Unit 3: Evolution of Management Thoughts

Scientific Management Principles:

Meaning
The term scientific management is the combination of two words i.e. scientific and management. The word "Scientific" means systematic analytical and objective approach while "management" means getting things done through others. In simple words scientific management means application of principles and methods of science in the field of management. "Scientific management is the art of knowing best and cheapest way". It is the art of knowing exactly what is to be done by whom it is to be done and what is the best and cheapest way of doing it. Scientific methods and techniques are applied in the field of management i.e., recruitment, selection, training, placement of workers and methods of doing work in the best and cheapest way.

The Scientific management can be studied under the following heads:

- Primary principles of scientific management as evolved by F.W. Taylor.
- Secondary principles of scientific management.

Definitions of Scientific Management

The main definitions of scientific management are as follows:

According to Fredrick Winslow 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."

According to Harlow Person, "Scientific management characterizes that form of organisation and procedure in purposive collective effort which rests on principles or laws derived by the process of scientific investigation and analysis, instead of tradition or on policies determined empirically and casually by the process of trial and error."

According to Jones, "Scientific management is a body of rules, together with their appropriate expression in physical and administrative mechanism and specialized executives, to be operated in coordination as a system for the achievement of a new strictness in the control and process of production."

According to Lloyd, Dodd and Zynch, In broad outline "Scientific management seeks to get the maximum from methods, men materials machines and money and it controls the works of production from the location and layout of the worker to the final distribution of the product."

According to Peter F. Drucker, " Scientific management is the organized study of work, the analysis of work into its simplest element and the systematic improvement of the workers".

Characteristics / Features of Scientific Management

The main characteristics or features of scientific management are as follows:

- Approach: It is a systematic, analytical and objective approach to solve industrial problems.
- Economy: The basis of scientific management is economy. For implementing economy, all the unnecessary elements of production are eliminated and a sincere effort is made to achieve optimum production at the minimum cost.
• A Definite plan: The main characteristic of scientific management is that before starting and work there must be a definite plan before and the work is to be done strictly according to that plan.

• Discards old methods: It discards the age old methods of rule of thumb and hit or miss approaches.

• Emphasis: It lays emphasis on all factors of production, men, material and technology.

• Techniques: It implies scientific techniques in methods of work, recruitment, selection and training of workers.

• Attempts: It attempts to develop each man to his greatest efficiency and prosperities.

• Method: It attempts to discover the best method of doing a work at the cheapest cost.

• A definite Aim: It is another main characteristic of scientific management. Scientific management is the process of organizing, directing, conducting and controlling human activities. Hence there must be a definite aim before the managers, so that the human activities be organized directed conducted and controlled for achieving that aim or aims.

• Changes in attitude: It involves a complete change in the mental attitude of workers as well as the management.

• A Set of Rules: There must be a set of rules in accordance with the laid plan so that the objectives can be achieved. According to F.W. Taylor, It is no single element but rather the whole combination that constitutes the scientific management.

• Primary Principles of scientific management as evolved by F.W. Taylor:

  F.W. Taylor, the father of scientific management evolved the following five primary principle of scientific management:

  Science, not Rule of Thumb
  Rule of thumb was the technique of pre-scientific management era. Taylor maintained that the rule of thumb should be replaced by scientific knowledge. While rule of thumb emphasizes mere estimation, scientific method denotes precision in determining any aspect of work. This should be done with the help of careful scientific investigation. Exactness of various aspects of work like day's fair work, standardization in work, differential price rate for payment etc. is the basic care of scientific management. Therefore, it is essential that these should be measured precisely and not on mere estimates.

  Harmony not Discord
  Taylor emphasized that harmony rather than discord should be obtained in group action. Harmony means that a group should work as a unit and contribute to the maximum. Within it there should be mutual give and take situation and proper understanding.

  Co-operation not Individualism
  Scientific management requires that parts of industrial body co-operate with each other, scientific management is based on mutual confidence, co-operation and goodwill. It requires a complete mental revolution on the part of both workers and management. Taylor suggested "Substitution of war for peace, hearty and brotherly co-operation for contention and strife, replacement of suspicious watchfulness with mutual confidence of becoming friends instead of enemies."

  The Development of each man to his greatest efficiency and prosperity
  In order to maximize production all possible efforts are made to increase the efficiency of workers. Workers are selected according to the nature of work. It includes scientific training, scientific allotment of work, implementation of incentive wage plan above all, development of workers to the fullest extent for themselves and also for the companies highest prosperity. Scientific management leads to the development of each worker to his greatest efficiency and prosperity.

• Secondary principles of scientific management:

  Standardization of Tools and Equipments
Another principle of scientific management is the standardization of tools and equipments. It is essential for the improvement of quality of products and also for bringing about uniformity in the production of standard goods. As a matter of fact, standardization should be maintained in respect of tools, equipments, materials, period of work, working conditions, amount of work, cost of production etc.

**Scientific Selection and Training of Workers**
Scientific management requires a radical change in the selection and training or workers. They must be selected on a scientific basis. The old traditional and absolute methods of selection of workers have to be replaced by the scientific and modern methods. Taylor suggested that the workers should be selected on scientific basis taking into account their educational background, health, work experience, aptitude, physical, strength and I.Q. etc. Further, proper training by qualified persons should be given according to their capabilities and nature of work.

**Experimentation and Scientific Investigation**
The success of scientific management depends upon experimentation and investigation. It involves analytical study, observation research, experimentation and investigation. It is only through constant experimentation and scientific investigation that one can find out the best and most efficient methods of doing a work. It has been rightly said that experimentation and investigation is the life-blood of scientific management.

**Incentive Wage System**
Taylor for the first time advocated an incentive wage system in the form of differential piece wages instead of time wages. Under differential piece system two wage rates are prescribed, i.e. one lower and the other higher. Those who are unable to perform standard work within standard time are paid wages at lower rate per unit. On the contrary, those who attain standard or even more within the standard time are paid wages at higher rate per unit. Thus, there is considerable difference in wages between those who attain and those who do not attain standards.

**Scientific Allotment of Task**
Another important principle of scientific management is the scientific allotment of task. Every job must be entrusted to the best available man according to his aptitude and training for that specific job. As a matter of fact, every person, however efficient he may be, cannot perform all the jobs efficiently. One has to carefully fit 'the man to the job', and "the job to the man". The principle of 'right job to the right person' should be implemented. A worker may perform his task most efficiently provided it suits his inclination aptitude taste and capability.

**Frank and Lillian Gilbreth**:- The Gilbreth used motion picture films to study hand and body motions. Their concern was on “economy of movement “ They emphasized on the use of technique and methods to help workers in developing their fullest potential through training , improved tools , working environment and standardize work method.

**Willing H Leffingwell**:- Leffingwell developed five principles of effective work. They are: - i) planning at work ii) scheduling the work iii) executing the work iv) measuring the work and v) rewarding the workers.

**Henry L Gantt**: Gantt refined the production control and cost control techniques. Gantt invent a technique of scheduling work which is also called Gantt Chart. He was the first theorist to suggest management to pay attention to service rather than profits.

**Harrington Emerson**: Emerson not only focuses on efficiency and productivity of work but, on the overall objectives cost accounting and the function of staff department.

**Contribution and limitation of scientific management**
Contribution of Scientific Management:

1. It promoted production through efficiency techniques. Productivity increased through assembly line production method. Gantt chart representing flow of work in still widely used for scheduling work.
2. It facilitates job design thorough specialization and standardization of work.
3. It gave importance to screening, selection, training and compensation of workers for improving efficiency.
4. It introduced rational and systematic method to solve management problems. It replaced “rule of thumb” method of doing work by scientific method.

Limitation of Scientific Management:

1. Exploitation of Workers: Taylor’s Scientific Management put unnecessary pressures on the employees to perform the work faster. Importance was give to productivity and profitability. This resulted in exploitation of the employees. Therefore, many employees joined trade unions. This resulted in mistrust between management and employees.
2. Problem of unity of command: Taylor used functional foremanship. So the workers have to report to eight bosses. This breaks the principles of unity of command, where the workers have to report to only one boss. Lack of unity command can create confusion and chaos in the organisation.
3. Mechanical approach: Taylor approach was a mechanical approach. He gave too much importance to efficiency. He did not consider the human element. Taylor considered workers as robots, which could speed up the work at any cost.
4. Problems of separation of planning and doing: Taylor said to separate planning from doing. In reality we cannot separate planning from doing. The planners should also be engaged in doing then only they are able to make realistic plans for the organisation.
5. Individualistic approach: Taylor’s scientific management gives too much importance to individual performance and not to group performance. However, the success of an organisation depends not only on individual performance of workers, but also on the group performance.
6. Wrong assumption: Taylor assumed that workers are motivated only by financial gains. However, in reality workers are motivated not financial incentives but also by social need and personal egos.
7. Narrow Application: Taylor’s scientific management has narrow application. It can be applied only when the performance of the workers can be measured quantitatively. It can be applied only for factories where the performance can be measured quantitatively. It cannot be used in the service sector because in this sector the performance of a person cannot be measured quantitatively.

Administrative Management Principles:

This theory is concerned with management principles and function. It provided the process approach to management. The major contributors of this theory are Henry Fayol, Max Weber and L Urwick. This theory focuses on functions and skills that are need for management. It consists of:

1. Administrative management Theory (Fayol ‘s Theory)
2. Bureaucracy Theory (Max Weber Theory)

1. Henri Fayol Theory of Management (Administrative Theory)

Fayol developed theory of management. According to him managerial excellence is a technical ability and can be acquired. He developed theories and principles of management which are universally accepted and make him universalistic. He was pioneer of the formal education in management. He stated that, management can be studied in terms of the management process. Management consists of:

4. Principle of management : (See below)

Henry Fayol, a French industrialist, offered fourteen principles of management for the first time in 1916. During the period of 1920-40 in the U.S. many authors did hard work in developing and testing various principles of management. Today, there is a very lengthy list of management principles and it is not possible to give an exhaustive lot of these management principles. Here, we are giving some important principles of management.

Henry Fayol's Principle of Management

Following are the fourteen principles of management developed by the Henry Fayol:

Division of Work
According to Henry Fayol under division of work, "The worker always on the same post, the manager always concerned with the same matters, acquire an ability, sureness and accuracy which increases their output. In other words, division of work means specialization. According to this principle, a person is not capable of doing all types of work. Each job and work should be assigned to the specialist of his job. Division of work promotes efficiency because it permits an organizational member to work in a limited area reducing the scope of his responsibility. Fayol wanted the division of work not only at factory but at management levels also."

Authority and Responsibility
Authority and responsibility go together or co-existing. Both authority and responsible are the two sides of a coin. In this way, if anybody is made responsible for any job, he should also have the concerned authority. Fayol's principle of management in this regard is that an efficient manager makes best possible use of his authority and does not escape from the responsibility. In other awards when the authority is exercised the responsibility. In other awards when the authority is exercised the responsibility is automatically generated.

Discipline
According to Henry Fayol discipline means sincerity about the work and enterprise, carrying out orders and instructions of superiors and to have faith in the policies and programmes of the business enterprise, in other sense, discipline in terms of obedience, application, energy and respect to superior. However, Fayol does not advocate warming, fines, suspension and dismissals of worker for maintaining discipline.
These punishments are rarely awarded. A well disciplined working force is essential for improving the quality and quantity of the production.

**Unity of Command**
A subordinate should take order from only one boss and he should be responsible and accountable to him. Further he claimed that if the unit of command is violated, authority is undermined, disciplined in danger, order disturbed and stability threatened. The violation of this principle will face some serious consequences. In this way, the principle of unity of command provides the enterprise disciplined, stable and orderly existence. It creates harmonious relationship between officers and subordinates, congenial atmosphere of work. It is one of the Fayol's important essential principle of management.

**Unity of direction**
Fayol advocates "One head and one plan" which means that group efforts on a particular plan be led and directed by a single person. This enables effective co-ordination of individual efforts and energy. This fulfils the principles of unity of command and brings uniformity in the work of same nature. In this way the principle of direction create dedication to purpose and loyalty. It emphasizes the attainment of common goal under one head.

**Subordination of individual interests to general interests**
The interest of the business enterprise ought to come before the interests of the praise individual workers. In other words, principle of management states that employees should surrender their personnel interest before the general interest of the enterprise. Sometimes the employees due to this ignorance, selfishness, laziness, carelessness and emotional pleasure overlook the interest of the organisation. This attitude proves to be very harmful to the enterprise.

**Fair Remuneration to employees**
According to Fayol wage-rates and method of their payment should be fair, proper and satisfactory. Both employees and ex-employers should agree to it. Logical and appropriate wage-rate and methods of their payment reduces tension and differences between workers and management, create harmonious relationship and a pleasing atmosphere of work. Further Fayol recommends that residential facilities be provided including arrangement of electricity, water and facilities.

**Centralization and Decentralization**
There should be one central point in the organisation which exercises overall direction and control of all the parts. But the degree of centralization of authority should vary according to the needs of situation. According to Fayol there should be centralization in small units and proper decentralization in big organisation. Further, Fayol does not favor centralization or decentralization of authorities but suggests that these should be proper and effective adjustment between centralization and decentralization in order to achieve maximum objectives of the business. The choice between centralization and decentralization be made after taking into consideration the nature of work and the efficiency, experience and decision-making capacity of the executives.

**Scalar chain**
The scalar chain is a chain of supervisors from the highest to the lowest rank. It should be short-circuited. An employee should feel the necessity to contact his superior through the scalar chain. The authority and responsibility is communicated through this scalar chain. Fayol defines scalar chain as "the chain of superiors ranging from the ultimate authority to the lowest rank." The flow of information between management and workers is a must. Business opportunities must be immediately avoided of, so we must make direct contact with the concerned employee. Business problems need immediate solution, so we cannot always depend on the established scalar chain. It requires that direct contact should be established.

**Order:**
According to Fayol there should be proper, systematic and orderly arrangement of physical and social factors, such as land, raw materials, tools and equipments and employees respectively. As per view, there should be safe, appropriate and specific place for every article and every place to be used effectively for a particular activity and commodity. In other words, principles that every piece of land and every article
should be used properly, economically and in the best possible way. Selection and appointment of the most suitable person to every job. There should be specific place for everyone and everyone should have specific place. This principle also stresses scientific selection and appointment of employees on every job.

**Equity**

The principle of equality should be followed and applicable at every level of management. There should not be any discrimination as regards caste, sex and religion. An effective management always accords sympathetic and human treatment. The management should be kind, honest and impartial with the employees. In other words, kindness and justice should be exercised by management in dealing with their subordinates. This will create loyalty and devotion among the employees. Thus, workers should be treated at par at every level.

**Stability of use of personnel**

Principle of stability is linked with long tenure of personnel in the organisation. This means production being a team work, an efficient management always builds a team of good workers. If the members of the team go on changing the entire process of production will be disturbed. It is always in the interest of the enterprise that its trusted, experienced and trained employees do not leave the organisation. Stability of job creates a sense of belongingness among workers who with this feeling are encouraged to improve the quality and quantity of work.

**Initiative**

Under this principle, the successful management provides an opportunity to its employees to suggest their new ideas, experiences and more convenient methods of work. The employees, who has been working on the specific job since long discover now, better alternative approach and technique of work. It will be more useful, if initiative to do so is provided to employees. In simple, to ensure success, plans should be well formulated before they are implemented.

**Spirit of Co-operation (Spirit de crops)**

In order to achieve the best possible results, individual and group efforts are to be effectively integrated and coordinated. Production is a team work for which the whole-hearted support and co-operation of the members at all levels is required. Everyone should sacrifice his personal interest and contribute his best energies to achieve the best results. It refers to the spirit of loyalty, faithfulness on the part of the members of the group which can be achieved by strong motivating recognition and importance of the members for their valuable contribution, effective coordination, informal mutual social relationship between members of the group and positive and constructive approach of the management towards workers' welfare.

**Contribution and Limitation of Administrative Management Theory:**

**Contribution:**
1. This theory serves as the foundation for the study of management function of planning, organizing, staffing, directing and controlling
2. It serves as the guide for modern management behaviors.

**Limitations:**
1. This theory has limited application in the complex and dynamic environment. Since it ignores the impact of environmental changes.
2. This principle is mechanistic in nature, which cannot be applicable in modern management.
3. This theory ignores the importance of human behaviors.

**Comparison between Taylor’s and Fayol’s Principles.**

Both the persons have contributed to development of science of management. The contribution of these two pioneers in the field of science of management has been reviewed as “The work of Taylor & Fayol was, of course, especially complementary. They both realized that problem of personnel & its management at all levels is the key to individual success. Both applied scientific method to this problem that Taylor worked primarily from operative level, from bottom to upward, while Fayol concentrated on
managing director and work downwards, was merely a reflection of their very different careers”. They both differ from each other in following aspects: -

1. Taylor looked at management from supervisory viewpoint & tried to improve efficiency at operating level. He moved upwards while formulating theory. On the other hand, Fayol analyzed management from level of top management downward. Thus, Fayol could afford a broader vision than Taylor.
2. Taylor called his philosophy “Scientific Management” while Fayol described his approach as “A general theory of administration”.
3. Main aim of Taylor - to improve labor productivity & to eliminate all type of waste through standardization of work & tools. Fayol attempted to develop a universal theory of management and stressed upon need for teaching the theory of management.
4. Taylor focused his attention on fact by management and his principles are applicable on shop floor. But Fayol concentrated on function of managers and on general principles of management wheel could be equally applied in all.

**Similarity** - Both emphasized mutual co-operation between employment and employees.

**Spheres of Human Activity**

Fayol’s theory is more widely applicable than that of Taylor, although Taylor’s philosophy has undergone a big change under influence of modern development, but Fayol’s principles of management have stood the test of time and are still being accepted as the core of management theory.

**Psychologists View Point**

According to Psychologists, Taylor's study had following drawbacks: -

1. Ignores human factors - Considers them as machines. Ignores human requirements, want and aspirations.
2. Separation of Planning and Doing.
3. Dissatisfaction - Comparing performance with others.
4. No best way - Scientific management does not give one best way for solving problems

**2. Max Weber’s Bureaucracy Theory**

Max Weber (1864-1920), who was a German sociologist, proposed different characteristics found in effective bureaucracies that would effectively conduct decision-making, control resources, protect workers and accomplish organizational goals. Max Weber's model of Bureaucracy is oftentimes described through a simple set of characteristics, which will be described in this article.

Max Weber's work was translated into English in the mid-forties of the twentieth century, and was oftentimes interpreted as a caricature of modern bureaucracies with all of their shortcomings. However, Weber's work was indented to supplant old organizational structures that existed in the earlier periods of industrialization. To fully appreciate and understand the work of Max Weber, one therefore has to keep the historic context in mind, and not "just" see his work as a caricature of bureaucratic models.

Below, some characteristics of the bureaucratic model are presented. Each characteristic is described in relation to which traditional features of administrative systems they were intended to succeed.
**Fixed division of labor**
The jurisdictional areas are clearly specified, and each area has a specific set of official duties and rights that cannot be changed at the whim of the leader. This division of labor should minimize arbitrary assignments of duties found in more traditional structures, in which the division of labor was not firm and regular, and in which the leader could change duties at any time.

**Hierarchy of offices**
Each office should be controlled and supervised by a higher ranking office. However, lower offices should maintain a right to appeal decisions made higher in the hierarchy. This should replace a more traditional system, in which power and authority relations are more diffuse, and not based on a clear hierarchical order.

**Rational-legal authority**
A bureaucracy is founded on rational-legal authority. This type of authority rests on the belief in the "legality" of formal rules and hierarchies, and in the right of those elevated in the hierarchy to posses authority and issue commands. Authority is given to officials based on their skills, position and authority placed formally in each position. This should supplant earlier types administrative systems, where authority was legitimimized based on other, and more individual, aspects of authority like wealth, position, ownership, heritage etc.

**Creation of rules to govern performance**
Rules should be specified to govern official decisions and actions. These formal rules should be relatively stable, exhaustive and easily understood. This should supplant old systems, in which rules were either ill-defined or stated vaguely, and in which leaders could change the rules for conducting the daily work arbitrarily.

**Separation of personal from official property and rights**
Official property rights concerning e.g. machines or tools should belong to the office or department - not the officeholder. Personal property should be separated from official property. This should supplant earlier systems, in which personal and official property rights were not separated to the needed extent.

**Selection based on qualifications**
Officials are recruited based on qualifications, and are appointed, not elected, to the office. People are compensated with a salary, and are not compensated with benefices such as rights to land, power etc. This should supplant more particularistic ways of staffing found in more traditional systems, where officials were often selected due to their relation with the leader or social rank. Benefices such as land, rights etc. were also common ways of compensating people, which was to be replaced by a general salary matching qualifications.

**Clear career paths**
Employment in the organizations should be seen as a career for officials. An official is a full-time employee, and anticipates a lifelong career. After an introduction period, the employee is given tenure, which protects the employee from arbitrary dismissal. This should supplant more traditional systems, in which employees’ career paths were determined by the leader, and in which employees lacked the security of tenure.
Max Weber viewed these bureaucratic elements as solutions to problems or defects within earlier and more traditional administrative systems. Likewise, he viewed these elements as parts of a total system, which, combined and instituted effectively, would increase the effectiveness and efficiency of the administrative structure.

The bureaucratic structure would to a greater extent protect employees from arbitrary rulings from leaders, and would potentially give a greater sense of security to the employees. Additionally, the bureaucratic structure would create an opportunity for employees to become specialists within one specific area, which would increase the effectiveness and efficiency in each area of the organization.

Finally, when rules for performance are relatively stable, employees would have a greater possibility to act creatively within the realm of their respective duties and sub-tasks, and to find creative ways to accomplish rather stable goals and targets.

**Criticisms of Bureaucracy Theory**

Bureaucratic organisation is a very rigid type of organisation. It does not give importance to human relation. It is suitable for government organisation. It is also suitable for organisation where change is very slow. It is appropriate for static organization.

Bureaucratic organisation is criticized because of the following reasons:

1. Too much emphasis on rules and regulation. The rules and regulations are rigid and inflexible.
2. No importance is given to informal groups. Nowadays, informal groups play an important role in all business organization.
3. Bureaucracy involves a lot of paper work. The result in lot of wastage of time, effort and money.
4. There will be unnecessary delay in decision making due to formalities and rules.
5. Bureaucratic model may be suitable for government organisation. But it is not suitable for business organisation because business organisation believe in quick decision making and flexibility in procedures.
6. Too much importance is given to the technical qualification of the employees for promotion and transfers. Dedication and commitment of the employee is not considered.
7. There is difficulty in coordination and communication.
8. There is limited scope for human resources (HR)

**Behavioural Science Theory:**

Behavioural Science Theory includes human relation and behavioural science movement. It modified improved and extended the classical theory. Classical theory concentrated on job content and management of physical resources, where as behavioural science theory gave greater emphasis to man behind the machine and stressed the importance of individual as well as group relationship.

a. **Chester Barnad:** Barnad argued that people join organization to satisfy some of their personal objectives. Organization should therefore, satisfy such personal goals, of employees, while pursuing organizational goals. An organization can sustain and survive only when it strikes a balance between their personal and organizational goals.

b. **Mary Parker Follett:** Follet propounded democratic and participatory theory of management. She pointed out the need for the concept of group and association to be introduced in the practice of management. She advocates the democratization of the work force.
c. **Elton W. Mayo (The Hawthorne Studies):** The study conducted by Elton Mayo and his associates between 1927-1932 at Western Electric’s Hawthorne Plant dramatically impacted the prevailing thought of management. They experimented the effect of illumination on work productivity. In that study, two groups: i) controlled and ii) experiment groups were formed to find out the effect of bright and dim light. The control group worked without change in lighting and the experiment group worked in fluctuating lighting condition. The result showed that there is no relation between illumination and performance. In other words, productivity of both groups increased. Thus, the study concluded that the human element (more specifically relation among workers) is important in the workplace. This study discovered the effect of group norms and standard on individual behaviour. In another experiment Mayo revealed that productivity improved by change in working conditions as length of rest time, duration of work, presence or absence of free lunch etc.

d. **Maslow’s Hierarchy of Needs:**

Maslow’s Hierarchy of Needs (Abraham Maslow): Maslow hypothesized that within every human being, there exists a hierarchy of five needs.

- a. **Physiological:** Includes hunger, thirst, shelter, sex and other bodily needs.
- b. **Safety:** Security and protection from physical and emotional harms.
- c. **Social:** Affection, belongingness, acceptance and friendship.
- d. **Esteem:** Internal factor such as self respect, autonomy and achievement and external factors such as status, recognition and attention.
- e. **Self-actualization:** Drive to become what one is capable of becoming: includes growth, achieving one’s potential and self fulfillment.

Maslow’s Hierarchy of Needs

Maslow separated the five needs into higher and lower orders.

1. **Lower order needs:** The needs that are satisfied externally and lower order needs, such as physiological needs, and safety needs.
2. **Higher order needs:** The needs that are satisfied internally, such as social, esteem and self-actualization needs.
e. McGregor’s Theory X and Theory Y:

Douglas McGregor invented the Theory X and Theory Y, also known as “hard guy, soft guy” approaches of managing people in the organization. It states that, people’s commitment to work in organization is influenced by assumptions managers make about people. One set of assumption is called theory X, which describes employees with relatively negative view. And another set of assumption is called theory Y, which describe employees positively.

McGregor’s Theory X and Theory Y

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<tr>
<th>Theory X (Traditional View)</th>
<th>Theory Y (Contemporary View)</th>
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<tr>
<td>1. The average person dislikes work inherently.</td>
<td>1. The average person does not inherently dislike work but depending on condition may find work to be satisfying or punishment.</td>
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<td>2. The average person will avoid work if he or she can.</td>
<td>2. People will exercise self-direction and self-control to achieve organizational objectives under certain conditions.</td>
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<td>3. Most people must be coerced, controlled or threatened with punishment to get them to work toward the achievement of organizational goals.</td>
<td>3. People will seek to attain their firm’s objectives if there are sufficient rewards provided.</td>
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<td>4. The average person prefers to direct to avoid responsibility.</td>
<td>4. Under proper conditions the average individual will seek responsibility.</td>
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<td>5. The average individual has relatively little ambition and wants security above all.</td>
<td>5. The capacity to use imagination and originality is widely found in the people.</td>
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Contribution and Limitation of Behavioural Theory:

Contributions:

1. This theory shifted the focus of management to the human side of organization. The “rational man” of scientific became “social man” in the human relation theory.
2. Social Setting and groups are important for productivity. Workers respond to pressures of informal work groups.
3. Non-Financial rewards such as recognition and appreciation are important for worker productivity.
5. Theory Y assumptions get people’s commitment to work.

Limitations:

1. This Theory gives overemphasis on human variable.
2. Human behaviour is complex and is studied from a variety of viewpoints. This complicates the problem for a manager trying to use insights from the behavioural sciences.
3. Human behaviour cannot be predicted. This limits the practical application of this theory.
4. Focus on symbolic reward may not always be effective on motivating the staffs.
The Decision Theory:

Herbert Simon, Luther Gulik and Lyndall Urwick have been the major contributor to this management thought. This theory focuses on managerial decisions. Decisions are made through rational choice among different alternative available. It is a choice making activity and choice determines our activity.

Herbert Simon’s (One of the major contributors of decision theory) model is based on two concepts

a. Bounded rationality: rational decision making is constrained by limitation of knowledge, resource etc.
b. Satisficing: Maximization is not possible in decision making. Decision make should “satisfice” and achieve the satisfactory outcome administrative man always satisfice.

This theory advocates that decision making should be rational. The rational approach to decision making should involves the following steps:

a. Define the problems
b. Identify relevant alternatives
c. Evaluate the alternatives.
d. Select the best course of action
e. Implement the action
f. Evaluate the result of the action

Contribution and Limitation of Decision Theory

Contribution:
1. In the field of management the decision theory provides guidelines for manager to make decision and solve problems.
2. This theory provides the “science” of improved organizational decision making through quantitative methods.
3. The theory makes the path for studying the process by which administrative organization makes decisions.

Limitations:
1. It does not take a total view of management. Its scope is limited.
2. Sometimes it is difficult to claim whether a decision finalize the action or commence the action.

Management Science Theory

The management science theory applies statistical and mathematical technique to solve complex problem in business. It focuses on solving technical rather than human behaviour problem. It used the techniques like linear programming, economic order quantity (EOQ), game theory, queuing theory etc to solve the problem. With the development of computer technology and other source of communicate media there has been high impact of management science theory in the business world to make decision and solve complex problems.

Currently, there are three main branches of management science. They are:-

a. Quantitative management: It utilizes mathematical techniques such as linear programming, modeling, queuing theory, etc to help managers make right decisions.
b. Operation management (Operation Research): It provides managers with a set of techniques that they can use to utilize an organization’s production system to increase efficiency.
c. Management Information System: It helps managers design information systems that provide information about events occurring within and outside an organization.

**Contribution and Limitation of Management Science Theory:**

**Contributions:**

1. This theory provides a new way to think about the complex managerial problems of the future and prescribes a basis to manage these problems proactively.
2. This theory enhances managers' understanding of overall organizational processes.

**Limitations:**

1. This theory ignores the importance of people, relationships, and other non-quantifiable factors.
2. The assumptions used for quantifying decision making do not match the real-world situations.
3. This theory is not a substitute for management functions. It prescribes a limited number of tools for the specific use in solving problems.

**The System Theory**

During the 1960s, management researchers began to analyze organizations from a systems perspective, a concept taken from physical science. A system is a combination of two or more interrelated or interdependent parts in a whole unit. A system is an established arrangement of components which leads to attainment of particular objectives according to plan. The two basic types of systems are closed systems (which do not interact with their environment) and open systems (which dynamically interact with their environment).

Business organizations are perceived as open adaptive systems. Any organism can be considered an energy system which has inputs, transformation processes, and outputs. In general, the term system is applied to any activity or any collection of facts, ideas, or principles which are so arranged as to present a united whole. All operations of the system will be methodical, thorough, and regular and above all as per plan to achieve set objectives. In business, many divisions and departments are organized on functional bases and all act as coordinated wholes to achieve the basic objectives of the firm. E.g. the inputs for a university would be students, teaching materials, books, money, and so on. The transformation processes would consist of lectures, seminars, assignments, research, study, discussion, counseling, etc. The output would be educated, cultured, and disciplined individuals ready to enter the real world of business or employment.

The major features of a system are:

1. Every system is always focused on a goal.
2. A particular system has some subsystems. Each subsystem interacts with each other.
3. Systems may be open or closed.
4. There is always a unity of action in each and every subsystem to achieve an overall system goal.
5. A system always has a boundary, which separates it from its environment.
6. Systems depend upon the flow of information in and outside their boundaries.
7. The emphasis is given to the effective feedback for system function control.
System View of Organization

**Contribusion and Limitation of System Theory:**

**Contributions:**

1. It recognizes the interrelation and interactions among subsystems for synergetic effect. In addition it implies that decision s and actions take in one organizational area will affect others and vice versa.
2. It recognizes that organizations are not self-contained. They rely on their environment for essential inputs and as outlets to absorb their outputs.

**Limitations:**

1. There are practical problems in applying system theory in organizations. The problems occur to determine system’s boundaries and identify interrelations of the various sub-systems.
2. How managers have to process the things is not very clearly defined by the system theory.

**Contingency Theory (Situational Theory)**

The contingency theory can be described as “if, then” theory, i.e. If this is the way my situation is, then this is the best way for me to manage. It states that, organization and even the units within the same organization are diverse—in size, goals, work activities etc. So one best way, or universally applicable management is not possible. Thus, management depends upon the situation and should act according to the situation. The major contingency variables are:

1. Organizational Size: As size increase, so do the problems of coordination. For instance, the type of organizational structure appropriate for an organization of 50,000 employees is likely to be inefficient for an organization of 50 employees.
2. Routineness of Task Technology: To achieve its purpose, an organization uses technology. Routine technologies require organizational structure, leadership styles and control system that differ from those required by customized or non-routine technologies.

3. Environmental Uncertainty: The degree of uncertainty caused by environmental changes influences the management process. What works best in a stable and predictable environment may be totally inappropriate in a rapidly changing and unpredictable environment.

4. Individual Differences: Individual differences in terms of their desire for growth, autonomy, tolerance of ambiguity, and expectations. These and other individual differences are particularly important when managers select motivation techniques, leadership styles and job designs.

**Contributions and Limitations of Contingency Theory:**

**Contributions:**

1. This theory helps to examine the conditional or moderating variables of cause and effect relations.
2. This theory helps to improve the caliber of the managers. Since more knowledge is gained about which factors should be take into account in what situation managers have to use their best knowledge and will manage organizations better than now in the future.

**Limitations:**

1. This theory may not be applicable to all managerial issues. Since, it fails to identify all the important contingencies.