespread output restriction among workers which he termed “systematic soldering.” Hence Taylor committed himself to the relentless pursuit of “finding a better way” and developing and practising the “science” of work - the underlying laws or principles that govern various activities. He attempted to do it by using systematic study of time, motion and fatigue involved in work with a view to identifying the best way of doing a job.

Taylor’s major concern throughout his life was to increase efficiency which he considered the best recipe to serve the competing interests of both managers and workers for a larger share of a fixed economic pie. To him, solution lies in increasing size of the pie by raising productivity through scientific management. He called for a “mental revolution” or a radical change of mind among workers and management in order to fuse the interests of both groups into a mutually rewarding one.

Mental Revolution and Tylor’s Principles Mental revolution, propounded by Taylor, was based on five vital principles:
(1) Replacing rules of thumb with science (organised knowledge).
(2) Obtaining harmony in the group action, rather than discord.
(3) Achieving cooperation of human beings, rather than chaotic individualism.
(4) Working for maximum output, rather than restricted output.
(5) Developing all workers to the fullest extent possible for their own and their company’s highest prosperity.

Taylor’s theory of scientific management gave rise to a host of disciples who took up the task of spreading the “gospel of efficiency.” Carl Barth, Henry Gantt, Frank and Lillian Gilbreth, Harrington Emerson and Morres Cook are his prominent followers who made valuable contributions to the growth of management in a scientific manner.

**Contributions of Frank Gilbreth and Lillian Gilbreth**

Frank Bunker Gilbreth and Lillian Moller Gilbreth are respected for their unique contributions to the advancement of motion study, fatigue study and work simplification. Their humanistic approach to the problems of management utilized the principles of psychology and the application of experimental results to improve industrial procedures.

Frank and Lillian Gilbreth were a husband-and-wife team who worked as engineers in the early part of the 20th century. Lillian carried on this work after the death of Frank in 1924. Their main focus was on the fields of motion study and time study, combined with an interest on the psychology of efficiency and work.

The Gilbreth theory held that there was a “one best way” to do any task. Efficiency, according to the Gilbreth business management theory, could therefore be improved by finding this “one best way” and replicating it throughout the manufacturing process. The Gilbreths used new technologies such as film to break motions down into incremental parts, which they called “therbligs.” By reducing the number of “therbligs” for any task, one could increase the efficiency of the worker.

The management theory of Frank and Lillian Gilbreth can be summed up by the following:

1. Reduce the number of motions in a task to increase efficiency.
2. Focus on the incremental study of motions and time to understand an entire task.
3. The goal of increased efficiency is both increased profit and greater worker satisfaction.

The Gilbreth management theory is rarely applied directly in today’s workplace. However, certain aspects of the theory, especially time-study and motion-study, can be implemented in a variety of workplace situations. One of the major implementations of the Gilbreth theory is in methods-time management (MTM), which is widely used in engineering. Many aspects of the Gilbreth management theory have been heavily modified over the past decades and are being still applied in some special domains.
**Contributions of Henry Fayol**

Perhaps the real father of modern management theory is the French industrialist Henri Fayoll. His works have left a permanent mark on twentieth-century management thinking. A successful industrialist, Fayol headed a steel and coal combine in France. He made the universal generalisations about management based on his keen insight and practical management experience. He focuses his attention on the enterprise as a whole rather than on a single segment of it. He pioneered the concept of viewing management as being made up of functions, and his work supplied a comprehensive framework from which management could be studied and developed. He also repeatedly emphasised that his principles apply not only to business but also to political, religious, philanthropic, military and other undertakings.

Henry Fayol proposed the Universal Process or Operational Management theory. It states that administration of all organisations – whether public or private, or “large or small” – requires the same rational process or functions. This school is based on two assumptions: first, although the objective of an organisation may differ (for example, business, government, education, or religion), yet there is a core management process that remains the same for all institutions. Successful managers, therefore, are interchangeable among organisations of differing purposes. Second, the universal management process can be reduced to a set of separate functions and related principles.

Fayol identifies the following six major activities of any industrial or business organisations:

- (1) Technical (production and manufacturing);
- (2) Commercial (buying, selling and exchanging);
- (3) Financial (search for and optimum use of capital);
- (4) Security (safeguarding property and people);
- (5) Accounting (including statistics); and
- (6) Managerial (planning, organisation, command, co-ordination and control) While pointing out the existence of these activities in business of any kind or size, Fayol particularly stresses on the analysis of the sixth.
Fayol’s 14 Principles

Fayol identifies fourteen universal principles of management which are aimed at showing managers how to carry out their functional duties.

1. Division of labour: This improves the efficiency of labour through specialisation, reducing labour time and increasing skill development.
2. Authority: This is the right to give orders which always carry responsibility commensurate with its privileges.
3. Discipline: It relies on respect for the rules, policies, and agreements that govern an organisation. Fayol ordains that discipline requires good superiors at all levels.
4. Unity of command: This means that subordinates should receive orders from one superior only, thus avoiding confusion and conflict.
5. Unity of direction: This means that there should be unity in the directions given by a boss to his subordinates. There should not be any conflict in the directions given by a boss."
6. Subordination of individual interest to common good: According to this principle, the needs of individuals and groups within an organisation should not take precedence over the needs of the organisation as a whole.
7. Remuneration: Wages should be equitable and satisfactory to employees and superiors.
8. Centralisation: Levels at which decisions are to be made should depend on the specific situation, no level of centralisation or decentralisation is ideal for all situations.
9. Scalar chain: The relationship among all levels in the organisational hierarchy and exact lines of authority should be unmistakably clear and usually followed at all times, excepting special circumstances when some departure might be necessary.
10. Order: Here Fayol means that there should be a place for everything (and everyone), and everything (and every one) should be in its place. This is essentially a principle of organisation in the arrangement of things and people.
11. Equity: Employees should be treated equitably in order to elicit loyalty and devotion from personnel.
12. Stability of tenure: Viewing unnecessary turnover to be both the cause and the effect of bad management, Fayol points out its danger and costs.
13. Initiative: Subordinates should be encouraged to conceive and carryout ideas.
14. Esprit de corps: Team work, a sense of unity and togetherness, should be fostered and maintained.

Fayol suggested that the application of these principles should be flexible enough to match each specific organisational situation. Even though, the rigid application of these functions were criticised, its context and content still remains popular.

THE BEHAVIORAL SCHOOL

The behavioral school of management thought developed, because of some observed weaknesses in the classical school assumptions. As the classical school emphasized on efficiency, process, and principles, it almost disregarded the important aspects of organizational life, related to human behavior. Thus, the behavioral school focused on trying to understand the factors that affect human behavior at work.
Human Relations Approach

The criticism of scientific and administrative management gave birth to the behavioural approach to management. Unlike the Scientific School approach, which took a mechanistic view of workers as creatures with only economic needs, behavioural scientists came to consider them as people with social and psychological needs (like recognition, respect, social contact, freedom and achievement). To them, a business organisation is a psycho-social system with primary focus on human side. This was supported by the famous Hawthorne Experiment.

The Human relations school believes that management should recognise the need of employees for recognition and social acceptance. In short, managers need not have only technical skill but also human relations skill to interact with their subordinates as human beings. Followers of this school believe that managers must know why their subordinates behave as they do and what psychological and social factors influence them. It also says that, since groups provide members with feelings of acceptance and dignity, management can look upon the work group as a potential productive force. The individuals who contributed to the school are too numerous including Abraham Maslow, who proposed the Need Hierarchy theory. The human relations school of thought still influences management theory and practice, as present-day management focuses much attention on human resources, organizational behavior, and applied psychology in the workplace.

Contributions of Elton Mayo

Elton Mayo (1880-1949) was a Harvard professor who proposed that managers should become more "people-orientated". Conducting experiments on conditions in the workplace and incorporating the well-published findings of the Hawthorne Studies, Mayo declared that "logical factors were far less important than emotional factors in determining productive efficiency". He concluded that participation in social groups and "group pressure", as opposed to organizational structures or demands from management, had the strongest impact on worker productivity (Smit & Cronjé, 2002, p43).

Elton Mayo’s findings are rated to have revolutionized the role of managers in organizations. His theories encouraged the managers to consult workers about change, take note of their views, and to show concern for their physical and mental health. He is well-known for his Hawthorne Experiment, which found that the workers’ attitudes are associated with productivity. The approach also commented that the style of supervision is an important factor in increasing workers’ job satisfaction. The studies found that organizations should take steps to assist employees by fostering some co-operative systems between labor and management. Thus, Hawthorne studies are generally credited as the motivation for the human relations Approach.
According to Mayo productivity can be improved by enhancing interrelationships between members of a workgroup. This kind of management with an understanding of human behaviour, will perfectly serve an enterprise in any turbulent atmospheres. The manager should focus on such interpersonal skills as motivating, counselling, leading and communicating. This phenomenon, is known as the Hawthorne effect.

Critics of this school, however, point out that Mayo gave unreasonably heavy emphasis to the social or human side as against organisational needs. It is also criticised that this facilitates unwanted exploitation of employees by purposefully keeping them satisfied and manipulating their emotions for increasing productivity.

THE QUANTITATIVE SCHOOL
The quantitative school focuses on improving decision making via the application of quantitative techniques. Its roots can be traced back to scientific management.

Management Science and MIS.
Management science (also called operations research) uses mathematical and statistical approaches to solve management problems. It developed during World War II as strategists tried to apply scientific knowledge and methods to the complex problems of war. Industry began to apply management science after the war. Tools like linear programming, inventory control theory, goal programming, queuing models, and simulation etc were used in the industry for pragmatic decision making. Further, the advent of the computer made many management science tools and concepts more practical for industry. Management information systems (MIS) was devised to focus on providing needed information to managers in a useful format and at the proper time. Decision support systems (DSS) attempt to integrate decision models, data, and the decision maker into a system that supports better management decisions.

Systems Approach
A system is a collection of parts that operate inter-despondently to achieve a common purpose. The parts of a system are sub-systems. These subsystems are functionally related to each other and to the total system. An organisation may, therefore, be viewed as a system made up of different parts in the form of departments or divisions. According to the Systems Approach school, management involves managing and solving problems in each part of the organisation. But this is to be done with the understanding that actions taken in one part of the organisation affect other parts of the organisation. In solving problems, therefore, managers must view the organisation as a dynamic
whole, focusing on the inter-dependence and inter-relationship of the various subsystems from the point of view of overall effectiveness of the organisation.

This school is based on the work of a biologist, Ludwig von Bertalanffy, who believed that a general systems model could be used to unite science. Systems theory is one of the most prominent theories in management today. Systems theory treats an organization as a system. A system can be either closed or open, but most approaches treat an organization as an open system.

**Organisation as an Open System**

The systems approach focuses on understanding the organization as an open system that transforms inputs into outputs. An open system interacts with its environment by way of inputs, throughputs, and outputs.

![Organization as an Open Adaptive System](image)

In order to understand the theory, you must first get a firm understanding of a system. A system is any set of distinct parts that interact to form a complex whole. Think of the universe. Its parts are as small as a subatomic particle and as large as galactic clusters. Each part is distinct but interacts to form the universe. An organization is also a system with parts such as employees, assets, products, resources, and information that form a complex system.

As we noted in our definition, systems can be open or closed. A closed system is not affected by its environment. For example, a chuck of iron ore is not substantially affected by its environment. An open system is a system that is affected by its environment. A simple example is a living organism, such as an animal. Most theorists treat an organization as an open system.

An open system consists of three essential elements. An organization receives resources such as equipment, natural resources, and the work of employees, referred to as inputs. The inputs are transformed, called throughputs, and then yield products or services called outputs. Outputs are released into the environment.
Feedback loops are also an important feature of open systems. They provide information to the organization by connecting the outputs to the inputs. A negative feedback loop indicates a problem that should be corrected. For example, the failure of product design indicated by the need to recall the product. A positive feedback loop can identify outputs that have worked well. For example, a successful marketing campaign that yields high sales. Thus, feedback loops are a means of confirming success or signaling that corrections to the system need to be made.

**Features of Systems Approach**

- A system consists of interacting elements. It is set of inter-related and inter-dependent parts arranged in a manner that produces a unified whole.
- The various sub-systems should be studied in their inter-relationships rather, than in isolation from each other.
- An organisational system has a boundary that determines which parts are internal and which are external.
- A system does not exist in a vacuum. It receives information, material and energy from other systems as inputs. These inputs undergo a transformation process within a system and leave the system as output to other systems.
- An organisation is a dynamic system as it is responsive to its environment. It is vulnerable to change in its environment.

The systems school began to have a strong impact on management thought in the 1960s as a way of thinking about managing techniques that would allow managers to relate different specialties and parts of the company to one another, as well as to external environmental factors. The systems school focuses on the organization as a whole, its interaction with the environment, and its need to achieve equilibrium. Systems theory received a great deal of attention in the 1960s, but then its influence on management thought got diminished, as it was criticized to be too abstract and too complex. Finally, many of the ideas inherent in the systems school formed the basis for the contingency school of management.
Contingency approach

The Contingency Management theory evolved out of the Systems approach to managing organisations. The Systems approach advocates that managers recognise the organisations as systems of independent parts. Above this, managers should also see how the parts fit together to be more effective. The Contingency Approach can help one better understand their interdependence.

According to the Contingency approach, management is situational; no approach is to be considered as best.. as each situation that a manager faces is too different. However, there can be similar situations so as to extent some principles of management to be effectively applied. To identify those appropriate principles, we must first identify the relevant contingency variables in the particular situation and then evaluate those variables. These situational variables/factors, can be anything like external environment, technology, organizational characteristics, characteristics of the manager, and characteristics of the subordinates.

"In short, the contingency approach to management involves identifying the important contingency variables in different situations, evaluating the variables and then applying appropriate management knowledge and principles in selecting an effective approach to the situation."

Contingency theorists criticize the classical school for its emphasis on the universality of management principles. The contingency school originated in the 1960s. It has been applied primarily to management issues such as organizational design, job design, motivation, and leadership style. A few of the major contributors to this school of management thought include Joan Woodward, Paul Lawrence, Jay Lorsch, and Fred Fiedler, among many others.

Contemporary Schools of Management Thought

Management research and practice continues to evolve and new approaches to the study of management continue to be advanced. Two such contemporary approaches are Total Quality Management (TQM) and the Learning Organization.

Total Quality Management.

Total quality management (TQM) is a philosophy or approach to management that focuses on managing the entire organization to deliver quality goods and services to customers. This approach to management was implemented in Japan after World War II and was a major factor in their economic renaissance.

TQM has four major elements.

- The organization should initiate Employee involvement policies, so as to prevent quality problems before they occur.
- The organization must attempt to determine customer needs and deliver products and services that address them.
- The organization should attempt to adapt or improve the processes used by other companies.
- The Organization should adopt a philosophy of continuous improvement

TQM has been implemented by many companies worldwide and appears to have fostered performance improvements in many organizations. Perhaps the best-known proponent of this school of management was W. Edwards Deming.
Learning Organization.

The contemporary organization faces some extraordinary environmental and unpredictable technological change. Thus, one of the biggest challenges for organizations is to continuously change in a way that meets the demands of this tough and competitive environment. The learning organization can be defined as one in which all employees are involved in identifying and solving problems, which allows the organization to continually increase its ability to grow, learn, and achieve its purpose. The organizing principle of the learning organization is not efficiency, but problem solving.

Three key aspects of the learning organization are
- Team-based structure,
- Empowered employees,
- Open information.

The concept of Knowledge Management, which has arisen today as a major concept is the brain-child of this system. Peter Senge is one of the best-known experts on learning organizations.

Conclusion

Different scholars from different disciplines at different periods of time in the history, have heavily contributed to the different schools of management. Each scholar has taken great pains to device his own point of view, and point out weaknesses of other schools. This has created a lot of confusion which has been termed by Harold Koontz as "The Management Theory Jungle."

However every theory / approach / school, highlights a particular aspect of management and helps managers address their tasks with a particular insight. As a relatively young and growing discipline, management has been undoubtedly benefiting from the great contributions of all these schools of thought.