3

PERSPECTIVES IN MANAGEMENT

LEARNING OBJECTIVES

After comprehensive study of this chapter, you will be able to:

➢ get the concept of classical theory of management,
➢ know contributions and limitations of classical theory of management,
➢ get the concept of human relation and behavioural science theory,
➢ explain the contribution and limitation of human relation and behavioral science theory,
➢ get the concept of classical theory of management,
➢ describe the contribution and limitation of classical theory of management,
➢ get the concept of system theory of management,
➢ know the contribution and limitation of system theory of management,
➢ get the concept of decision and management science theory of management,
➢ explain the contribution and limitation of decision and management science theory of management,
➢ get the concept of contingency theory of management,
➢ explain the contribution and limitation of contingency theory of management,
➢ explain different emerging management concepts : workforce diversity, outsourcing, knowledge management and learning organization.

INTRODUCTION

Management was developed along with the development of human civilization. Once people started to live in family unit and society, they started developing management process or function knowingly or unknowingly. Family is taken as the main source or origin for development of management principles and techniques during joint family system since traditional era. Thus, the development of management is historic. With developing business complexities in different time and situation, such traditional principles of management are being advanced and we are experiencing the modern management process, system and practices.

Today, management has many principles with well developed literature as modern management principles. Most of these principles were developed in the twentieth century. Many scholars have contributed to develop different management perspectives . The streams of management thought are also known as management schools. For the general study, we can classify these perspectives   into six categories: Classical theory, Human relations and behavior science perspectives , Decision science perspectives , Management science perspectives , System theory and Contingency perspectives . We will discuss these perspectives   in detail in this chapter along with management in antiquity and early management pioneers.

MANAGEMENT IN ANTIQUITY AND EARLY MANAGEMENT PIONEERS

As stated above, management is as old as human civilization. It evolved and existed from very long back with considerable change over time. Management is equally accepted in all areas of business like hospitals, trade, educational institutions, engineering agency, NGOs/INGOs, society or business world etc. for their continuous growth. Knowledge of management is equally important for all the professionals from psychologists, anthropologists, doctors, and marketers, social activists, politicians and economists. Knowledge of management assists for smooth, efficient and effective operation of organization. Following scholars are major contributors in evolution of management in early time :

1. **Robert Owen [1771 – 1858]**

    Robert Owen, a British industrialist, made a significant contribution in the field of human resource management. He advocate for the development of human resource and claims that 'investment in human resource is more profitable than investment in physical resources'. For this, he emphasizes on human resource motivation for higher productivity as the main background of organizational productivity. He suggests that employees who are motivated for the job contribute their effort willingly and hence output will always be better.

2. **Charles Babbage [1792 – 1871]**

    Charles Babbage, Cambridge University professor, advocates for participative decision making in organization. He suggests that profit sharing and decision under participation of middle and lower level employees motivates them. According to him, the manager should make a decision on the basis of reality, investigation and facts rather than intuition and opinion. For this participative management practice becomes more beneficial.

3. **Hennery Robinson Towne [1844 – 1924]**

    Hennery Robinson Towne was an industrialist. He advocates on increasing skills and qualities of employees to improve the productivity of organization. According to him, this is the only way out for organization success. Joint effort of employees and management can improve the productivity of organization. For this, he gives emphasis on gathering the knowledge and experiences of the every employee and managers.

THE CLASSICAL PERSPECTIVES IN MANAGEMENT

Classical perspectives are those which were propounded early days of management thoughts. After the establishment of huge factories in Europe and the USA for the purpose of mass production of goods, industrialists and technicians were in search of special ideas and knowledge to manage those factories effectively and efficiently. New management techniques were propounded by the experts with long experience since then. Generally classical perspectives describe the essential nature of management and its relationship to the production process. They are based on traditional concepts and thoughts. Scientific management theory, administrative management theory and bureaucratic theory are taken as classical perspectives of management. These perspectives are evolved for efficiency and productivity of employees and entire organization. For this, these perspectives focus on through the one best way, universally applicable management principles and formal relationship based on hierarchy of job. Here, we will discuss each of these three perspectives in detail.

A. SCIENTIFIC MANAGEMENT THEORY

This theory is developed by Frederick Winslow Taylor (1856-1915), an industrial engineer. This theory is considered as pioneer and first formal theory of management.

Gilbreths and Henry Gantt further developed this theory though this theory was developed with the concepts developed by early thinkers from Roman Catholic Church, Military Organization, a group of Austrian and German public administrators and many intellectuals like business leaders, consultants, educators and researchers. This theory is based on 'productivity and efficiency' of the individual and organization. This theory focuses on the jobs of workers and emphasizes on scientific principles to improve productivity endlessly. According to Taylor, every job should be performed scientifically which enhances the productivity.

> **F.W. Taylor :** "Scientific management means knowing exactly what you want men to do and seeing that they do it in the best and the cheapest way."
>
> **Peter F. Druker** – "The operational study of work, the analysis of work into its simplest element and the systematic improvement of worker's performance of each element."

F.W Taylor is known as *father of scientific management.* He started his career as an engineer of Midvale Still Company in 1878. Later, he changed his service and went to Bethlehem Steel Company. On the basis of experiences and practices in the capacity of operational supervisor, consultant engineer and manager in different companies, he understood that those companies were suffering from low productivity, poor payments system and greater inefficiency, high wastage of resources and low use of potential capacity of resources. He realized that this was because of lack of standardized task and work process.

Taylor wanted to solve such problems and to increase the output of organizations. He faced many difficulties to change the production system during that time. He realized that there must be good working environment and proper provision for hiring and training workers in factories. He emphasized need of hiring and training workers, time and motion studies, use of differential piece rate wage systems, need of standardized tools and equipments and enough rest to reduce fatigue. He advocated that the workers can be motivated by the monitory incentives. Taylor's entire principles to scientific management believe that *there is one best way of doing everything.* The principles of scientific management are described is his book entitled *The Principles of Scientific Management* which was published in 1911.

In 1911, Taylor published his principles of management focusing on *one best way of doing things* and *standardized jobs.* He suggests that every unnecessary effort should be removed and workers fatigue should be reduced considerably. This is believed that by doing activities in a systematic manner can solve the managerial and industrial problems. His theory is based on different studies as follows :

Motion study : It is a study of the movement of an operator while performing the job. This helps to identify and reduce unnecessary movement or motion of workers and machinery at job.

Time study : It aims to determine the exact time for performing specific operation while performing job. This study helps to determine time limit to complete any job. Time is studied after motion study which helps to arrange the work activities which come in sequence and allocate the responsibilities to workers. Time study facilitates to reduce idle time at work.

Fatigue study : Workers tiredness and laziness should also be studied at work to increase efficiency and effectiveness. This study helps to determine working hours and schedule for rest or pauses at work scientifically to reduce fatigue or weakness of workers to increase the rate of doing things.

Rate setting : Workers performing the standard task within prescribed time are paid a much higher rate per unit than inefficient worker who are not able to attain the standard set. Taylor suggested *differential piece wage system* i.e. providing wages on the basis of output rather than time spent on job.

Principles of F. W. Taylor's scientific management theory

Scientific management is the art of knowing exactly what is to be done and how it is to be done. Taylor's scientific management concludes following principles :
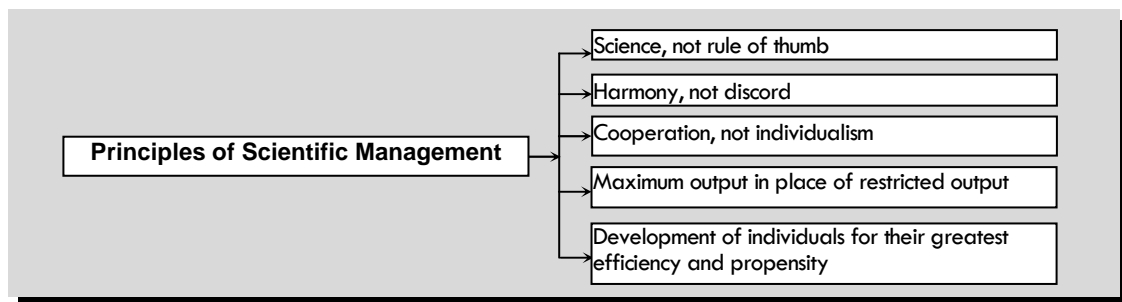
1. **Science, not rule of thumb:** Science is a systematized body of knowledge. It tries to solve the problems through scientific methods. Scientific Management advocates in doing the things scientifically with removing the old rule of thumb. To solve the problems, managers should use scientific method, scientific tools and techniques rather than hit and trail attempts.

2. **Harmony, not discord:** Scientific management believes in unity of actions through good congenial working environment but not in different approaches. To do the work more effectively and efficiently, management should provide a good working environment and coordination at efforts. Good harmony among workers and managers helps for good understanding and feeling of togetherness. This helps to reduce fatigue, tiredness, and misunderstanding but to increase mutual respect.

3. **Cooperation, not individualism:** Effort of individual alone can be useless and not enough for attaining common goal. There should be perfect cooperation and coordination between the manager and his subordinates to attain organizational goals. It is required to build up trust, respect and confidence among managers and subordinates. This helps to build up group effort instead of priority to individual effort which ensures the attainment of organizational goals with greater effectiveness and efficiency.

4. **Maximum output in place of restricted output:** Scientific management has focused on the increased production volume and productivity. Maximum output under proper utilization of various resources such as man, money, machine and materials will make maximum profit for the business and high wage for the employees too. For this, employees should be encouraged for maximum output rather than restricted output (quota).

5. **Development of individuals for their greatest efficiency and propensity:** There must be proper and scientific development of human resource to increase the organizational productivity. There must be system of scientific selection and placement of workers. Employees must be trained periodically with scientific methods so that their efficiency and effectiveness can be improved. There must be scientific approach on appropriate working hours and working conditions together with guarantee of proper facilities for promotion and retirement benefits, entertainment etc.

**Contributions of Scientific Management Theory**

- It has promoted mass production through high productivity and efficiency techniques.
- It has introduced rational and systematic methods to solve the industrial and management problems.
- It has emphasized on improved working conditions by reducing fatigue and redesigning machines.
- It facilitates the job design through specialization and standardization of work.
- It has emphasized on importance of recruitment and selection, training and development, performance appraisal and compensation system for workers to improve efficiency.
- It has suggested time study, motion study, fatigue study, and rate setting study for developing management system to increase productivity.

Limitations of Scientific Management Theory

- This theory treats man as a machine. It has less application in dynamic and complex organizational setting. The focus is on shop-floor levels. So, workers feel greater exploitation which increases the turnover rate.
- This theory believes only in financial incentives. Workers were viewed as economic beings. The views of employee motivation are inadequate and narrow.
- It ignores psychological and sociological aspects of worker which cannot increase cooperation and coordination among workers and management.
- There is problem of unity of command as one worker should report different supervisors and follow the command of various supervisors. This creates confusion and chaos in the organization.
- Taylor's principles are focused to individual performance and effectiveness rather than group and team performance. It becomes difficult to develop coordination and cooperation among individual as well as different units of organization.

B.   ADMINISTRATIVE MANAGEMENT THEORY

This theory is propounded by Henry Fayol (1841-1925) who was mining engineer by profession. He was also a French industrialist. He used administration in place of management first time. His contribution is taken as one of the revolutionary actions in modern management literature. So, he is also known as *father of modern management.*
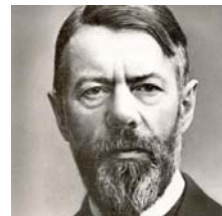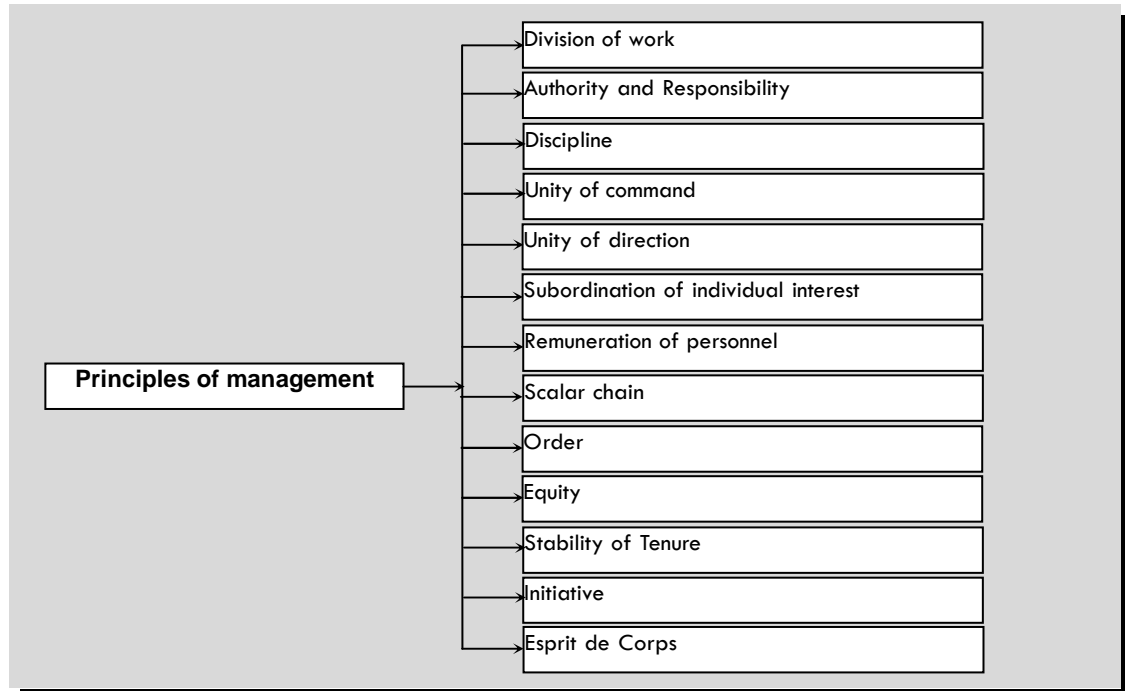
With his experience and experiment in industries, he developed 14 different principles which are commonly known as *principles of management*. His theory focuses on universal application of management principles, tools, functions and skills. Fayol presented his view of universal nature of management and developed a broad framework of administrative management. He also prescribed the need of teaching management education formally in colleges and universities.

Fayol stated the elements of management as its functions. He divided a manager's job into five functions: planning, organizing, commanding, coordinating and controlling. According to him, these functions are the most important for managerial success. These elements can apply not only to business organization but also universally in political, military, religious, philanthropic and other areas. Fayol's another important issue was managerial skills. Every manager must have physical skills, mental skills, moral knowledge, educational background, technical skills and work related experiences to perform the given task. He classified the entire business activities into six categories; technical, commercial, financial, security, accounting and managerial functions.

Principles of administrative management theory

Henry Fayol developed 14 principles which are known as basic principles of management and useful to almost all the organizations. These principles are explained below:

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                         ┌───►│ Division of work                   │
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                         ├───►│ Authority and Responsibility       │
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                         ├───►│ Unity of command                   │
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                         ├───►│ Unity of direction                 │
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                         ├───►│ Subordination of individual interest│
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┌──────────────────────┐ ├───►│ Remuneration of personnel          │
│ Principles of        │─┤    └────────────────────────────────────┘
│ management           │ │    ┌────────────────────────────────────┐
└──────────────────────┘ ├───►│ Scalar chain                       │
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                         ├───►│ Order                              │
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                         ├───►│ Equity                             │
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                         ├───►│ Stability of Tenure                │
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                         ├───►│ Initiative                         │
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                         └───►│ Esprit de Corps                    │
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1. **Division of work:** Division of work indicates breaking down of complex work into simpler and homogenous unit. It facilitates specialization at work which helps to attain greater efficiency and effectiveness at work. This principle can be applied to all kind of works of managerial as well as technical responsibilities and at all levels of organization.

2. **Authority and Responsibility:** This principle states that authority without responsibility leads to irresponsible behavior and responsibility without authority will make a person ineffective. Thus, Fayol suggests that there should be a balance between responsibility and authority. Authority is a legitimate right or power to make decision and command over workforce. It is associated with the position or management hierarchy of the organization. Responsibility is the obligation or duty assigned to employees to accomplish organizational goals. Along with responsibilities, appropriate level of authority should be delegated to subordinates.

3. **Discipline:** This principle implies that everyone in the organization should be self disciplined so that every work can be done easily and smoothly. Discipline implies obedience and respect of authority. This is state of obeying specified rules, regulations and command of the superior. Indiscipline acts of individual lead misunderstanding, lack of coordination and cooperation ultimately lead the organization to failure.

4. **Unity of command:** This principle states that there must be only one superior or only one command at a time to the subordinate. When a person gets command from many superiors at a time then it creates confusion and delays in action. Only one superior can command many subordinates at a time but a subordinate should not get command from many superiors at a time.

5. **Unity of direction:** This principle states that same direction and instruction should be given to the similar type of responsibilities. If different superiors give different directions and techniques to a single subordinate to accomplish same task, then subordinate may be confused regarding which direction should be followed. Unity of direction creates the unity of action. Simply, there must be one head, one plan and one boss.

6. **Subordination of individual interest to general interest:** Different individuals associated in the organization may have countless personal goals. But, organizations get established with organizational goals. If individuals are guided by their own personal goals ignoring organizational

goals, neither individual nor the organization can attain the goals. So, individuals must incorporate their interest with the organizational needs. They have to give first priority to organizational goals (general interest) rather than individual goals (individual interest) accepting that at attainment of organizational goals each individual can attain the individual goals.

7. **Remuneration of personnel:** According to this principle *fair, transparent and marketable salary, wages and benefits* should be provided to the employees. Remuneration must be in accordance with the experience, qualification, productivity, market inflation rate, etc. Organization should provide financial and non-financial benefits to the employees satisfying their basic needs. It should be competitive and based on productivity. A good remuneration system encourages employees for higher productivity and boost up their morale.

8. **Centralization:** Principle of centralization states that the ultimate authority of decision making must be in top level management. This is the philosophy of controlling organizational activities by the central authorities. This principle believes that the final authority should be retained to the top level of management though appropriate level of authorities should be delegated to the sub-ordinates. Management must balance centralization and decentralization for the effective and disciplined functioning of organization.

9. **Scalar chain :** Scalar chain refers to the chain of superior-subordinates from top to the bottom for effective flow of authority, orders and communication. This principle states that there should be unbroken chain for command and communication.

10. **Order:** Order indicates placing the man, machinery, and things at the right place and sequence so that each resource can be obtained easily without loss of time. It says that right man should be appointed at right place at right time. For the efficiency and the productivity, right things must be kept at right place and time.

11. **Equity:** Equity refers to fair treatment, equality or justice in the behavior and performance of each person in the organization. There should not be any discrimination on the basis of castes and creeds, religion, geography, and common saying of nearest and dearest. This principle ensures the healthy industrial relation between management and labour.

12. **Stability of tenure:** Stability of tenure refers to the duration of job done in an organization. Principle of stability of tenure states that there must be enough assurance of job security in the organization. Job insecurity decreases the morale of the employees as they think they can be fired at any time for any reason due to which their effectiveness and efficiency get decreased. Lack of stability of tenure increases labour turnover.

13. **Initiative:** According to this principle, every manager must take steps in order to make the work done properly to realize the goal of an organization. The initiation makes every work possible as it encourages and boost up the morale of employees. Managers must participate in execution of any plan and policy. Initiation encourages subordinates to devote their effort for utmost benefit.

14. **Esprit de corps:** Esprit de Corps refers to *strength in unity.* This principle states that there must be joint effort to materialize the goal of an organization as single effort doesn't suffice. The unity always generates team spirit (synergy effect) which can be strong reason for organizational success. Cooperation increases positive attitude towards the organization and its goal.

Contributions of Administrative Management Theory

- This theory proposes five management functions as the foundation of study of management. They are planning, organizing, commanding, coordinating and controlling. Such functions are common in any organization.

- This theory provides fourteen universally applicable principles of management which are taken as basic principles of management in all organization.

- This theory advocates various skills and knowledge in managers to operate organizations more efficiently and effectively. Thus, managers get encouragement for acquiring skills like physical, mental, moral, educational, technical and work related experiences.

- Fayol classified the whole business activities into six categories as technical, commercial, financial, security, accounting and managerial. This helps to identify the activities to attain organizational goals and getting right man at right job.
- This theory has provided avenue for modern management perspectives applicable in complex and dynamic business environment.

Limitation of Administrative Management Theory

- This theory has limited application for the complex and dynamic business environment.
- Fayol's principles cannot be applied universally in all situations as his claim.
- Human behavior and relations in organization are totally ignored in this theory but these things are more crucial in maintaining good industrial relations.
- Workers are treated as tools rather than resources. This theory is also mechanistic in nature.

C. THE BUREAUCRATIC THEORY OF MANAGEMENT

The bureaucratic theory of management is developed by Max Weber (1864-1920), a German sociologist. According to him the ideal model for management is the bureaucratic approach which ensures efficiency and effectiveness in planning, decision making, employee selection and protection, resource control, reporting and communication. He described his principles of bureaucracy in his book titled *The Theory of Social and Economic Organization.* He defined bureaucracy as, *an ideal form of organization whose activities and objectives are rationally thought out and whose divisions of labour are explicitly spelled out.*

The bureaucratic theory of management stressed strictly on *defined hierarchy governed by clearly defined regulations and lines of authority*. Literally, bureaucracy is defined as system of government through department managed by state officials, not by elected representatives. The roles of employees are formal and hierarchical in bureaucratic organizations. Max Weber has clearly distinguished between authority and power. Max Weber used this method to form an ideal-type bureaucracy with the following principles :

- Well defined hierarchy of authority
- Job specialization (division of labor)
- Clearly defined formal rules and regulations
- Impersonality of personal relations (social distance between superior and subordinates)
- Formal selection of manpower and basis of technical qualification and examination
- Career orientation - professional officials rather than ownership of units, career in the organization.

Max Weber's Bureaucratic Principles

Max Weber has propounded different principles which are commonly known as bureaucratic principles of management. They are described below :

1. **Hierarchical structure:** Hierarchy is the formal relationship among various functional levels of an organization. A formal hierarchy serves as the basis of central planning and centralized decision making. According to this principle, higher level of management controls subsequently lower level. Command, instruction and communication flows formally through this hierarchy.

2. **Functional specialty :** According to this principle, the top level executive should be well knowledgeable, skilled, trained and learned to carry out different functions in an organization. Work must be done by specialists. People must be organized into units on the basis of the skills they have or type of work they do. Specialization must be focused rather than generalization of work.

3. **Clearly defined rules and regulations:** This principle states that decisions should be made under clearly defined rule. Plans and decisions should not be formed on the basis of arbitrary judgment. Each level of management must implement the rules and regulations. Employee selection, training and development, compensation system as well as grievance management should be based on well

established rules and regulations. Each member must accept and work according to the guidance of such rules.

4. **Purposely impersonal :** This principle states that all the stakeholders from businessman to general customers should be treated fairly and equally without any prejudice. This idea is about to treat all employees and customers equally, not on individual differences. So, there must be practice of equality for each member.

5. **Formal selection of employees :** Employee selection is vital function in organizational success. Employees should be selected on the basis of technical qualification, skills and experience required for the job. Right man should be selected for the right position i.e. responsibility. This helps to increase the productivity of the organization which ensures the attainment of organizational goals.

6. **Career development:** Each employee should be confident that organization has guarantee of career advancement in terms of standard of living. Organization should have strong backup for training and development, well established performance appraisal system and fair compensation system. Organization should plan for economic security, physical security and job security. This principle thus states that organization should ensure for personal growth working in the organization.

Contribution of Bureaucratic theory

*   This model is useful to manage big and complex organization like government, army, multinational and global organizations.
*   Decisions can be made rationally based on a clear rules and regulations.
*   Technical competence of employees facilitates specialization which helps to increase the organizational productivity.
*   This theory emphasizes on formal selection process of employees to ensure right person at right job.

Limitations of Bureaucratic theory

*   Bureaucracy is a very rigid system. It is generally described as a rational legal system which cannot be applicable in all organizations.
*   It emphasizes efficiency at the cost of human needs means this theory does not prioritize on human sentiments and relations.
*   The procedures are lengthy and time consuming. In this context, this theory may not be suitable to increase productivity.
*   Every decision must depend on rigid rules, regulations and procedures which may not be practical in real life situation specially on business organizations.
*   This theory lacks innovations and flexibility. It cannot be changed with the complex and dynamic business environment.

HUMAN RELATIONS AND BEHAVIOR SCIENCE THEORY OF MANAGEMENT

The classical perspectives were suitable in the industrialized era of mass production. But some management experts did not agree with the principles of classical perspectives because of their rigidity and ignorance of human sentiments. They wanted to make management more responsible and applicable. Hence, they have established new principles and perspectives to minimize the criticism and drawbacks of classical perspectives . Those new thinkers gave more emphasis on human relation and behavioral approach on work place. They proposed humanistic and people oriented ideas in the organizations as human relations and behaviour science theory of management.

Robert Owen, Elton Mayo, Chester Bernard and Mary Parker Follet are the main contributors of these perspectives . According to them management should have greater emphasis on human and social factors along with the specialization in job design.

Workers cannot be motivated only by monetary incentives but they should be treated morally. Managers should understand their psychology to motivate them effectively. Group dynamics, participative management, two way communication, personality development, non-financial motivation and democratic leadership in management are important aspects of these perspectives . These perspectives relate with Hawthorne studies, theory of participatory management, theory of motivation etc. We have discussed these perspectives below :

A.   HUMAN RELATION THEORY

Hawthorne studies : Elton Mayo and his research team from Harvard University conducted a series of research studies during 1922 to 1932 among several group of workers at the Hawthorne Plant of the Western Electric Company in Chicago. The Hawthorne studies were part of a refocus on managerial strategy incorporating the socio-psychological aspects of human behavior in organizations.

The research team undertook four different experiments in relation to the effects of physical environments upon the productivity of worker. The major experiments they conducted were *The illumination test, Relay assembly test room experiment. Mass interviewing experiment* and *Bank wiring observation room experiments.*

Illumination experiment (1924) : In the early 1920s, Chicago's Western Electric Hawthorne Works employed 12,000 workers. The plant was a primary manufacturer of telephones, and in 1924 the company provided a site to cooperate with the National Research Council (NRC) on a series of test room studies to determine the relationship between illumination and worker efficiency. The basic idea was to vary and record levels of illumination in a test room with the expectation that as lighting was increased, productivity would also be increased. In another test room, illumination was decreased, with the correlating expectation that efficiency would also be decreased. The electric power industry provided an additional impetus for these tests, hoping to encourage industries to use artificial lighting in place of natural light. The Illuminating Engineering Society's Committee on Research also supported the tests and cooperated with the NRC.

NRC representatives and the engineers drew several conclusions from the experiments. First, illumination was one factor in output but not the most important. More important to the tests was the realization there was not a simple answer to the issue of illumination and worker productivity and that other factors that were not controlled presented a problem with the test results - the issue of human factors.

Changing variable usually increased productivity, even if the variable was just a change back to the original condition. Researchers concluded that the employees worked harder because they thought they were being monitored individually. Researchers hypothesized that choosing one's own coworkers, working as a group, being treated as special (as evidenced by working in a separate room), and having a sympathetic supervisor were the real reasons for the increased productivity.

Relay-assembly tests (1927-1932): In order to observe the impact of these other factors, a second set of tests was begun before the completion of the illumination studies on April 25, 1987. The relay-assembly tests were designed to evaluate the effect rest periods and hours of work would have on efficiency. Researchers hoped to answer a series of questions concerning why output declined in the afternoon: Did the operators tire out? Did they need brief rest periods? What was the impact of changes in equipment? What were the effects of a shorter work day? What role did workers attitudes play? Hawthorne engineers led by George Pennock were the primary researchers for the relay-assembly tests, originally intended to take place for only a few months. Six women operators volunteered for the study and two more joined the test group in January 1928. They were administered physical examinations before the studies began and then every six weeks in order to evaluate the effects of changes in working conditions on their health. The women were isolated in a separate room to assure accuracy in measuring output and quality, as temperature, humidity, and other factors were adjusted. The test subjects constituted a piece-work payment group and efforts were made to maintain steady work patterns. The Hawthorne researchers attempted to gain the women's confidence and to build a sense of pride in their participation. A male observer was introduced into the test room to keep accurate records, maintain cordial working conditions, and provide some degree of supervision.

The women were employed in assembling relays or electromagnetic switches used in switching telephone calls automatically. The women assembled more than 35 parts of the relay by hand. The relays were then

carefully inspected. The entire process was highly labor intensive and the speed of assembly had an obvious effect on productivity.

Initially the women were monitored for productivity, then they were isolated in a test room. Finally, the workers began to participate in a group payment rate, where extra pay for increased productivity was shared by the group. The other relay assemblers did not share in any bonus pay, but researchers concluded this added incentive was necessary for full cooperation. This single difference has been historically criticized as the one variable having the greatest significance on test results. These initial steps in the relay-assembly studies lasted only three months. In August, rest periods were introduced and other changes followed over the rest of the test period, including shortened work days and weeks. As the test periods turned from months into years, worker productivity continued to climb, once again providing unexpected results for the Hawthorne team to evaluate.

Productivity increased in excess of 30 percent over the first two and-a-half years of the studies and remained steady for the duration of the tests. The physicals indicated improved worker health and absenteeism decreased. By their own testimony, the women expressed increased satisfaction with all aspects of their jobs. Researchers tentatively concluded that performance and efficiency improved because of the rest periods, relief from monotonous working conditions, the wage incentive, and the type of supervision provided in the test environment. After additional study and consideration, the first two factors were rejected and further tests were conducted in an attempt to verify the effects of incentives and working conditions. The results were still not totally conclusive. Finally, researchers realized worker attitudes within the group were influential as was the more personal atmosphere of the test room. They concluded factors such as lighting, hours of work, rest periods, bonus incentives, and supervision affected workers, but the attitudes of the employees experiencing the factors were of greater significance. As a result, the Hawthorne team decided not to pursue similar studies. Almost as significant during the relay assembly tests was the introduction of a team of academics from the Harvard Business School into the experiments. Led by professors Elton Mayo and F.J. Roethlisberger, this new group of researchers would have an enormous impact on the Hawthorne studies and the future of human relations in the workplace.

Mass interviewing programme : During the course of experiments, about 20,000 interviews were conducted between 1928 and 1930 to determine employee's attitudes towards company, supervision, insurance plans, promotion and wages. Initially, these interviews were conducted by means of direct questioning such as "do you like your supervisor?" or "is he in your opinion fair or does he have favorites?" etc. This method has disadvantage of stimulating hostility or the oversimplified 'yes' or 'no' responses which could not get to the root of problem, then the method was changed to non-directive interviewing where interviewer was asked to listen to instead of talking, arguing or advising. The interview programme gave valuable insights about the human behaviour in the company. Some of the major findings of the programme were as follows:

- A complaint is not necessarily an objective reading of facts; it is a symptom of personal disturbance the cause of which may be deep seated.
- Objects, persons or events are carriers of social meanings. They become related to employee satisfaction or dissatisfaction only as the employee comes to view them from his personal situation.
- The personal situation of the worker is a configuration, composed of a personal preference involving sentiments, desires and interests of the person and the social reference constituting the person's social past and his present interpersonal relations.
- The position or status of worker in the company is a reference from which the worker assigns meaning and value to the events, objects and features of his environment such as hours of work, wages, etc.
- The social organization of the company represents a system of values from which the worker derives satisfaction or dissatisfaction according to the perception of his social status and the expected social rewards.
- The social demands of the worker are influenced by social experience in groups both inside and outside the work plant.

During the course of interviews, it was discovered that workers' behaviour was being influenced by group behaviour. However, this conclusion was not very satisfactory and, therefore, researchers decided to

conduct another series of experiments. As such, the detailed study of a shop situation was started to find out the behaviour of workers in small groups.

Bank wiring observation room experiment (1931-1932) : These experiments were conducted to find out the impact of small groups on the individuals. In this experiment, a group of 14 male workers were formed into a small work group. The men were engaged in the assembly of terminal banks for the use in telephone exchanges. The work involved attaching wire with switches for certain equipment used in telephone exchanges. Hourly wage for each worker was fixed on the basis of average output of each worker. Bonus was also payable on the basis of group effort.

It was expected that highly efficient workers would bring pressure on less efficient workers to increase output and take advantage of group incentive plan. However, the strategy did not work and workers established their own standard of output and this was enforced vigorously by various methods of social pressure. The workers cited various reasons for this behaviour like fear of unemployment, fear of not increasing in output, desire to protect slow workers etc.

Conclusion of Hawthorne studies

The followings were the main conclusions drawn by Prof. Mayo on the basis of Hawthorne studies :

1. **Social unit:** A factory is not only a techno-economic unit, but also a social unit. Men are social beings. This social characteristic at work plays an important role in motivating people. The output increased in Relay Room because of effectively functioning of a social group with a warm relationship with its supervisors.

2. **Group influence:** The workers in a group develop a common psychological bond uniting them as a group in the form of informal organization. Their behaviour is influenced by these groups. Pressure of a group, rather than management demands, frequently influences on how productive workers would be.

3. **Group behaviour:** Management must understand that a typical group behaviour can dominate or even supersede individual propensities.

4. **Motivation:** Human and social motivation can play even a greater role than mere monitory incentives in moving or motivating and managing employee group.

5. **Supervision:** The style of supervision affects worker's attitude to work and his productivity. A supervisor who is friendly with his workers and takes interest in their social problems can get co-operation and better results from the subordinates.

6. **Working conditions:** Productivity increases as a result of improved working conditions in the organization.

7. **Employee morale:** Mayo pointed out that workers were not simply device in the machinery, instead the employee morale (both individual and in groups) can have profound effects on productivity.

8. **Communication:** Experiments have shown that the output increases when workers are explained the logic behind various decisions and their participation in decision making brings better results.

9. **Balanced approach:** The problems of workers could not be solved by taking one factor i.e. management could not achieve the results by emphasizing one aspect. All the things should be discussed and decision be taken for improving the whole situation. A balanced approach to the whole situation can show better results.

B.   BEHAVIORAL SCIENCE PERSPECTIVES

There are many perspectives which deal with behavioral aspects of workers and their productivity. Many experts contributed to extend the management literature. Some of the important behavioral science perspectives are explained below :

Theory of participatory management: Mary Parker Follet contributed more to develop this theory of management. According to Follet, human element in the workplace is an important factor for increased productivity. Management should achieve integrative unity through coordination and cooperation.

Managers should give more preferences to vertical as well as horizontal communication system. They should give more emphasis in participative environment. To increase efficiency and productivity, employees should be involved in decision making process. Employees of different level should be encouraged for providing suggestions regarding plans, policies and operating strategies. Management should make decision on the basis of employee suggestions.

Theory of human needs: This theory is developed by Abraham Maslow, a socio-psychologist. This theory assumes that needs of human being form a hierarchy. This means needs in human being emerge from lower level to higher level successively after fulfilling the lower. Maslow categorized human needs in five levels as physiological needs, safety needs, social affiliation needs, self-esteem needs and self-actualization needs.

According to Maslow, lower order needs like physiological and safety needs should be satisfied first then only higher order needs-social, ego and self-actualization needs. Needs creation and satisfaction process is never ending process. Thus, every manager must understand needs of employee and initiate to satisfy their unfulfilled needs. This motivates employees and improves the productivity.

Theory of X and Y: This is a motivational theory developed by Douglas McGregor. He assumed that there are two types of people in organization. These two types of people are categorized into two groups X and Y on the basis of their nature and attitude.

Theory X represents the group of traditional and negative people who assume the job is compulsion and boring activity. According to this theory, most people dislike their works and they avoid it. They ignore responsibilities and have little ambition. They need to force and threaten with punishment before they work. They require close direction and supervision. The subordinates are naturally irresponsible, selfish and lazy. Therefore, manager should adopt restrictive control and autocratic leadership style.

Theory Y represents the group of people who are naturally hard worker, self-responsible, self-directed and self-controlled. According to this theory, such people are committed to objectives and believe in democratic leadership style. They do not like to avoid responsibilities but wish more challenging and creative works. They like to remain busy at works even if management does not give them enough works. They always want to learn new things for their self development. This theory has positive attitude towards working people. According to this theory, managers should understand the human psychology and treat them positively to achieve more productivity. They should be provided more challenging works to motivate them.

Two factors theory: This theory is propounded by Frederick Herzberg as a theory of motivation. According to this theory, all the factors cannot motivate employees. Some of the factors just protect from demotivation while some of others can motivate employees. Thus Herzberg classified factors into two major categories as Hygiene factors and Motivating factors.

Hygiene factors are also called dissatisfiers as in the presence of these factors in organization, employees cannot be motivated but in the absence of these factors employees get dissatisfaction. Hygiene factors are just like nutrients as they protect from diseases but do not cure the diseases. These factors are related to company policies, working conditions, supervision, salary and benefits, organizational image, etc. These factors provide minimum level of satisfaction to the employees.

Motivating factors are those which actually motivate employees. These factors are thus causes for greater productivity and efficiency. Herzberg claims that motivating factors are related with job content like challenging job, achievement, recognition, desire to take more responsibilities, personal growth, etc. In order to motivate employees, thus management should include and ensure such factors in job.

Theory Z: Theory Z is the name applied to *Japanese Management Style* (based on Edwards Deming's fourteen principles) popularized during the period of Asian economic boom of 1980s. Theory Z focused on increasing employee loyalty towards the organization. This theory believes on job for life with a strong focus on the well-being of the employee both on and off the job in order to motivate employees. Theory Z emphasizes that management must promote stable employment for high productivity, high employee morale and satisfaction.

Theory Z is characterized with long-term employment and job security, collective responsibility, implicit and informal control with explicit and formalized measures, collective decision making, slow evaluation and promotion, moderately specialized careers and concern for a total person including their family life.

Contributions of Human Relations and Behavioral Science Perspectives

- These perspectives shifted the focus of technical approach of management to the human and social side of the organization.
- These perspectives provide many non-monetary motivational perspectives which are important not only to motivate employees but to retain them in the organization.
- These perspectives give emphasis on personal and informal relationship among the employees to improve the quality of work life.
- These perspectives have emphasized on informal organization system.
- These perspectives make organizational behavior as a new discipline of study.
- These perspectives give more importance to non-financial incentives and rewards such as recognition and appreciation to motivate employees and to improve their productivity.

Limitations of Human Relation and Behavioral Science Perspectives

- The assumptions of these perspectives are complex and vague. Human behaviors are complex and difficult to understand. It can be understood only by behavioral scientists not by all the managers.
- These perspectives give over emphasis on human variables than all other variables in organization.
- Informal groups and personal relationship in the organization cannot always be helpful. It may minimize the morale and discipline of formal organization structure.
- Human needs and expectations can be situational which are beyond the consideration of these perspectives .
- Human behavior cannot be assumed as estimated by the behavioral science theory.
- Situational factors are ignored in these perspectives as well.

DECISION THEORY

Herbert Simon propounded decision science theory in 1986. For this outstanding work, he was awarded the Nobel Prize. Other contributors of this theory are Luther Gulik and Lyndall Urwick. According to this theory, major task of every manger in organization is making decisions. Managers should be involved in decision making process while defining organizational structure, setting goals, finalizing plans, launching new product, selecting new employees, purchasing fixed assets and many others day to day activities. Decision making is an intellectual process which involves in selection of one best course of action out of many alternatives. Decisions of managers must be rational. Quality of decisions highly affects on managerial effectiveness, organizational productivity and efficiency which are the basis of success of organization.

According to this theory, for the organizational efficiency, managers must follow the following steps while making more rational decisions:

- Defining the problem clearly
- Defining decision premises
- Identifying relevant or potential alternatives
- Evaluating of the alternatives
- Selecting the best course of action
- Implementing the selected alternatives and
- Evaluating and reviewing of the results.

In the process of decisions making, managers need different types of information and techniques. Managers can use different mathematical tools like probability, sampling, linear programming, game

theory etc. to make the decisions rational and correct. According to decision science theory, the perfect decision are made with rational decision making process which is constraint by bounded rationality and tends to satisfying. While making decisions, this approach assumes that, managers may face uncertainty, ambiguity and non- programmed decision making situation. Decision may be limited by beliefs, values, attitudes, ability, skills, habits, qualifications, information and resources. This approach also explains that decision satisfies the decision maker until the decision maker tends to seek the next alternative.

Contributions of Decision Theory

- This theory provides the rational decision making process depending on the mathematical tools.
- Decision theory is helpful to make effective decisions on the basis of proved theory.

Limitations of Decision Theory

- This theory is limited to economic rationale.
- The consideration of this theory is still very limited and narrow.
- It focuses only on decision making issues.

MANAGEMENT SCIENCE THEORY

This theory was originated through military science. The concept of operation research was developed during the Second World War by British government period to find out the solution of unique problems. British government constituted a team of expert including scientists, mathematicians and physicists to find out the causes of loss in war and to identify wining strategy. That team recommended operation research model as new managerial tool to win the war. The British army got significant success following that approach. Then, U.S and other countries also followed the approach which is now called Management Science Theory. The focus of this approach is on planning, designing and implementing strategies through mathematical models. Managers should predict everything on the basis of proved mathematical and statistical perspectives. This theory is also known as mathematical or quantitative approach of management.

Quantitative techniques can be operation research, linear programming, queuing theory, game theory, simulation and model building, PERT etc. In these days, this theory is acceptable to solve problems regarding planning, productions, inventory management, operation management and transportation problems. Advanced computer and information technology have extended the application of management science theory to many other areas of business.

Large and complex organizations use this theory for decision making. This theory believes on logical process for maximizing the productivity and managerial efficiency. Quantitative Management, Management Information System and Operation Management are the main areas of Management Science Theory.

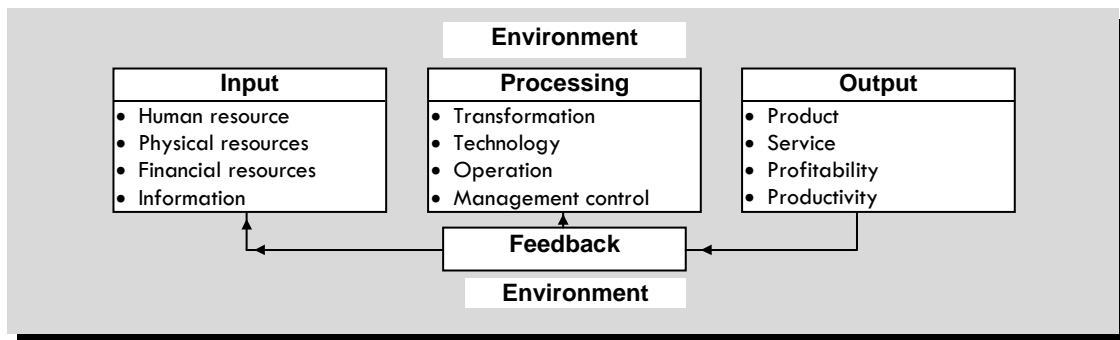**Contributions of Management Science Theory**

- This theory helps to develop quantitative tools to aid decision making.
- It has opened new frontiers for managers.
- This theory provides important contributions in the areas of production and operation management.

Limitations of Management Science Theory

- It ignores the importance of people relationship and other non– quantifiable factors.
- The over emphasis on management science techniques may delay development of other managerial skills.
- These techniques cannot be fully accountable for individual behavior and attitudes.
- The quantitative models are not suitable for non-routine or unpredictable managerial decision.
- The assumptions of this theory may not be realistic.

THE SYSTEM THEORY OF MANAGEMENT

A system is defined as a flow of group of inter-related activities or parts working together as a whole. System theory may be defined as a goal oriented organism composed of parts that are interacting and interrelated in such a way that the total of the components of system is greater than the sum of its individual parts. This theory is the unified view of management and looks at an organization in its totality. All systems are composed of three basic elements input, process and output connected with feedback and surrounded by environment. A system input includes the raw materials, equipments, human resources, finance, technology and information. These inputs should be transformed into output using some processes. Process can be managerial functions like transformation, technology, operation and management control. Output of organization system can be the product, service, profit/loss, employee satisfaction, loyalty, low turnover, etc. organization system is shown as below:

Environment

Input	**Processing**	**Output**
• Human resource	• Transformation	• Product
• Physical resources	• Technology	• Service
• Financial resources	• Operation	• Profitability
• Information	• Management control	• Productivity

Feedback

Environment

System approach is a balanced view of management which suggests that managers must take an overall balanced view because *the best for whole is not necessarily the best for each component of the system.* The important elements of system approach which have substantial impact on management thinking are as follows:

1. **Open versus closed system:** A system can be closed or open. Closed system has no environmental influence. Closed system does not interact with external environment and is not affected by external environmental factors. On the other hand, open system reacts and influenced by external environment. Open system is more complex in comparison to closed system as it has to cooperate with external and internal environment. Efficiency of management affects on degree of influence of environment.

2. **Sub-systems:** A particular system has some subsystems. Subsystem is a system within a system. This means integration of subsystems forms a system. All subsystems are interrelated to each other.

3. **Synergy:** Synergy means that the whole is greater than sum of its parts. For instance, $2 + 2 > 4$ is possible in management if all system and sub system works together as a whole for a common purpose. System theory suggests that subsystems should coordinate in such a way that the output should be always greater than the sum of output of individual subsystem.

4. **System boundary:** Every system has a boundary which separates it from the environment. In an open system the boundary is flexible while in closed system it remains fixed.

5. **Entropy.** Entropy is a universal property of systems and refers to their tendency to run down and die. A primary objective of management, form systems perspective, is to avoid entropy.

6. **Feedback:** Feedback is an essential component of management system to provide information regarding the output. This is required for taking corrective measures in organization if the results are deviated from the desired standard.

Contributions of System Theory of Management

- It provides the holistic view of the organization.
- It recognizes the interactions and interrelationship among subsystem for synergetic effects.
- It suggests that there will be environmental effects in organizational system so that management can make significant strategy to tackle with environmental influence.

-     This theory is useful for managing complex and large organizations.

Limitations of System Theory of Management

-     This theory is too abstract which is intangible in real sense.
-     It is not possible to apply this concept in small organizations.
-     This approach does not provide specific guidelines to managers for functions and duties.
-     There are no any specific tools of management suggested by this theory.

THE CONTINGENCY THEORY

This theory is developed in 1960 by Tom Burns and GM Stalker in Britain and Paul Lawrence and Jay Lorsch in USA. They suggest that management concepts cannot be used in every organization uniformly. Same management approach and practice cannot produce the same results across various situations. The concepts, tools and techniques of management appropriate for one situation, may not be equally effective in another situation. According to this theory, management concepts are contingent on a particular situation. This theory is the most recent development in management school of thought. The conclusion of contingency theory is that *there is no one best way to solve any problem* in different organizations as management principles and practices are conditional (affected by) to the situation. Each situation can be different and unique. Thus, it is required to apply unique managerial action to solve the problem. This means, instead of specific management perspectives and practices, special theory which is fit for that situation, should be applied. Therefore, this theory is also known as situational theory of management.

Contingency theory is based on the following important assumptions:

-     There is no universal or one best way to manage.
-     Organizational structure of an organization should fit with the environment.
-     Subsystems within organization should have effective fit with the environment.
-     The needs of an organization are better satisfied when it is properly designed and the management style is appropriate both to the tasks undertaken and the nature of the work group.

There can be various contingency variables for influencing management practices in the organization. Followings are important contingency variables for the organization :

-     **Size of organization :** Size of the organization is one of the most important factor for defining and determining organizational structure. Large organizations should be more decentralized while small organization need not. In small organizations, only one person can control the organizational activities with centralization while in large organizations, departmental managers need to be appointed and allocated with certain level of authority.
-     **Level of task technology :** Level of technology also affects on management policies and practices. Employee recruitment and selection, training and development, performance and reward management system, compensation system, etc. must be different on the basis of technology used by organization.
-     **Environmental uncertainties:** As business environment is complex and dynamic business uncertainty is increasing rapidly. Management practices and strategies in stable environment do not work on dynamic business environment. Thus, environmental uncertainties are also one of the important contingencies.
-     **Individual differences:** Different personalities holding different positions also affect in organizational system. Their personal thoughts affects on decision making, management practices and strategies.

The geographical shape of the organization and the type of work being done are also important variables. The earlier thinkers of management were trying to find one best way to find universal solution to organizational and managerial problems but which is practically impossible due to the changeable situation of many variables. This theory states that leadership styles, organization structure, job design, motivational approaches, control systems, conflict and grievances handing techniques should be situation specific.

Contribution of Contingency Theory

- This theory is the break through to think from well established traditional management principles to flexible practices.
- This theory encourages managers to identify the contingency variables to solve the problems.
- Managers can make decisions independently. So, any problems can be solved quickly and differently.

Limitations of Contingency Theory

- This theory suggests situational decision making but it does not recommend any probable solution for the problems in different situations.
- Managers may sometimes have misleading in search of situation specific problems.

EMERGING MANAGEMENT CONCEPTS

Business environment in the current days is being more complex and challenging. Globalization, open market economy, frequent changes in political-legal environment, technological invention and development, technology transfer, foreign direct investment, etc. are some causes which make the business environment more unpredictable and complex. In order to cope with such complexities, new management concepts are emerging. Some of them are discussed below :

1. **Workforce diversity :** Without human resources, we cannot imagine the accomplishment of organizational goals. From planning to implementation of plans and output evaluation, human resources are essential for the various capacities at different level. But, it is not easy to hire and manage homogenous set of human resources. Globalization and growing legal concern for equal opportunities at job position, the complexities of work force variation i.e. diversity is increasing rapidly.

    In modern organizations, there are different types of human resources (workforce) in terms of age, gender, caste and race, economic status, social status, geographical variation, etc. They hold different individual goals. Management is facing more challenge in order to fulfill the needs of human resources, to fulfill the basic legal formalities as well as to bear social responsibility. Getting synergy from diversity of human resources is great challenge to the current management.

    Benefits of workforce diversity

    - **Variety of perspectives:** When employees of different backgrounds, different cultures, different nationalities, and different perspectives come together, everyone shares a slightly different approach to the job and the problem at hand. This provides different perspectives for business expansion and growth.
    - **Increased creativity :** Workplace diversity helps to boost creativity of employees and hence to gain the organizational creativity, innovation and invention. Employees from diverse backgrounds bring diverse solutions to achieve a common goal i.e. organizational goals.
    - **Increased productivity :** Diversity not only develops creativity but creativity actually leads to productivity. The more diverse in workforce, the more diverse would be brainstorming, the more diverse solutions for problems related to productivity and the more diversely productivity can be attained. *According to a McKinsey study, U.S. public companies with diverse executive boards have a 95% higher return on equity than do those with homogeneous boards.*
    - **Improved performance :** Workplace diversity culture of an organization intends to help employees feeling included in the decision making process of the organization. This inclusiveness helps break down barriers and reduces the fear of being rejected in various organizational activities. *Research by Deloitte 2013 revealed that when employees feel included, innovation increases by 83%.*
    - **Brand Reputation:** Workforce diversity connects organization with the community around with fulfilling the legal provisions and compliances. Diverse workforce directly reflects the community where the organization is located and the community that the organization serves. Workforce diversity helps maintain legal provisions which increase the organizational reputations with government bodies as well as in the international arena.

- **Better decision making:** Workplace diversity facilitates for better decision making because of diverse perspectives in perceiving problem and the opportunities. Employees with different background and perspectives come up with more solutions, which lead to more informed and improved decision-making process and results. *Cloverpop, a white paper from online decision-making platform, reported that diverse teams outperform in comparison to individual decision-makers up to 87% of the time.*

- **Higher employee engagement and reduced turnover :** Workplace diversity leads to higher employee engagement. As the diversity increases, feeling in decision making process, employee satisfaction increases and hence their commitment also increases. Workplace diversity is also beneficial for employee retention. As a result, companies with greater diversity in the workplace have lower turnover rates.

- **Improved hiring results :** Workplace diversity leads to better hiring results. As discussed earlier, diversity in the workplace increases brand value of the organization because of which more competent employees apply for the vacant positions. Workplace diversity is an especially beneficial asset for attracting top talent from diverse talent pools.

Limitations of workforce diversity

- **Poor focus on leadership qualities:** Focus on diversity management often create problem in focusing leadership qualities. This hinders growth opportunity as well as the productivity of the organization may decrease. Because of diversity management, competition in the organization can be healthy, but it can also be dangerous when it cannot be controlled in its right time. *When the goal is to promote the individual instead of the team, then a diversity initiative fails.*

- **Chances of conflict:** Diversity creates chances of creating series of differences in decision making process, investment process and specially in change initiation. This increases the chances of decision delay as everyone needs to participate in process, and the common agreement becomes impossible. In absence of consensus, supervisor makes decision which may not be acceptable to all the people. In such situations, there could be conflict in the organization. Functional conflict increases the productivity of the organization while dysfunctional conflict may hinder the organizational progress.

- **Decrease in mutual trust :** Very often, over focus on diversity initiatives decreases in workplace trust. Such consequences decrease the cooperation, coordination and self-induced motivation for improved performance. Such disadvantages can create roadblocks to collaboration and developing synergy.

- **Creating communication problems:** People from diverse areas can have unique perspectives regarding how they understand any problem, situation and evidence. They might have different meaning though they speak the same language. This may create problem in understanding each other at the workplace.

- **Increase in complaint :** Because of poor management of diversity, there could be misunderstanding among the employees which can cause complaints within them and to the management. Dissatisfaction of employees at their workplace either of any reasons, their service level to the customer will be low. This causes poor customer satisfactions which causes customer complaints. This means, diversity can cause increase in complaints in the organizations.

- **Difficult to apply :** Though the diversity is being popular slogan for every person and every organization, it is difficult to maintain. Maintaining diversity is being easier by following the legal provision. It is being a bigger limitation in implementation of diversity in organization. Noted that *only less than 5% of today's Fortune 500 companies have a female CEO.*

2. **Knowledge management:** The concept of knowledge management is relatively a modern concept in management which is established in 1990s as a separate discipline. Knowledge management is the process of collecting, organizing, classifying and disseminating information throughout an organization, making it purposeful to needy people. It is the systematic process by which knowledge needed for an organization to succeed is created, captured, shared and leveraged.

There can be two types of knowledge as *tacit knowledge and explicit knowledge.* Tacit knowledge is related with personal experience, skills, understanding, and knowledge gained by personal study and working experience in various levels. Explicit knowledge can be obtained in the written form in working manuals, guidelines, legal circulars, booklets, etc.

Knowledge management comprises a wide range of strategies and practices to identify, create, represent, distribute and enable adoption of insights and experiences of the various expertise inside and outside the organization. Knowledge management efforts typically focus on organizational objectives such as improved performance, competitive advantage, innovation, the sharing of lessons learned, integration and continuous improvement of the organization. Taxonomy of knowledge is shown in the given figure.
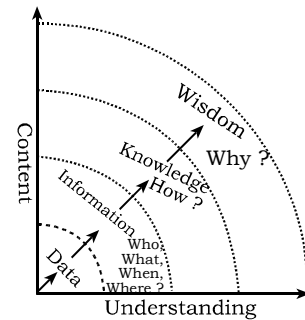
As an emerging management concept, every modern organization aims to capture the knowledge that can be obtained from work experience, employees, technology, and experts for the betterment of organization. Knowledge management stores and supplies advance knowledge which helps in better use of available resources, minimizing wastages, improving quality, enhancing productivity and profitability. This is also a challenge to the management to hold knowledgeable employees and experts, capturing their knowledge and managing it in such a way that it can be used at right time.

Knowledge management process

Knowledge management is a process consisting of different stages i.e. knowledge discovery, knowledge capture, knowledge sharing, and knowledge application.

- **Knowledge discovery:** It is the act of developing of new knowledge. As described earlier, knowledge can be tacit or explicit which can be generated either from data, information or synthesis of prior experience. The discovery of new explicit knowledge relies most directly on combination whereas the discovery of new tacit knowledge relies most directly on socialization. For creation of knowledge from existing explicit knowledge; data and information are reconfigured, re-categorized, and re-contextualized.

- **Knowledge capture:** It is the act of converting tacit knowledge to the explicit form i.e. recording knowledge from people, artifacts or organizational entities. Knowledge can also be captured from the people outside the organizational boundaries including consultants, competitors, customers, suppliers, etc. which should be recorded in organizational memory.

- **Knowledge sharing:** It is the process through which recorded knowledge in organizational memory either in the form of explicit or tacit is shared i.e. communicated to other individuals in the organization. Exchange is used to communicate or transfer explicit knowledge among individuals, groups and organizations. It can be done by means of various ways like writing books or research papers, delivering a lecture or making a speech or presentation, participating in a dialogue over coffee or lunch, participating in communities of practice, mentoring a new staff; shadowing an expert, etc. Socialization is essential with sharing, exchanging based on explicit or tacit knowledge.

- **Knowledge application:** It is the use of created knowledge for formulating plans, policies, and making decisions and the implementation of decisions. Knowledge application helps managers to perform their task through direction and routines. Here, direction refers to the process through which the individual possessing the knowledge directs the action of another individual without transferring to that individual the knowledge underlying the direction. Routines involve the utilization of knowledge embedded in procedures, rules, norms and processes that guide future behavior.

Core Considerations for a Knowledge Management Program

To be a knowledge management (KM) program more successful, it should integrate the following five important areas:

- **People**: Focusing on people i.e. individuals in the organization should improve the overall quality. KM program should increase the ability of these people to influence other people with their knowledge.
- **Processes**: For successful KM, there should be optimal level processes so that knowledge generation, recording the processes you establish should include best practices and governance for the efficient and accurate identification, management and dissemination of knowledge.
- **Technology:** Technology is another important factors to influence the KM programs. The technology chosen for KM should enhance users to configure, use tools and help for automation to enable knowledge management.
- **Structure**: Organizational structure is one of the most important factors influencing KM in the organization. It allows legitimate right for making decision. Flexible and principle based structure helps facilitate and encourage cross-discipline awareness and expertise.
- **Culture:** Organizational culture is the sum of organizational values, believes and practices rooted deeply from long years of experience. Each organization should establish and cultivate a knowledge-sharing, knowledge-driven culture for long-term success.

Steps to Knowledge Management Implementation

- Establish knowledge management program objectives
- Prepare for change management
- Define a high-level process as a foundation
- Determine and prioritize technology needs
- Assess current state
- Build a knowledge management implementation roadmap
- Implementation
- Measure and Improve the Knowledge Management Program

3. **Outsourcing:** In this competitive globalized age, producing and supplying goods and services to customers as per their changing expectation is challenging. Organizations need to concentrate in each and every activity so it can supply goods and services quality with competitive quality and price. For this, organization should have the enough capability in terms of capital, approach in information technology, production process, human resources, distribution channels, etc. which is almost impossible to each organization. In such situation, organization should concentrate to the activities only on its efficient areas and get the product or service from others in which it lacks.

Getting goods and services for improving quality of goods and services, delivery, and price from other organizations is called outsourcing. In outsourcing, organizations contract for the goods and services with other organizations which are more competent in those areas. Organizations can go for outsourcing for whole products or parts of product, process or management in which area they have low competency. Suppose a company A is producing shoes. It is technologically competent for party-shoes but weak in sport-shoes. In this situation company A can contract for sport-shoes with the company B which is more competent in producing sport-shoes. In this process, A can concentrate its efforts to the competent sector i.e. party-shoes and can supply sport-shoes with the same brand name at same level of quality to the market. Similarly, airlines companies are outsourcing meal for the long journey passengers from five star hotels. Instead of buying trucks, many suppliers outsource transportation companies for distribution of goods. Nowadays, business organizations are outsourcing in the following sectors:

- Management professionals
- Supply of human resources
- Certain processes of final production
- Complete production
- Distribution of goods and services

Outsourcing is essentially adopted by several modern organizations for the following objectives :

- To reduce cost of production
- To maintain quality in goods and services
- To supply goods and services promptly

- To improve managerial efficiency
- To concentrate only on efficiency of organization
- To reduce over dependency on internal resources
- To manage risk

4. **Learning Organization :** This concept views knowledge as a power of organization. So, organization should be converted into a learning center to create new knowledge and methods to solve different problems. Only the knowledge is the way to lead the today's competitive market. So, it is most urgent to give emphasis on learning different techniques to become more competitive. Knowledge is not bounded with age, gender, and level of the organization. So, managers need to create free learning environment to its employees within the organization to make them globally competent. Learning is a continuous process. Employees should always be encouraged for learning new technologies and create new knowledge to solve the organizational problems. For this, organizations need to accept change. Change in technology, change in organizational structure, change in existing management practices are essential to adapt in the organization. Management of modern organizations is managing information technology to create the learning organizations. They are practicing participating decision making process. Employees are made more autonomous to choose procedure and apply new methods in order to ensure the new knowledge. Every member of the organization must be creative in this concept. Initially, this concept may increase the cost of productions, but there is no option of this concept to be a market leader.

Features of learning organizations

Basically, learning organization is the philosophy in which a group of people work collectively to enhance capacities of each other to attain meaningful results i.e. organizational goals. For learning organization, following five basic features should be maintained:

- **Systems thinking:** The basic concept of the learning organization is developed from concept of system thinking which provides a conceptual framework to study the things, processes and events from the bounded objects perspective. Systems thinking is a holistic approach to create and analyze the facts in such a way that all components of the system interrelate and work together to create synergy. Under the systems thinking approach, all the things are analyzed in an interrelated sub-system. This advocates that one thing happens not in isolations but in an integrated and interrelated environment. According to systems thinking, system behaviors are the outcome of reinforcing and balancing processes in which a reinforcing process leads to the increase of some system component. Balancing process is most essential as to maintain equilibrium in a particular system. Learning organizations follow this concept when accumulating information to measure the performance as a whole and of its various components and evaluating organizational progress.

- **Personal mastery:** Personal mastery is the commitment of an individual to be an active partner of the learning process. Personal mastery is self-induced commitment for searching, creating, accumulating and sharing knowledge for learning organization system. Higher commitment on personal mastery motivates individual for quick expansion of the ability to be more productive through the application of new skills. It is different than just collecting the information or acquiring knowledge but strong motivational focus for application.

  Personal mastery is the strong will power for personal development with clarification of focus, personal vision and ability to see and interpret reality objectively. Individual gets self-motivation for individual learning through staff training, development and continuous self-improvement. Personal mastery makes possible many positive outcomes such as individual performance with self-motivation, self-efficacy and sense of responsibility, commitment, patience and focus on relevant matters as well as work-life balance and well-being. Personal mastery is guided by principles such as purpose, vision, belief, commitment and knowing oneself. Personal mastery is about understanding exactly how an employee thinks, why s/he does things the way s/he does, having clarity around purpose and direction in life and taking steps towards continual learning and development to evolve and enhance oneself. Thus, for learning organization, each person involved in the organization should think from the personal mastery perspective.

- **Mental models:** A mental model describes how an individual thinks about how something is happening in the real world. Mental models explain that individual should care about various interrelated components of environment and their relationships with various components. For instance, business environment is composed with different factors and changes in one factor may cause multi-facet effects in overall business opportunities and threats. To become a learning organization, mental models must be identified and challenged. Individuals tend to follow defined perspectives which they intend to follow and to make decisions which may not always be correct. Similarly, organizations tend to have 'memories' which preserve certain behaviors, norms and values. In creating a learning environment it is important to replace confrontational attitudes with an open culture that promotes inquiry and trust. Learning organization needs develop mechanisms for locating and assessing organizational perspectives of action, and allows to discard the unwanted values.

- **Shared vision:** Shared vision is the act of building a sense of commitment in a group, by developing shared images of the future we seek to create, and the principles and guiding practices by which we hope to get there. For learning organization, management should develop organizational culture of sharing knowledge, skills, ideas, vision, missions, and work plans, discuss upon them and critical appreciation. Shared vision is important to motivate people learn, as it creates a common identity that provides focus and energy for learning. For this, learning organizations tend to have flat and decentralized organizational structure.

- **Team learning :** Team learning is the process or system of integrating the individual learning in the organization. It creates synergy effect to increase the problem solving expertise of the organization more quickly. Team learning becomes possible from team meetings in which team members can learn better from each other by concentrating on listening, avoiding interruption, being interested in and responding. Learning organizations facilitate creating environment for breaking down boundaries for sharing and learning new knowledge in the organization. Team learn how to think together which facilitates adapting and developing the team capacity to create the results that its members really want.

SUMMARY OF LEARNING OBJECTIVES

❒ Management was developed along with human civilization. Once people started to live in family unit and society, they required management. Family is taken as the basis of development of management principles and techniques in traditional era. Even today we are using such principles in the organizations. Today, management has many principles and well developed literature. Most of these literatures were developed in the twentieth century. Many scholars and practitioners have contributed in the development of different management perspectives .

1. **The Classical Theory**
    Classical perspectives are those which were propounded earlier. These perspectives concern with efficiency and productivity through the *one best way universally applicable management principles and formal relationship based on hierarchy of job*. This is traditional theory which represents scientific management theory, administrative management theory and bureaucratic theory.

i. **Scientific Management Theory :** This theory is developed by Frederick Winslow Taylor. This theory focuses on job and states that productivity can be improved endlessly through the use of scientific principles. Taylor wanted to solve the problems of low quality, low productivity and high wastage. For this, he suggested that every job should be done scientifically to solve these problems. Additionally, he emphasized on the need of hiring on the basis of technical qualification and training workers them to increase specialization, time and motion studies, use of differential piece rate wage systems, need of standardized tools and equipments and enough rest to reduce fatigue.

    Principles of Taylor's Scientific Management : Scientific management is the art of knowing exactly what is to be done and how it is to be done. Taylor's scientific management concludes following principles :
    - Science, not rule of thumb
    - Harmony, not discord

- Cooperation, not individualism
- Maximum output in place of restricted output
- Development of individuals for their greatest efficiency and propensity

ii. **Administrative Management Theory :** This theory is propounded by Henry Fayol who was mining engineer by profession. He used administration in the management first time. This theory focuses on universal application of management principles, tools, functions and skills.

Principles of administrative management theory

1.	Division of Work	2.	Authority and Responsibility
3.	Discipline	4.	Unity of Command
5.	Unity of Direction		
6.	Subordination of Individual Interest to General Interest		
7.	Remuneration of Personnel	8.	Centralization
9.	Scalar Chain	10.	Order
11.	Equity	12.	Stability of Tenure
13.	Initiative	14.	Esprit de Corps

iii. **The Bureaucratic Theory :** This theory was developed by Max Weber who was a German sociologist. According to him the ideal model for management is the bureaucratic approach which ensures efficiency and effectiveness. He described the principles of bureaucracy in his book titled "The theory of Social and Economic organization". He defined bureaucracy as, "an ideal form of organization whose activities and objectives are rationally thought out and whose divisions of labour are explicitly spelled out. This theory stressed strictly defined hierarchy governed by clearly defined regulations and lines of authority. Weber used this method to form an ideal-type bureaucracy with the following principles:

- Well defined hierarchy of authority
- Job specialization (Division of labor)
- Clearly defined formal rules and regulations
- Impersonality of personal relations (social distance between superior and subordinates)
- Formal selection of manpower and basis of technical qualification and examination
- Career orientation-professional officials rather than ownership of units, career in the organization.

2. **Human Relations and Behavior Science Theory**

Elton Mayo and his research team from Harvard University conducted a series of research studies during 1922 to 1932 among several group of workers at the Hawthorne Plant of the Western Electric Company in Chicago. The conclusions of Hawthorne study are :

- Fellowship and self-respect influence the workers' behavior.
- Productivity is not only a technical but also a social aspect.
- Group or team sprit influences individual behavior significant effects on productivity than working conditions.
- Physical factors and monetary incentives are not enough to decrease efficiency and productivity.
- This experiment emphasizes on social, psychological and physiological factors of workers and employees.

3. **Behavioral Science Perspectives :** There are many perspectives which deal with behavioral aspects of workers and their productivity. Some of the important behavioral science perspectives are explained are described below :

i. **Theory of participative management:** Mary Parker Follet contributed more to develop this theory of management. According to Follet human element in the workplace is an important factor. Management should achieve integrative unity through co-ordination and co-operation. To make better efficiency and productivity, employees should be involved in management decision making process.

ii. **Theory of human needs:** This theory is developed by Abraham Maslow. This theory assumes that needs of human being form hierarchy and workers are motivated to fulfill their needs. Maslow categorized human needs into five levels as physiological need, safety need, social need, self-esteem need and self-actualization needs from lower to higher level needs. According to Maslow, lower order needs like physiological and safety needs should be satisfied first then only higher order needs like social, ego and self-actualization needs can be emerged to fulfill them employees get motivation.

iii. **Theory X and Theory Y:** This is a motivational theory developed by Douglas McGregor. He claims that there are two types of people in organization. These two types of people are categorized into two groups X (for theory X) and group Y (for theory Y) on the basis of their nature and attitude. Theory X represents the people with traditional and negative assumptions about job and organization. According to theory X, most people dislike the works and they avoid responsibility. Theory Y

represents workers who are naturally laborious, self-responsible, self-directed and self-controlled. Such people are committed to objectives and want democratic leadership style. They do not like to avoid work but want to do more challenging and creative works.

iv. **Two factors theory :** This theory is propounded by Frederick Herzberg as a theory of motivation. According to this theory, all the factors cannot motivate employees. Some of the factors just protect from demotivation while some of others can motivate employees. Thus Herzberg classified factors into two major categories as Hygiene factors and Motivating factors. Hygiene factors are only protector from demotivation while motivating factors are motivator.

v. **Theory Z:** Theory Z is the name applied to Japanese Management Style (based on Edwards Deming's fourteen principles) popularized during the period of Asian economic boom of the 1980s. Theory Z focused on increasing employee loyalty towards the organization. This theory believes on job for life with a strong focus on the well-being of the employee both on and off the job in order to motivate employees. Theory Z emphasizes that management must promote stable employment for high productivity, high employee morale and satisfaction.

4. **The Decision Science Theory of Management**

Herbert Simon was main profounder of decision science theory who won the Nobel Prize in 1986 for his outstanding work on decision science. According to this theory, managers should be involved in decision making process regarding introduction of new products, selecting new employees, adjusting organizational structure, setting organizational goals, finalizing plans, purchasing fixed assets and many others day to day activities. Decisions of managers must be rational.

5. **Management Science Theory**

The concept of operation research was developed during the Second World War by British government period to find out the unique solution of problems. The focus of this approach is on planning, designing and implementing strategies through mathematical models. Managers should predict everything on the basis of proved mathematical and statistical perspectives . This theory is also known as mathematical or quantitative approach of management.

6. **The System Theory of Management**

A system is defined as a flow of group of inter-related activities or parts working together as a whole. System theory may be defined as a goal oriented organism composed of parts that are interacting and interrelated in such a way that the total system is greater than the sum of its parts operated individually. This theory is the unified view of management and looks at an organization in its totality. All systems are composed of four basic elements : input, process, output and feedback. System can be closed or open.

7. **The Contingency Theory**

This theory was developed in 1960 jointly by Tom Burns and GM Stalker in Britain and Paul Lawrence and Jay Lorsch in USA. According to this theory, management concepts are contingent on a particular situation. This theory is the most recent development in management school of thought. The conclusion of contingency theory is that *there is no one best way to solve problems uniformly in all the organizations.* Each situation may be unique and demands unique managerial action different from other situation. The major contingency variables for the organization are :

- Size of organization
- Task technology level of organization
- Environmental uncertainties and
- Individual differences.

❑ **Emerging Management Concepts**

In order to cope with such complexities, new management concepts are being emerging. Some of them are discussed below :

1. **Work force diversity :** Globalization and growing legal concern in the equality in job position, the complexities of work force variation i.e. diversity is increasing rapidly. In modern organizations, work force i.e. human resources are varying in terms of age, gender, caste and race, economic status, social status, geographical variation, etc. They carry different attitudes and needs differently.

Benefits of workforce diversity

- Variety of perspectives
- Increased creativity
- Increased productivity
- Improved performance
- Brand reputation
- Better decision making

- Higher employee engagement and reduced turnover
- Improved hiring results

Limitations of workforce diversity

- Poor focus on leadership qualities
- Chances of conflict
- Decrement in mutual trust
- Creating communication problems
- Increase in complaint
- Difficult to apply

2. **Knowledge management :** Knowledge management is the process of capturing value, knowledge and understanding of corporate information. This concept creates, uses and reuses the knowledge by using information technology systems. Knowledge management efforts typically focuses on organizational objectives such as improved performance, competitive advantage, innovation, the sharing of lessons learned, integration and continuous improvement of the organization.

Knowledge management process

- Knowledge discovery
- Knowledge sharing
- Knowledge capture
- Knowledge application

Core Considerations for a Knowledge Management Program

- People
- Technology
- Culture
- Processes
- Structure

Steps to Knowledge Management Implementation

- Establish knowledge management program objectives
- Prepare for change management
- Define a high-level process as a foundation
- Determine and prioritize technology needs
- Assess current state
- Build a knowledge management implementation roadmap
- Implementation
- Measure and Improve the Knowledge Management Program

3. **Outsourcing :** In this concept, organizations contract for the product or services to the other organization in which other organizations are more competent. They can contact for whole process for particular product or parts or for only certain processing in which they low competency. Nowadays, business organizations are outsourcing for the following sectors:

- Management professionals
- Certain processes of final production
- Distribution, etc.
- Supply of human resources
- Complete production

4. **Learning organization:** This concept explains as the organization should be converted into a learning center to create new knowledge and methods to solve different problems. Only the knowledge is the way to lead today's competitive market. So, it is most important to give emphasis on learning different techniques to become more competitive. Knowledge is not bounded with age, gender, and level of the organization. So, managers need to create free learning environment to its employees within the organization to make them globally competent.

Features of learning organizations

- Systems thinking
- Mental models
- Team learning
- Personal mastery
- Shared vision

EXERCISE

Brief Answer Questions

1. What is classical management thought? Explain.

2. State different contributions of classical management perspectives .

3. What are different limitations of classical management perspectives ?

4. State and explain human relations theory in management.

5. Explain behavioral science theory of management.

6. How is system theory applicable in modern organization? Explain.

7. How does us decision theory help to managers? Explain.

8. Managers need to adopt contingency approach. Explain.

9. Define the expression workforce diversity.

10. What is meant by outsourcing? How does it help in modern management?

11. Knowledge management is only the way to compete in current competitive environment. Explain.

12. What is meant by learning organization concept? Explain.

Descriptive Answer Questions

13. Introduce scientific management. Explain the major contributions made by F.W. Taylor.

14. What is administrative management theory? Explain the principles of management introduced by H. Fayol.

15. Compare and contrast F.W. Taylor's scientific management and H. Fayol's principles of management.

16. Introduce human relation approach. State the limitations and contributions of human relation approach. Explain the human relation theory of management.

17. What do you mean by behavioral science approach? Explain Abraham Maslow's need hierarchy theory with its major contributions.

18. Describe the contributions and limitations of human relation theory.

19. State and explain the theory X and Y established by Duglas McGregor.

20. Explain Fredrick Herzberg's two-factor theory of management.

21. Introduce decision theory with its contributions and limitations.

22. What is a system theory of management? Explain in brief the pros and cons of systems theory.

23. What is scientific management theory? Describe the major contributions and limitations of scientific management theory.

24. Differentiate between open and closed system. How does the system approach affect management practice?

25. Highlight in brief the contingency theory of management.

Analytical Answer Questions

26. Apply the system theory concepts to an organization with which you are familiar. What are its inputs and outputs? What are the challenges in managing an organization from the systems theory perspective?

27. Management perspectives are established even in every part of the world not exactly fit in each organization. On the light of this statement, state and explain contingency theory of management with its contributions and limitations.

CASE

Dibya, Dristi, and Dipika are university friends and three managers at the 3D Art Gallery established in Babarmahal, Kathmandu. After completing their graduation in fine art, they decided to start a gallery in the suggestion of Sapana Shrestha, an interior designer. In three years of time, they were selling their painting of net worth 20 lakhs a year, a very good sales reported. They decided to expand the business in Lalitpur and Bhaktapur taking Sapana also a partner and expanding the business in terms of interactive art studios. As part of this expansion, one of the managers will be chosen to oversee the new wing of the gallery, which will feature interactive art studios, classes for aspiring artists taught by gallery staff, and a rotating display of modern art collections. This position will require the manager to look-after the complex task of designing new interactive studios every month (which requires a complete redesign of the space), managing the gallery staff that will be teaching art classes, and finally working with the museum curators that fall under other departments to coordinate the acquisition of new and modern art collections to the gallery one per quarter. While it is not a promotion in pay, it is a promotion in title and whichever manager is chosen would likely be the frontrunner for gallery director in the future and as such Dibya, Dristi and Dipika all very much want the position. Later, Dibya was chosen the position of Director, she has a difficult decision to make each of the managers brings something to the table. As Dibya was not from management background, she started to consult a friend specialized in leadership styles and management, Dibya has decided she will lean on Contingency Theory in order to determine which manager is the best fit for this situation, tasks, and the personnel she will have working under her.

Dibya takes several weeks to make her decision. She uses this time to observe, assess and review each of other two managers' strengths. During this assessment, Dibya learns that Dipika is motivated by tasks and Dristi can be motivated by either tasks or relationships. In observing, Dibya has also noticed that Dipika tends to be more forward and focuses on what needs to be accomplished in a given day, which can come across as rude and aligns with the assessment given. Dibya is very kind to everyone and wants to keep everyone happy, while Dristi is a mix of keeping those who work for her happy and getting the job done. Dibya knows that it is important to consider how much each candidate has control over her subordinates and that there are a few ways to determine this. Dibya wants to be sure that whomever she chooses will have a strong and positive relationship with her subordinates in the new business expansion.

Questions

1.   Based on the case, how Dibya wish to follow the contingency theory?
2.   What fundamental difference do you find in Dristi and Dipika in terms of way of dealing with subordinates? How do you link their management style with theory?
3.   If you need to suggest Dibya to choose the manager, whom do you suggest and why?

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