LECTURE NOTES

ON

MANAGEMENT SCIENCE

IV B. Tech I semester
(JNTUH-R15)

Ms. B.SWATHI
Assistant Professor
&

Ms. K.L.REVATHI
Assistant Professor

ELECTRONICS AND COMMUNICATION ENGINEERING

INSTITUTE OF AERONAUTICAL ENGINEERING
(AUTONOMOUS)
DUNDIGAL, HYDERABAD - 500 043

UNIT-1

INTRODUCTION TO MANAGEMENT

When human being started group activities for the attainment of same common objectives whenever a group is formed and a group activity is organized to achieve certain common objectives management is needed to direct, co-ordinate and integrate the individual activities of a group and secure teams work to accomplish organizational objectives. The objectives of all business are attained by utilizing the scare resources like men, materials, machines, money etc.

In process of management, a manage uses human skills, material resources and scientific methods to perform all the activities leading to the achievement of goods.

Definition: Management is knowing exactly what you want men to do and then seeing that they do it the best and cheapest ways.   F.W.Taylor

OR

Management is defined as the creation and maintenance of an internal environment in an enterprise where individuals working together in groups, can perform efficiently and effectively towards the attainment of group goals.

Nature of Management: The study and application of management techniques in managing the affairs of the organization have changed its nature over the period of time.

Multidisciplinary: Management is basically multidisciplinary. This implies that, although management has been developed as a separate discipline, it raws knowledge and concepts from various disciplines. It draws freely ideas and concepts from such disciplines as psychology, sociology, anthropology, economics, ecology, statistics, operations research, etc. Management integrates the ideas and concepts taken from these disciplines and present newer concepts which can be put into practice for managing the organization.

Dynamic nature of principle: Based on integration and supported by practical evidences, management has formed certain principles. However, these principles are flexible in nature and change with the changes in the environment in which an organization exists.

Relative, not absolute principles: Management principles are relative, not absolute, and they should be applied according to the need of the organization. Each organization may be different from others. The difference may exist because of time, place, socio-cultural factors, etc.

Management Science or Art: There is a controversy whether management is science or art. However, management is both a science and art.

Management as profession: Management has been regarded as profession by many while many have suggested that it has not achieved the status of a profession.

Characteristics of Management:

- Setting goals for organizations: Goals differ from organization to organization in business, the basic economic goal is to earn maximum profit, while in service organization like hospital and educational institution for the basic goal is to provide better service and better education.

- Awareness of opportunities and resources: Management have awareness of opportunities and resources like men, materials, money which assembles and integrates by management.

- Management is transformation process: Management is a transformation process consisting of planning, organizing, staffing, directing and controlling.

- Management is universal: The principles and techniques of management are universally applicable to all group activities performed at any level of organization.

- System of authority: System of authority means a hierarchy of command and control. Managers at different levels possess varying degrees of authority.

- Co – Ordination: Various human beings organized in formal groups are endeavoring to achieve the common organizational objectives, so various departments in the organization must work in harmony with one another.

- ➢ Management is Dynamic: The ever changing social environment directly and indirectly effect the group activity thus changing environments provide a challenge to management. Efficient management cannot remain static it must adopt itself to changing conditions.

- ➢ Management is decision making: The managers are decision makers the marketing manager decides about how to market, when to market, where to market how to collect funds for organization.

- ➢ Management is a profession: Management is not only a science but also an art. Art means managers have to handle the person and things tactfully. Science means achieving objectives through procedures.

Importance of Management: No ideology, no ism, or political theory can win greater output with less efforts from a given complex of human and materials resource only sound management And it is on such greater output that a higher standard of life, more leisure, more amenities for all must necessarily be found.

- ➢ Effective utilization of resources: Management tries to make effective utilization of various resources. The resources are scarce in nature and to meet the demand of the society, their contribution should be maximum for the general interests of the society. Management not only decides in which particular alternative a particular resource is used but also takes actions to utilize it in that particular alternative in the best way.

- ➢ Development of resources: Management develops various resources. This is true with human as well as non-human factors. Most of the researches for resource development are carried on in an organization way and management is involved in those activities.

- ➢ To incorporate innovations: Today changes are occurring at a very fast rate in both technology and social process and structure these changes need to be incorporated to keep the organizations alive and efficient.

- ➢ Therefore, they require high degree of specialization, high level of competence, and complex technology. All these require efficient management so that organizations work in the most efficient way.

➢ Integrating various interest groups: In the organized efforts, there are various interest groups and they put pressure over other groups for maximum share in the combined output. For example, in the case of business organization, there are various pressure groups such as shareholders, employees, government etc. These interest groups have pressure on an organization.

➢ Stability in the society: Management provides stability in the society by changing and modifying the resources in accordance with the changing environment of the society. In the modern age, more emphasis is on new inventions for the betterment of human beings. These inventions make old systems and factors mostly obsolete and inefficient. Management provides Integrated between traditions and new inventions and safeguards, society from the unfavorable   impact of these inventions so that continuity in social process is maintained.

Levels of Management:

1. Top Management

2. Upper Middle management

3. Middle Management

4. Lower Management

5. Operating Force or Rank and file workmen

Top Management includes:

 a) Board of directors b) Managing directors c) Chief executives d) General Manager e) Owners

Functions:

✓ Setting basic goals and objectives

✓ Expanding or contracting activities

✓ Establishing policies

✓ Monitoring performance

✓ Designing/Redesigning organization system

✓ Shouldering financial responsibilities etc.

Upper Middle Management includes:

- Sales executives

- Production executives

- Finance executives

- Accounts executives

Functions:

a) Establishment of the organization

b) Selection of staff for lower levels of management

c) Installing different departments

d) Designing operating policies and routines

e) Assigning duties to their subordinates

Middle Management includes

Superintendent

Branch Managers

General force meat etc.

Functions:

❖ To cooperate to run organization smoothly

❖ To understand inter locking of department in major policies

❖ To achieve coordination between different parts of the organization

❖ To conduct training for employee development

❖ To build an efficient company team spirit

- Foremen

- Supervisors or charge-hands

- Office Superintendent

- Inspectors etc.

Functions:

1. Direct supervision of workers and their work

2. Developing and improving work methods operations

3. Inspection function

4. Imparting instruction to workers

5. To give finishing touch to the plans and policies of top management

6. To act as link between top management and operating force

7. To communicate the feelings of workers to the top management.

Operating force includes:

Workers

Rank and file workman

Skilled and Semi-skilled workers

Unskilled workers

Function:

To do work on machines or manually, using tools etc.

To work independently (in case of skilled workers) or under the guidance of supervisor.

Functions of Management:

1. Planning: Involves selecting the objectives and actions to achieves them planning stage involves decision making and choosing future courses of action from the various alternatives.

2. Organizing: Role of each person in any organization is fixed. The concept of role is who will be doing what should be known, to achieve organizational targets efficiently. It is intended that all the tasks necessary to achieve targets are assigned to people who can do the best.

3. Staffing: Staffing function includes keeping the various organizational position fixed. This activity is done by identifying work force requirements, keeping the records of the performance of people working with the organization. So that suitable people can be prompted and at the same time people performing not up to the mark could be send for training. If all the above activities are taking place in nice way in any organization, it will give rise minimum work force turnover.

4. Directing: Directing means influencing people, so that they will contribute to the organization targets directing involves motivation, leadership styles and proper communication.

5. Controlling: It is the process of comparing the plans with the results. If there is deviation attain taken to be bridge the gap between plan and actual results.

6. Coordinating: The essence of management is the achievement of coordination among people coordination is a complex process following the principles by which organization activity can be accomplished. Coordinative is possible only if all the personnel working in the organization accept the target of the organization. This target must be clearly defined and sold to everyone concerned.

Evolution of Management Theory: Good management intends to achieve an objective with the least use of man, machine, money and material and at the same time maximum satisfaction of the participants.

Taylor's Scientific Management: The utility of scientific methods to problems of management was first introduced by F.W.Taylor.

Definition:

Scientific management may be defined as the Art of knowing exactly what is to be done and the best way of doing it. Scientific management is the result of applying scientific knowledge and scientific methods to the various aspects of management and the problems that arise from them.

Principles of Scientific Management: Taylor through his principles of scientific management initiated a system in which there would be an effective and fruitful coordination and cooperation between the management and the workers. Development of Science for each element of work: Analyze the work scientifically, rather than using thumb rule. It means that an attempt is made to find out what is to be done by a particular worker, how he is to do it, what equipment will be necessary to do it. This information is provided to the worker, so as to reduce wastage of tie, material etc. and improve the quality work.

Scientific selection, placement and training of workers: This principle states that select the workers best suited to perform the specific task, and then train them within the industry in order to attain the objectives of the enterprise workers should also be trained from time to time to keep them informed of latest development in the techniques of production.

Division of Labour: division of work in smaller tasks and separation of thinking element of job from doing element of the job, this is the principle of specialization. It is essential for efficiency in all sphere of activities as well as in supervision work Standardization of methods, procedures, tools and equipment: Standardization helps in reducing time, labour and cost of production. The success of scientific management largely depends upon standardization of system, depends upon standardization of system, tools, equipments and techniques of production.

Use of time and motion study: Taylor's introduced time and motion study to determine standard work. Taylor's undertook studies on fatigue, incurred by the workers and the time necessary to complete task.

Differential wage system: Taylor's differential piece rate scheme provides an incentive for a worker to achieve high level of optimum output. It distinguishes the more productive workers from less productive workers and motivates them to produce more.

Cooperation between labour and management: Mutual respect and cooperation between the workers and management helps in providing proper and effective leadership. The labour starts thinking that it is their work and they must put their heart in the work assigned to him.

Principle of Management by Exception: Taylor suggested that only major or significant deviations between the actual performance and standard performance should be brought to the notice of top management. Top management should pay more attention to those areas of work where standards and procedures could not be established and where there is a significant variation between standard performance and actual performance.

Administrative Management Theory (Henri Fayol and Others):

Henri Fayol is called as father of Modern Management

He established the pattern of management and the pyramidal form of organization. He pointed out that technical ability is more dominating on the lower level of management managerial ability is more important on the higher level of management.

Henri Fayol analyzed the process of management and divided the activities of an industrial undertaking into six groups

1. Technical activities

2. Commercial activities

3. Financial activities

4. Security activities

5. Accounting activities

6. Managerial activities

Elton Mayo: Elton Mayo generally recognized as father of human relations approach Mayo led the team which conducted the study psychological reaction of workers in on-the job situations Mayo concluded that work arrangements in addition to meeting the objective requirements of production must at the same time satisfy the employees subjective requirement of social satisfaction at his work place.

Maslow's Theory:

Maslow's level of hierarchy about human relations and behavioral science approach, his assumptions are based mainly on theory of Human Needs, he has defined five level of hierarchy of needs starting from the biological need and then coming to more intangible ones .

- Physical needs like food, clothes and shelter

- Safety needs freedom from fear of insecurity

- Social needs include a sense of being accepted in the society or environment one finds himself in.

- Ego needs include feeling of important and recognition Self actualization needs include need or desire for personal fulfillment of individual potential and activity.

Douglas McGregor Theory: He divides leadership is two styles labeled theory ―X and theory ―Y. The traditional styles of leadership and controls stated in theory _X' by McGregor, is exercised to managers on the basis of his assumptions about human beings. These assumptions as laid down or observed by McGregor for theory X' are

Theory ―X:

An average human being does not like to work and he tries to avoid it as far as possible.

He avoids accepting responsible and challenging tasks, has no ambition but wants security above all.

Because of this, the employees are to be forced, concerned and threatened with punishments to make them put their best effort These people would not

work sincerely and honestly under democratic conditions.

However the above assumptions re not based on research finding. The autocratic style basically presumes that workers are generally lazy, avoid work and shrink responsibilities. It is believed that workers are more interested in money and security based on these assumptions the leadership styles developed, insists on tighter control and supervision.

Theory of ─Y:

It focuses a totally different set of assumptions about the employees

Some employees consider work as natural as play or rest.

These employees are capable of directing and controlling performance on their own.

They are much committed to the objectives of the organization

Higher rewards make these employees more committed to organization.

Given an opportunity they not only accept responsibility but also look for opportunities to outperform others.

Most of them highly imaginative, creative and display ingenuity in handling organizational issues.

System approach management:

Modern approaches to understand management is the systems approach. Here the organization is viewed as a system. Every department is considered as a sub-system, it is also possible that every department can be viewed as a system and every section in the department can be viewed as a sub-system, system approach helps to study the basic feature and functions of the organization its minutest details.

The collection of interrelated parts called as sub-system which constitutes one whole unit. System approach facilitates the study of each of these parts in detail to have a close understanding of the whole system.

Ex: Every part of the study such as the eyes, brain, and heart can also be viewed as a sub-system, a study of each of the parts of the body in necessary to understand the whole body.

Herzberg's Two-factors Theory: Maslow's theory has been modified by

Herzberg and he called in two-factor theory of motivation. According to him the first groups of needs are such things are such things as company policy and administration, supervision, working conditions, interpersonal relations, salary, status, job security and personal life.

Herzberg called these factors as dissatisfies and not motivators, by this he means their presence or existence does not motivate in the sense of yielding satisfaction, but their absence would result in dissatisfaction. These are also referred to as hygiene 'factors.

In the second group are the satisfiers 'in the sense that they are motivators, which are related to Job content'. He included the factors of achievement, recognition, challenge work, advancement and growth in the job. He says that their presence will yield feelings of satisfactory or no satisfaction but not dissatisfaction.

- Quality of supervision   Recognition

- Relations with supervision Advancement

- Relations with subordinates   Possibility of growth

- Pay Responsibility.

Leadership and Leadership Styles:

Leader:

One who leads a given group or team of people is called leader. If you can influence people to perform better in a given organizational setting, that means you are a leader.

Leadership is ability to influence people to achieve the given goals in an organization.

A true leader is one who shares success with followers and absorbs all failures.

A manager has to be a mini-leader 9he has to inspire his subordinates and get work done) and leader to be a mega-leader (otherwise he does not understand the ground realities of functioning)

Leadership Styles: Leader has to ensure that people under his guidance are comfortable and their good work is recognized.

A good leader has to adopt such a style of working that takes care of people around him. There are also some leader who do not care for people and who care more for the task completion.

Types:

Autocratic leadership: Here, leader command the followers and expects compliance from them for all the instructions given, leaders are more dogmatic and positive. They lead by his ability to withhold or give rewards or punishments. Here, no suggestions from the followers are entertained and almost to-down approach is seen. They direct others. They do not allow any participation.

Democratic leadership: Here leaders consult subordinates and involve them in decision making. They encourage discussion with the group leaders believes in two-way communication. They listen to followers try to facilitate the decision making.

Free – Rein leadership: Free – Rein leaders exercises little authority and give maximum freedom to subordinates while making decisions. It is a bottom-upapproach. Suggestions from the followers are encourage and rewarded. They give high degree of independence subordinates in their operations.

Social Responsibility: Social responsibility refers to the process with includes several activities from providing safe products and services to giving apportion of the company's profits to welfare organizations.

Responsibility towards shareholders: The business enterprise has the responsibility to provide fair return on capital to the shareholders. The firm must provide them regular, accurate, and full information about the working of enterprise in order to fulfill and encourage their interest in the affairs of the company.

Responsibility towards consumers: The management has to provide quality products and services to the customers at reasonable prices. It should consider customer suggestions and also plan it services more effectively through consumer satisfaction survey.

Responsibility towards employees: Good working conditions motivate workers to contribute their best it is the responsibility of the management recognize their unions and respect their right to associate with a union of their choices.

Responsibility towards creditors: The business has to repay the loans it has taken from the financial institutions as per the repayment schedule also it should inform the creditors about the developments in the company form time-to-time.

Responsibility towards Government: The business firm has to pay its taxes and be fair in its endeavors. It should also support the government in community development projects.

Responsibility towards competitors: The business firm should always maintain the highest ethical standards and maintain cordial relations with each of the competitors, which is a critical and sensitive segment.

Responsibility towards public: Business units have tremendous responsibility towards the general public to support the cause of community development. Most of the companies maintain public relations departments exclusively to maintain good relations with the community.

DESIGNING ORGANISATIONAL STRUCTURES

Organization:

Organization is form of organizing which is a part of management process Organization defied as collectivity of people for achieving common

Objectives:

Organization means the determination and assignment of duties to people, and also the establishment and the maintenance of authority relationships among these grouped activities it is the structural frame work with in which the various efforts are coordinated and related to each other.

Definitions: Organization are collectivities of people that have been established for the pursuit of relatively specific objectives on a more or less continuous basis.

Money and Reilly: Organization involves the grouping of activities necessary to accomplish goals and plans assignment and these activities to appropriate departments and positions to appropriate departments and positions for authority delegation and coordination‖.

Koontz and O'Donnell Organization is used in the following ways with or without prefix or suffix

- As entity

- As group of people

- As structure

- As process

Process of Organization:

Determination of objectives, strategies, plans and policies: Objectives should be clear and precise, because the entire organization is to be built around the objectives of the enterprises.

Determination of activities: Determine activities needed to execute these plans and policies and accomplish the objectives. The work load is broken into component activities that are to be performed by all the employees. The activities are so split to determine the job which can be performed by an individual.

Separation and grouping of activities: To attain the benefits of specialization and division of labour, every company, will separate its activities on the basis of primary functions like finance, engineering, purchasing, production, sales and industrial relations. All the similar or directly related activities are grouped together in the form of departments.

Delegation of authority: Authority is necessary for the performance of the job and therefore authority is delegated to the subordinates for enabling them to carry out their work smoothly and efficiently.

Delegation of responsibility: Responsibility may be described as the obligation and accountability for the performance of delegated duties. A superior is always accountable for the acts of his subordinate. Therefore, responsibility always flows from subordinates to superiors.

Establish inter-relationships: The grouped activities are placed in the overall organization structure at appropriate level. It is necessary to integrate or these groups of activities through.

Authority relationship horizontally, vertically and diagonally

Organized information or communication system i.e., with the help of Effective coordination and communication.

Providing physical facilities and proper environment: Physic al facilities means provide machinery, tools equipments, infrastructure etc, environment means provide proper lighting, ventilation, heating, cooling arrangement at the work place, reasonable hours of work, safety devices, job security etc.

Principles of Organization:

- Principle of unity of objectives: An organization structure is effective if is enables individuals to contribute to entire objectives.

- Principle of co-ordination: The aim of the objective can be achieved it proper co-ordination exists for efferent activities

- Principles of organizational efficiency: An organization is efficient it is structured to aid the accomplishment of enterprise objective with a minimum of unsought consequences or costs.

- Span of management principle: In each managerial position, there is a limit to the number of persons an individual can effectively manage but the exact number will depend on the impact of underlying variables.

- Scalar principle: The clearer the line of authority from the ultimate management position in an enterprise to every subordinate position, the clearer will be the responsibility for decision making the more effective will be organization communication.

- Principle of delegation by results expected: Authority delegated to all individual managers should be adequate enough to ensure their ability to accomplish the results expected.

- Principle of responsibility: The responsibility of subordinates to their superiors for performance is absolute, and superiors cannot escape responsibility for the organization activity of their subordinates.

- **Principle of parity of authority and responsibility**: The responsibility for actions cannot be greater than that implied by the authority delegated, not should it be less.

- **Principle of unity command**: The more complete an individual's reporting relationships to a single superior, the smaller the problem of conflicting instructions and the greater the feeling of personal responsibility for results.

- **Authority level principle**: Maintenance of intended delegation requires that decisions within the authority of individual managers should be made by them and not be referred upward in the organization structure.

- **Principle of balance**: The application of principles or technique must be balanced to ensure the overall effectiveness of the structure in meeting enterprise objectives.

- **Principle of flexibility**: the more that provisions are made for building flexibility in to an organization structure can fulfill its purpose.

- **Principle of leadership facilitation**: The more an organization structure and its delegations of authority enable managers to design and maintain an environment for performance, the more they will help the leadership abilities of those managers.

Design of Organization structure: The main objective of an organization structure is to ensure that efforts of all the people working in various sections are co-ordinate and integrated for achieving the task in the most efficient effective way with minimum consumption of resources i.e. economical ways

1) Formal organization structure 2) Informal organization structure

Formal organization structure: According to classical theorists the formal organization is built an four pillars

Division of labour

Scalar functional processes

Structure

Span of control

Definition:

An organization is formal when the activities of two or more persons are consciously coordinated towards common objectives.

Informal organization:

Informal organization arises spontaneously based on friendship or some common interest and not based on rules, regulation and procedures. It is developed by the employees themselves and not by the formal authority.

Definition:

Informal organization brings cohesiveness to a formal organization; it brings to the members of formal organization a feeling of belonging of status, of self-respect and of gregarious satisfaction.

Comparison between formal and informal organization:

Basis of comparison	Formal	Informal
Formation	Planned & deliberated	Spontaneous
Purpose	Well-set goals	Social interaction
Structure	Well structured	Un structured
Focus	Positions	Persons
Nature	Official	Unofficial
Leadership	Superior	Any one
Source of power	Delegated	Given by group
Guidelines for behaviour	Rules procedures	Group norms
Source of control	Rewards/Punishment	Sanctions

Type of organization: On the basis of authority relationships organization classified as follows

- ➢ Line organization or Military organization or Scalar organization

- ➢ Functional organization

- ➢ Line and Staff organization

- ➢ Project organization

- ➢ Committee organization

- ➢ Matrix organization

Where efforts of large number of people have to be controlled and discipline is of prime importance line type organization structure will serve the purpose. This is also one of the oldest structures. However, in present conditions this type of structure has lost the applicability. In line structure ten lines of instruction, directing is vertical. This means in this type boss is always right and his orders are to be obeyed at any cost.

Merits:

- Simplicity: Line organization is very simple to establish and can be easily understand by the employees

- Discipline: Since each position is subject to control by its immediate superior position, often the maintenance of discipline is easy unity of command and unity of direction foster discipline among the people in the organization.

- Co-ordination: The hierarchy in management helps in achieving effective coordination

- Effective communication: There will be a direct link between superior and his subordinate; both can communicate properly among himself or herself. Economical: Line organization is easy to operate and less expensive

- Unity of command: In line organization every person is under the command of one boss only.

- **Prompt decision**: Only one person is in charge of one division or department. This enables manager to take quick decisions.

- **Over all development of the managers**: The departmental head has to look after all the activities of his department; therefore, it encourages the development of all round managers at the higher level of authority.
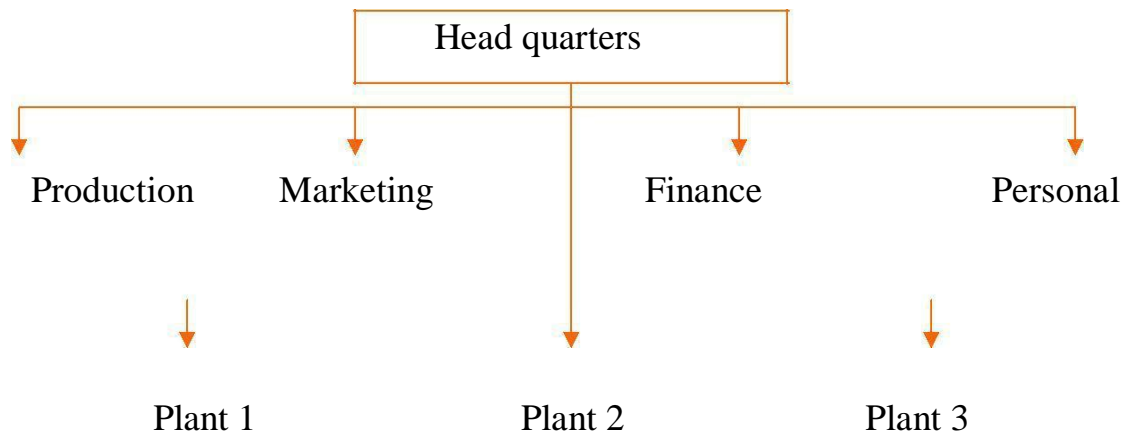
  Demerits:

- **Undue reliance**: The success of the enterprise depends upon the caliber and ability of few departmental heads, loss of one or two capable men may put the organization in difficulties.

- **Personnel limitations**: In this type of organization an individual executive is suppose to discharge different types of duties. He cannot do justice to all different activities because he cannot be specialized in all the trades.

- **Overload of work**: Departmental heads are overloaded with various routine jobs hence they cannot spare time for important managerial functions like planning, development budgeting etc.

- **Dictatorial way**: In line organization, too much authorities centre on line executive. Hence it encourages dictatorial way of working.

- **Duplication of work**: Conflicting policies of different departments result in duplication of work.

- **Unsuitable for large concerns**: It is limited to small concerns.

- **General interest of enterprise may be over looked**: Departments may work for their self-interest and may sacrifice the general interest of the enterprise.

- **Scope of favourism**: As the departmental heads has the supreme authority, there is chance of favourism.

Functional organization: This structure most widely used, in the medium and large organizations having limited number of products.

This was introduced by F.W.Taylor and is logical extension of the division of labour cover departments as well as men.

In this authority is delegated to an individual or department to control specified processes, policies or other matter relating to activities under taken by persons in other departments.

```
                        ┌─────────────────┐
                        │   Head quarters  │
                        └─────────────────┘
         ┌──────────────┬──────────┴──────────┬──────────────┐
         ▼              ▼                      ▼              ▼
    Production      Marketing              Finance        Personal

         │              │                      │
         ▼              ▼                      ▼
      Plant 1        Plant 2               Plant 3
```

In this system planning is separated from performance since the direction of work is divided by various function in the factory. It has been found that this type of structure becomes ineffective when the work of departments and individuals increases in variety and complexity.

Merits:

Separation of work: In functional organization, work has been separated from routine work. The specialist has been given the authority and responsibility for supervision and administration pertaining to their field of specialization unnecessary over loading of responsibilities is thus avoided.

Specialization:

Specialization and skilled supervisory attention is given to workers the result is increase in rate of production and improved quality of work. Narrow range with high depth: The narrow range of activities enable the functional expert to developing in depth understanding in his particular area of activity.

Ease in selection and training: Functional organization is based upon expert knowledge. The availability of guidance through experts makes it possible to train the workers properly in comparatively short span of time.

Reduction in prime cost: Since for every operation expert guidance is there, wastage of material is reduced and thus helps to reduce prime cost.

Scope of growth and development of business: This type of organization presents ample scope for the growth and development of business.

Demerits:

- Indispline: Since the workers receive instructions from number of specialist it leads to confusion to whom they should follow. Therefore, it is difficult to maintain discipline.

- Shifting of responsibility: It is difficult for the top management to locate responsibility for the unsatisfactory work everybody tries to shift responsibility on others for the faults and failure.

- Kills the initiative of workers: As the specialized guidance is available to the workers the workers will not be using their talents and skills therefore their initiative cannot be utilized.

- Overlapping of authority: The sphere of authority tends to overlap and gives rise to friction between the persons of equal rank.

- Lack of co-ordination between functions: except the function in which he is specialized he is absolutely indifferent to other functions. Therefore, there is a lack of coordination of function and efforts.

Line and Staff Organization: Line and Staff organization is the in which the line heads are assisted by specialist staff.

If the firm is of large size, manager cannot give careful attention to every aspect of management. They are busy with ordinary task of production and selling. Hence staff is deputed to do the work of investigation, research, recording, and advising to managers. Thus the staff brings advising to managers. Thus the staff brings specialization by assisting the line officers.

1. Planned specialization: The line and staff structure is based upon the principle of specialization. The line managers are responsible for operations contributing directly to the achievement of organizational objectives where as staff people are there to provide expert advice on the matters of their concerns.

2. Quality decisions: Decisions come after careful consideration and thought each expert gives his advise in the area of his specialization which is reflected in the decisions.

3. Prospect for personal growth: Prospect for efficient personal to grow in the organization not only that, it also offers opportunity for concentrating in a particular area, thereby increasing personal efficiency

4. Less wastage: There will be less wastage of material.

5. Training ground for personnel: It provides training ground to the personnel in two ways. First, since everybody is expected to concentrate on one field, one's training needs can easily be identified. Second, the staff with expert knowledge provides opportunities to the line managers for adopting rational multi-dimensional approach towards a problem.

Demerits:

1. Chances of Misinterpretation: Although the expert advice is available, yet it reaches the workers through line supervisors. The line officers may fail to understand the meaning of advice and there is always a risk of misunderstanding and misinterpretation.

2. Chances of friction: There are bound to be occasions when the line and staff may differ in opinion may resent in conflict of interests and prevents harmonious relations between the two.

3. Ineffective Staff in the absence of authority: The staff has no authority to execute their own advice. Their advice is not a binding on the line officers. Therefore the advice given by specialist may be ignored by line heads.

4. Expensive: The overhead cost of the product increases because of high salaried specialized staff.

5. Loss of initiative by line executives: If is they start depending too much on staff may loose their initiative drive and ingenuity.

: A project organization is a special case where common service like finance, purchase etc. are organized at the functional level. But project resources are allocated to the project manager. Since the business responsibility rests with the project manager, necessary authority is given to him with the requisite resources. This type of organization structure helps in making decisions for project control in terms of cost, resource and time. In a project organization some of the functions are corporate responsibility and some of them are project manager's responsibility.

Merits:

This calls for quick divisions

Organizing all functional

Proper coordination of work of different departments

Demerits:

1. It tends to increase the problems of control for top management

2. It is special case of product organization

3. The organization may get disintegrated with increasing focus on departments.

Committee Organization: A committee is formed when two or more persons are appointed to work as a team to arrive at a decision on the matters referred to it. It is intended to utilize the knowledge, skills, and experiences of all the concerned parties. Particularly, in large organizations, problems are too big to be handled by one single expert.

Organizational resources in terms of knowledge skills and experiences.

It represents all interested groups and thus, facilitates group decision.

It yields good results if the committees are headed by taskmaster like chairman and time bound in terms of decision-making.
It minimizes the fear of too much authority vested in one person

Merits:

- It offers operational freedom and flexibility
- It seeks to optimize the utilization of resources
- It focuses on results
- It maintains professional identity
- It holds employees responsible for management of resources

Demerits:

- It calls for greater degree of coordination
- It violates unity of command principle
- It may be difficult to define authority and responsibility precisely
- Employees may find it frustrating to work with two bosses.

MODERN TRENDS IN ORGANISATIONAL STRUCTURE DESIGNS:

Organizations in the recent times have been gearing themselves to suit to the growing demands from their stakeholders in terms of responsiveness, flexibility, agility, adaptability etc. In this process, they are following organic structure, which are more agile, flexible and adaptable to the changing circumstances. Virtual organizations, cellular organizations, team structure, boundary less organization and inverted pyramid and different forms of organic structure that are widely seen among most of the sun-rise sectors such as financial services, Information Technology (IT) and IT enabled services. These structures have been contributing to the organic growth of the organization. The focus of organic structures is to do away with those activities which do not directly contribute to the growth of the organization and focus only on those activities which directly lead the organization for the achievement of the given goals.

Virtual Organization: Virtual organizations facilitate competitiveness particularly when these organizations are part of the global economy. Here, there can be alliances and partnerships with other organizations almost all

Over world. It is a flexible organization structure that removes the traditional boundaries. It allows easy reassignment and reallocation of resources to take quick advantage of shifting opportunities in global markets. To avoid disintegration and to attain the effective needed focus, the lead virtual organizations must have a shared vision,, strong brand and high trust culture.

The virtual organization is a temporary network of companies that come together quickly to exploit fast changing opportunities. Virtual organizations appear to be bigger than traditional organizations. As virtual organizing required a strong information technology (IT) platform, The boundaries that traditionally separate a firm form its suppliers, customers and even competitors are largely eliminated, temporarily and in respect to a given transaction or business purpose. Virtualorganizations. Come into being as needed when alliances are called into action to meet specific operating needs and objectives. When the task is complete, the alliances rest until next called into action. Each partner in the alliance contributes to the virtual organization what it is best as-its core competence.

UNIT – 2

OPERATIONS AND MARKETING MANAGEMENT

Plant location: Plant location is a strategic decision several factors influence this decision. The main objective of any business is to optimize its cost and revenue that is, minimize its costs and maximize its returns.

The degree of significance for the selection of location for any enterprise mainly depends on its size and nature large scale industries requiring huge amount of investment there are many considerations other than the local demand in the selection proper plant location these plants cannot be easily shifted to other place and an error of judgment in the selection of site can be vary expensive to the organization. However, small-scale industry mainly selects the site where in accordance with its capacity; the local market is available for its products. It can easily shift to other place when there is any change in the market.

Factors affecting plant location:

Nearness to Market: If the plant is located close to the market the cost of transportation can be minimized. This also helps the producers to have direct knowledge of the requirements of the customers.

Nearness to supply of raw materials: As far as possible the site selected should be near the source of raw materials, so that the cost of transportation can be minimized and storing cost can be reduced due to shorter lead time.

Availability of labour: Availability of right kind of labour force in required number at reasonable rates is also a deciding factor in selection of site

Transport and communication facilities: Generally, industries have a tendency to locate the industrial units near the railway station, highway or port areas.

Availability of power and fuel: Coal, electricity, oil and natural gas are the important sources of power in the industries.

Ex: Tata iron and steel industry is established near the coalmines of Bihar. Climatic conditions: Climatic conditions largely affect certain production processes and also the efficiency of the employees.

Ex: Textile mills require moist climate that why these plant located at Mumbai

And Ahmedabad.

Availability of water: Water is used in industries for processing as in paper in chemical industries, for generation of power in hydroelectric power, plants and also required for drinking sanitary purpose also.

Ancillary industries: Many industries such as processing and assembly industries are not producing al the parts of their product but purchase some of the parts from ancillary industries producing it.

Financial and other aids: For the development of backward regions central as well as state government provide certain incentives and facilities such as cash-subsides, concession financial assistance, land, power and other facilities at cheaper rates, tax concession etc.

Plant Layout: A technique of locating machines, processes and plant services within the factory in order to secure the greatest possible output of high quality at the lowest possible total cost of production

Type of plant layout:

Product or line layout: This type of layout is developed for product-focused systems. In this type of layout only one product, or one type of product, is produced in a given area. In case of product being assembled, this type of layout is popularly known as an assembly line layout.

The work centers are organized in the sequence of appearance. The raw material centre at one end of the line and goes from one operation to another rapidly with minimum of work-in-process storage and material handling

Factors influencing plant layout:

Management policy: Management has to decide on many matters e.g. nature and quality of products, size of the plant, integration of production process, plans for expansion, amount of inventory in stock, employee facilities.

Manufacturing process: The type of manufacturing process e.g. synthetic/analytical, continuous/intermittent and repetitive/non-repetitive, will

govern the type of plant layout.

Nature of product: Small and light products can be moved easily to the machines, whereas for heavy and bulky products the machines may have to be moved.

Type of equipment: The use of single purpose and multi-purpose machine substantially affects the plant layout. Similarly, noisy and vibrating machines require special attention in the plant layout decision.

Types of buildings: The plant layout in a single storey building will be different from that in a multi storey building. The covered areas, the number of storey's, elevators and stairs, parking and storage area all affect the layout.

Availability of total floor area: The allocation of space for machines, work-benches, sub-store aisles etc., is made on the basis of the available floor area use of overhead space is made in case of shortage of space.

Arrangement of materials handing equipment: Provide sufficient aisles for free movement of material handling equipment such as hand truck, fork truck etc.

Service facilities: The layout of factory must include proper service facilities required for the comfort and welfare of workers. These include canteen, lockers, drinking water, first aid etc.

PRINCIPLES OF PLANT LAYOUT:

Principle of Integration: It means the best layout in one which can be adopted and re-arranged at a minimum cost with least inconvenience

Principle of continuous flow: Working places-safe, well-ventilated and free from dust, noise fumes, odors and other hazardous conditions, help to increase the efficiency of the workers and improve their morale.

Principle of cubic space: Space of a room, it the ceiling height is also utilized, more materials can be accommodated in the same space.

Principle of satisfaction of safety: Working places-safe, well-ventilated and free from dust, noise fumes, odors and other hazardous conditions, help to increase the efficiency of the workers and improve their morale.

Principle of flexibility: It means the best layout in one which can be adopted and re-arranged at a minimum cost with least inconvenience.

Productivity:

Definition: Productivity is defined as the rate at which the goods and services are produced.

It refers to the relationship between the inputs and the output. It is calculated as a ratio between the amount produced and the amount of resources (land, labour, capital, technology etc.) used in the course of production in other words.

Method of Production:

Job production: In this system, goods are produced according to the orders with this method; individual requirements of the consumers can be met. Each job order stands alone and is not likely to be repeated. This type of production has a lot of flexibility of operation and hence general purpose machines are required. Factories adopting this type of production are generally small in size.

Advantages:

1. It is the only method, which can meet the individual requirement.
2. There is no managerial problem, because of very less number of workers, and small size of concern.

Such type of production requires less money and is easy to start.

1. There is no scope for continuous production and demand

2. As the purchase of raw materials is less, hence cost of raw materials per unit will be slightly more.

3. For handling different type of jobs, only skilled and intelligent workers are Needed, thus labor cost increases.

Batch production: This type of production is generally adopted in medium size enterprise. Batch production is in between job production and mass production. Batch production is bigger in scale than the job production. While it is smaller than that of mass production, batch production requires more machines than job production and fewer machines that the of mass production.

Advantages:

1. While comparing with mass production it requires less capital

2. Comparing with job production, it is more advantageous commercially.

3. If demand for one product decrease then production, for another product may be increased, thus the risk of loss is very less.

Disadvantages:

1. Comparing with mass production cost of scales and advertisement per unit is more

2. Raw materials to be purchased are in less quantity than that in mass production; therefore it is slightly costlier than that of mass production

   Because less quantity discount is available.

Mass production: This method of production is used by concerns where manufacturing is carried on continuously in anticipation of demand though demand of the product may not be uniform through the year.

In mass production, simplification and standardization of products are made with the help of specialized (one purpose) machine; articles of standardized nature can easily and economically be produced on a large scale.

There is a small difference between mass production and continuous production.

This is mainly in the kind of product and its relation to the plant. In mass production plant and equipment are flexible enough to deal with other products, involving same production process. Where as in continuous or process production only standardized product in a sequence produced. In this method layout and requirement of additional tools and equipment.

Advantages:

- A smooth flow of materials from one work station to the next in logical order.

- Since the work from one process is fed directly into the next, small in process inventories result

- Total production time per unit short

- Simple production planning control system are possible

Disadvantages:

A breakdown of one machine may lead to a complete stoppage of the line that follows the machine. Hence maintenance and repair is challenging job.

Since the product dictates the layout, changes in product design may require major changes in the layout.

Work Study: Work study is one of the most important management techniques which is employed to improve the activities in the production. The main objective of work study is to assist the management in the optimum use of the human and material resources.

Definition: Work study refers to the method study and work measurement, which are used to examine human work in all its contexts by systematically investigating into all factors affecting its efficiency and economy to bring forth the desired improvement.

Method Study:

Definition: The systematic recording and critical examination of existing and proposed ways of doing work, as a means of developing and applying easier

and more effective methods and reducing cost it is also called motion study.

Work Measurement:

Definition: Work measurement is the application of techniques designed to establish time for a qualified worker to carry out a specified job at a defined level of performance.

Work study has two parts, Method Study and Work Measurement. Method study deals with the techniques of analyzing the way to do a given job better, Work Measurement seeks to measure the time required to perform the job.

Basic procedure for Method Study:

Select: The work to be studied

Record: All the relevant facts of the present or proposed method study by observation

Examine: The recorded facts critically every thing that is done, considering in turn, the purpose of the activity, the place where it is performed, the sequence in which it is done, the person who is doing it and the means by which it is done.

Develop: The most practical, economical and effective method considering all the circumstances.

Define: The new method so that it can always be identified.

Install: The method as standard practice

Maintain: That standard practice by regular routine checks.

Recording: The current process of doing the job has to be recorded, while doing so every detail however small it may be, has to be identified.

Where the process is too long, involving many stages of production, inspection or transportation, the present process of doing the job is recorded sufficiently together with all the relevant information, using the process chart symbols.

Recording Techniques:

The recording techniques are of three types

a) Process chart
b) Diagrams
c) Motion and film analysis
d) Models

A) Process Charts:

1) Out line process chart: This chart outlines the main events sequence
wise considering only operations and inspections in the given job

2) Flow process chart: These are scale drawings of the work place, which
indicate where each activity takes place. This chart is capable of reflecting
undue delays in transferring work between workstations duplication of work,
and unfair work assignment, which may delay the completion process. It
classified into three types

Man Type	: It records what the worker does
Materials Type	: It records what happens to the materials
Equipment Type	: It records how the equipment used.

a) Man Type

Ex:

Job: Writing a letter using short hand typist

Chart begins: Typist in own office-awaiting dictation

Chart ends: Typist puts letter and copy in out tray

Typist office: 6 meters manager's office

3) Two handed process chart: The two hand process chart is a chart is which the activities of a workers hand are recorded, in their relationship to one another. It is commonly used for repetitive and short operations.

Ex:
Job   : Assemble to washers and nut to bolt
Chart begins   : Hand empty material in boxes
Part No.   : -------------

Chart ends   : Completed assembly aside to box
Operation No.   : -------------
Method   : Present/proposed

4) Multiple activity chart: A multiple activity chart is a chart in which the activities of more than one item (worker, machine or equipment) are recorded on a common time scale to show their inter relationship.

By using separate vertical columns to represent the activities of different operators or machines on a common time scale, the chart shows very clearly the period of idleness on the part of any items during the process.

Ex:

Chart   Sheet No. ---------   Department -----------------
No.-----   ----------   -
Materi : B201   : Making a slot on
al   casting   Job   the casing
Machi   Operati
ne   : Slotted   on   : XYZ
Charte
d by   : ------------   Date   : ------------

Time (min.)	Man			Machine	Time (min.)
0.2	Removes finished casting cleans with compressed air			Idle	0.2
0.4	Gauges depth of slot on surface plate			Idle	0.4
0.6	Breaks sharp edges with file cleans with compressed air			Idle	0.6

Time	Man			Machine	Time
0.8	Place in a box obtains new casting			Idle	0.8
1.0	Cleans machine with compressed air			Idle	1.0
1.2	Locates casting in fixture, starts machine and automatic fee			Idle	1.2
1.4	Idle			Cutting slot	1.4
1.6	Idle			Cutting slot	1.6
1.8	Idle			Cutting slot	1.8
2.0	Idle			Cutting slot	2.0

Summary:

Cycle time : 2 min.

Working Time:

a) Man : 1.2 min.

b) Machine : 0.8 min.

Idle time:

a) Man : 0.8 min.

b) Machine : 1.2 min.

Utilization:

a) Man : 60%

b) Machine : 40%

B) Diagrams:

Flow diagrams: Flow process chart only shows the sequence of various activities necessary for performing the specified work. It does not show clearly the path of movement of men and materials from one location to another.

Definition: It is diagrams, drawn to scale, intended to show the relative position of the production machinery and marks the route followed by the machines, materials and men.

String diagrams: The workers are moving at irregular intervals between a number of points in a working area with or without materials in many industrial activities.

Definition: The string diagram is a scale plan or model on which a tread its used to trace and measure the path of workers, materials or equipment during a specified sequence of events.

Cycle graph: In this method a small electric bulb is attached to each part of the body, which makes the movement for carrying out an operation. The path of movement is photographed by high-speed camera.

Chronocycle graph: This is a photographic record, which traces the path of movement onto a photographic place. In principle, it is similar to the string diagram, and is most effective when recording short, rapid movements.

C) Micro motion Study and film analysis: Micro motion study is a set of techniques intended to divide human activity into groups of movements or micro motions (therbiligs) and the study of such movements help to find for an operator one best pattern of movements that consumes less time and requires less effort to accomplish the task.

Film analysis: Once the activity has been filmed and the film processed, a projector runs the film very slowly and the film can be stopped or reversed whenever required.

1) SIMO Chart (simultaneous motion cycle chart): A SIMO chart is based on film analysis, it is a graphic representation of the coordinated activities of an

operators body embers. The activities are described in terms of basic or fundamental motions. The time required for completion of these motions is also recorded on the chart.

D) Models: Sometimes the picture of the existing conditions is not clear by the use of flow process chart or flow diagram. In such cases instead of the scales plans of the shop facilities models are used to provide visual representation of the proposed layout before proceeding with actual rearrangement of the work place.

Work Measurement: Work measurement is the application of technique to establish the time for a qualified worker to carry out a specified job at a defined level of performance.

Procedure for Work Measurement:

- Sect: The work to be studied and determine the objectives of the study

- Record: All the relevant data relating to circumstances in which the work is being done, the methods to be used breakdown the job into its elements

- Examine: The recorded data and the detailed breakdown critically to ensure the most effective method and motions are being used and that unproductive elements are separated from productive elements.

- Measure: The time required to complete each element using the appropriate work measurement techniques and calculate the time required to complete the work cycle which is known as basic time.

- Compile: The standard time for the operation or work place, in case of stop watch time study the various allowances to cover relation, personal needs etc. are added to the basic time to estimate the standard time.

Techniques of work measurement:

1. Time study
2. Synthesis from standard data
3. Predetermined Motion Time System (PMTS)
4. Analytical estimating
5. Work Sampling

1) Time study: It is defined as the art of observing and recording the time required to do each detailed element of all industrial operation.

Time study equipment: Time study equipment can be broadly grouped two categories

A) Time measuring device

B) Time study boards and time study chart

A) Time measuring devices:

- Stop Watch
- Motion picture camera
- Time recording machine
- Electronic timer.

a) Stop Watch:

Decimal minute stop watch: In this type of watch the movements is started and stopped by moving the slide "A", forward and backward respectively are complete revolution of large hand represents 1 minute and since the dial is divided into 100 parts reading to with in 0.01 minutes can be obtained. Every time the large hand make one revolution the small hand will register 1 minute and is able to register up to 30 minutes.

Decimal hour stop watch: The dial in this watch is divided into 100 parts. The needle completes 10 revolutions in one hour. The least count in this watch is 0.001 hours. The small dial of this watch is divided into 30 equl spaces (representing 0.01 hour) and the small needle makes 31/3 revolutions in one hour.

b)Motion picture camera: Every element of the operation involving motion of the workers is made into film through motion picture camera when this film is run at a slow speed through a projector; the time of each element is recorded using a stopwatch.

c)Time recording machine: A moving tape is run is this machine at a uniform velocity of 10 inches/minutes with the help of electric motor. The machine has two keys: one key, when pressed, indicates starting of an operation, and the other key used to take a print on the scaled tape at the end of elements.

d)Electronic timer: The timing of starting and ending of an operation of an element is automatically recorded through electronic timers.

B) Time study boards and time study charts:

Time study board: These are simple and handy hard wood boards equipped with stopwatch holders and clamps for holding the observation sheets and time study forms. These boards help to see and record the observation and time at the same instant.

Observations forms: Printed or cyclostyled forms are used for recording the observation during that time study. It ensures that time study are made

standard manner and that no essential data are omitted. These forms are attached to the study board by means of clip provided

2)Synthesis from standard data: This one technique of work measurement to obtained synthetic times that are synthesis from element times previously obtained from direct time studies. The analysis and measurement stage are thus conducted prior to the actual study.

3)Predetermine motion time system (PMTS): Every element of work is composed of some combination of basic human motions. Apart from mental activity all works can broken down into elements that usually a fundamental movement of the body or body members. After this analysis stage the basic motions that have been isolated have a time allotted to them on the basis of predetermine motion times.

4)Analytical estimation: Analytical estimating serves as best for measuring work. In the analysis stage we find the usually these basic elements or much larger as compared to the elements in PMTS or time study. For measuring stages the time, which will be occupied by the element at a specific speed of working is estimated.

5)Work Sampling: It is work measurement technique which large number of instantaneous observation are made random interval over a specified period of time of a group of workers, machine and processes. Each observation records what is happening at that instant and the present observations recorded for a particular activity or delay is a measure of the percentage of time during which that activity or delay occurs.

It can also defined as a method of finding the percentage occurrence of a certain activity by statistical sampling and random observations.

Procedure for conducting time study: For conducting time study average workers and average machines are selected. This study id conducted by the time study expert, who should be familiar with all the information related to the job and the conditions in which it is being done.

Time study is performed in the following stages.

A) Analysis of work B) Standardization of methods C) Making time study

a)Analysis of work: It includes all the tasks performed by the workers, not just the effective work. In the end, time required for job preparation, cleaning of machine, etc. should also be included.

b)Standardization of methods: Related to materials, equipment, tools, working conditions to ensure an acceptable method which is easy, safe and the fastest.

c)Making time study: Time study is done on a printed time study record sheet, which is fixed on a board known as time study board. On one corner, a stopwatch is placed.

Different time readings of element are recorded in the corresponding column of the record sheet. Several sets of reading are taken to arrive at an accurate result

after noting all these readings, average tome is calculated, neglecting abnormal values, if any.

Standard time: it is the time, which is taken by a normal worker for a specific task or job, working under moderate conditions and including other allowances. Such as fatigue setting of tool and job, repairing of tool and checking of job etc Standard time is the basis for the calculation of wages and

incentives.

Standard time= Average time* Rating factor+ other allowances

Rating factor: the study engineer multiplies actual time with a factor known as Rating factor or leveling factor to set the average time which a normal worker would take. This is expressed as a percentage of the effacing of representative operator, which is in comparison to some of his average fellow workers.

Performance rating: performance rating is that process, during which the time study engineer compares the performance of the operator of normal performance.

Performance rating= $\dfrac{\text{OBSERVED PERFORMANCE}}{\text{NORMAL PERFORMANCE}} \times 100$

The rating can be

a)Standard rating: A qualified worker will naturally work if he is motivated to apply himself to his work at the average rate of pace.

b)Normal rating: It is the average rate or pace at which a qualified worker will naturally work even if he has no specific motivation to apply himself to this work

Rating techniques:

1) Speed rating : Speed rating consists of determining the speed of the operator's movements in relation to a normal pace as a factor and applying it to each element so as to get the normal time for the element.

Normal or basic time = $\dfrac{\text{OBSERED TIME} \times \text{RATING}}{\text{STAN DARD RATING}}$

Rating= Worker's speed

Standard rating = Speed expected from the worker

2)Westing-house system of rating: It is based upon four factors- system comprising skill, effort, conditions and consistency and arrives at cumulative rating.

3)Synthetic rating: It is the ratio of the standard tome for the element to that of observed time.

4)Objective rating; It is determined in two stages- first the speed rating and second the adjustment for job difficulties.

5)Psychological evaluation of performance level: In this rating we consider the amount of oxygen consumed, change of heart rate etc to determine rating factor.

Types of allowances in time study:

1)Process allowances: Process allowances to compensate for enforced idleness due to no work power failure, faulty material or tools and equipment.

2)Personal allowances: It comprises personal needs and fatigue. Fatigue allowance contains, in turn, a constant portion and a variable portion.

3)Interference allowances: When a worker is attending more than one machine .

4)Contingency allowances: These allowances are to meet legitimate but irregular or infrequent items of work or delays.

5)Special allowances: Special allowances decided as a policy matter, covering activities that are essential for satisfactory performance of work but may not be part of the job, like start up, shut down, change over, cleaning, set up, tool changing etc.

STATISTICAL QUALITY CONTROL:

Introduction: Quality is the determining factor the success of any product or service large resources are committed in every organization to ensure quality.

Definition: It is defined as customer satisfaction in general and fitness for use in particular. Both the external consumer who buy the product and services and the internal consumers that is, all divisions or departments of the business

organization are equally interested in the quality.

Statistical quality control: The process of applying statistical principles to solve the problem of controlling the quality control of a product or service is called statistical quality control.

Quality elements: a) Quality design b) Quality conformance

a)Quality design: Quality of design refers to product feature such as performance, reliability durability, ease of use, serviceability

b)Quality conformance: Quality conformance means whether the product meets the given quality specification or not .

Inspection: The process of measuring the output and comparing it to check whether it meets the given specified requirements or not, is called inspection.

Inspection Methods: The following are the methods of inspection based on merits

1) Incoming inspection: In this method, the quality of the goods and services arriving into the organization is inspected. This ensures that the material suppliers adhere to the given specifications with this defective material cannot enter into the production process. This focuses on the vendor's quality and ability to supply acceptable raw materials.

2)Critical point inspection: Inspecting at the critical points of a product manufacture gives valuable insight into the completely functional process. At the points of manufacture that involve high costs or which offer no possibility for repair or rework, inspection is crucial further operation depend on these results critical point inspection helps to drop the defective production, and thereby, facilitate avoiding unnecessary further expenditure on them.

3)Process inspection: This is also called patrolling inspection or floor inspection or roving inspection. Here the inspector goes around the manufacturing points in the shop floor to inspect the goods produced on random sample basis from time to time.

4)Fixed inspection: It provides for a centralized and independent where work is

brought for inspection from time to time. This method is followed where the inspection equipment cannot be moved to the points of productions.

5) Final inspection: This is centralized inspection making use of special equipment. This certifies the quality of the goods before they are shipped.

Elements of statistical Quality Control: The technique under SQC can be divided in to two parts a) Process control b) Acceptance sampling

a) Process control: Process control is a technique of ensuring the quality of the products during the manufacturing process itself. If a process consistently produces items with acceptable or tolerable range of specification. It is said to be statically under control. Process control is achieved through control charts. Process control aims to control and maintain the quality of the products in the manufacturing process.

Statistical control charts: A control chart compares graphically the process performance data to compute statistical control limits. These control limits act as limit lines on the chart control chats are the tools to determine whether the process is under control or not.

The quality of the production process may be affected by chance cause or assignable cause.

Chance cause: such causes, which may or may not affect the manufacturing process are called chance cause, chance cause cannot even be identified. It is not possible to always maintain the given specification.

Assignable Cause: Assignable causes affect the quality of the production process. These causes can be identified and specified. Causes such as change in the labour shift, power fluctuations, or excessive tool wear are said to be assignable causes as they affect the quality of manufacturing process in different ways.

Process capability: Process capability refers to the ability to achieve measurable results from a combination of machines, tools, methods, materials and people engaged in production.

Confidence limits and control limit:

Confidence limit: It indicates the range of confidence level. A confidence level refers to the probability that the value of measurement or parameter, such as length of screw, is correct.

Acceptance Sampling: Acceptance sampling is a technique of deciding whether to accept the whole lot or not based on the number of defectives from a random drawn sample.

It is widely use in buying food products, such as rice, wheat etc. Before buying the random samples drawn from the bags of say rice are tested. If the quality of sample drawn looks good or free from defects then according to the requirement the entire bag or part of it can be brought.

The process of acceptance sampling through operating characteristic curve (OCC)

Operating characteristic curve (OCC): The graphical relationship between percentage defective in the lots being submitted for inspection and the probability acceptance is termed as "operating characteristic of a particular sampling plan"

Construction of OC

1)Acceptable quality level (AQL): This is the maximum proportion of defectives that will make the lot definitely acceptable.

2)Lot tolerance percentage defective (LTPD): This is the maximum proportion of defectives that will make the lot definitely unacceptable.

3)Producers risk (α): This is the risk, the producer is willing to take that lots of the quality level AQL will be rejected, even though, they are acceptable usually $\alpha = 5\%$

4) Consumer risk (β): This is the risk, the consumer is willing to take that lots of the quality level LTPD will be accepted, even though, they are actually unacceptable usually $\beta = 10\%$.

UNIT – 3

HUMAN RESOURCE MANGEMENT

Human Resource Management: Human resource management is the process of managing the human resources of an organization in tune with the vision of the top management.

Personnel Management: Defines personnel management as the planning, organizing, and controlling of the procurement, development, compensation, integration and maintenance of people for the purpose of contributing to the organizational goals.

Personal management versus Human resource management:

1. Personnel management function is often viewed as a function of the specialized staff. Human resource management function is the responsibility of all the line managers in the organization.

2. Personnel management goal is employee orientation Human resource management goal is organization orientation.

3. Personnel management managerial function Human resource management operative function

4. Personnel management cooperative level manager concern Human resource management top level manager concern.

Definition of HRM: According to Flippo HRM is planning, organizing , directing and controlling of the procurement development, Compensation, integration, maintenance and suppuration of human resources to the objectives.

FUNCTION OF HRM:

Most experts agree that managing involves 5 functions

- Planning
- Organizing
- Staffing
- Leading
- Controlling

- **Planning:** Establishing goals and standards, developing rules and procedures, developing plans and forecasting.

- **Organising:** Giving each sub ordinate a specific staff establishing departments deligating authority,Communication and co-ordinating work.

- **Staffing:** Manning the position. Determining the required people, selecting training, developing, Evaluating and compensating.

- **Leading:** Getting others to get the job done, maintain moral, motivating sub-ordinates.

- **Controlling:** Setting standards such as sales quota, quality standards production levels, checking Actual performance and comparing with standards, taking necessary action.

Line and staff aspects of HRM:

Types of Authority:

1. **Line authority:** Line authority entitles a manger to direct the work of an employee. It is the employer-enployee authority relationship that extends from top to bottom. A line manager directs the work of employees and makes certain decisions without consulting anyone. Sometimes the term line is used to differentiate line managers from staff managers. Line emphasizes managers whose organizational function contributes directly to the achievement of organizational objectives.

2. **Staff managers and Staff authority:** Staff managers have staff authority. A managers function is classified as line or staff based on the organizations objectives.

   As organizations get larger and more complex, line managers find that they do not have the time, expertise or resources to get their jobs done effectively. They create staff authority functions to support, assist, advice, and generally reduce some of the informational burdens they have.

3. **Functional control:** The authority exerted by a personnel manager as a coordinator of personnel activities. Here the manager acts as the right arm of the top executive.

JOB ANALYSIS:

Harry L.Wylie: "Job analysis deals with the anatomy of the job. This is the complete study of the job embodying every known and determinable factor. Including the duties and responsibilities involved in its performancve. The conditions under which performance is carried on, the nature of the task; the qualifications required in the worker, and the conditions of employment such as pay, hours, opportunities and privileges".

Objectives of Job analysis:

1. **Job Description:**

   Job description is a job profile which describes the contents environment and condition of jobs. It is prepared on the basis of data collected through job analysis. It provides information relating to activities and duties to be performed in a job. It differentiate one job from another by introducing unique characterstics of each job.

2. **Job Specification:**

   Job specification is another notable objective of job analysis. It includes the information relating to the requirements of skills and abilities to perform a specific task. It states the minimum acceptable qualifications that an incumbent must possess to perform the assigned duty successfully. The job specification statement identifies he knowledge, skills, abilities needed to perform that task effectively.

3. Job evaluation:

Job analysis also provides required information which are necessary for evaluating the worthiness of jobs. After the preparation of job description and job specification statements. It assists for the evaluation of actual performance against the predetermined standard. Then the deviation is found out that has taken place during the course of action. Moreover, it helps to establish the value of different jobs in a hierarchical order which allows to compare jobs one from another.

Steps involved in Job Analysis or Job Analysis Process:

1. Information collection

2. Review background information

3. Selection of representative position to be analyzed

4. Analysis of job by collecting data

5. Develop job description

6. Develop job specification

USES OF JOB ANALYSIS:

1. HR planning

2. Recruitment and selection

3. Training and development

4. Compensation management

5. Performance appraisal

6. Information of duties

7. Health and safety

8. Job re-engineering

9. Employee counseling

METHODS OF COLLECTING JOB ANALYSIS INFORMATION:

1. Job identification

2. Significant characterstics of a job

3. What the typical worker does?

4. Job duties

5. What materials and equipment the worker uses?

6. How a job is performed?

7. Required personal attributes

8. Job relationship

JOB DESCRIPTION:

Job description is an important document which is basically descriptive in nature and contains a statement of job analysis. It serves to identify a job for consideration by other job analysis. It tells us what should be done, why it should be done and where it should be done.

A job description is "an organized, factual statement of duties and responsibilities of a specific job". It tells what is to be done, how it is done and why?

Contents of Job Description:

- ❖ Job title

- ❖ Location of the job

- ❖ Supervision given and receive

- ❖ Materials, tools, machinery

- ❖ Designation of superior/sub-ordinates

- ❖ Salary particulars

- ❖ List of duties

- ❖ Conditions of work

- ❖ Training and development facilities

JOB SPECIFICATIONS:

Job specification is a written statement of qualifications, traits and mental characterstics that all individual must possess to perform the job duties and discharge responsibilities effectively.

A job specification is " a statement of minimum acceptable human qualities necessary to perform a job properly. In contrast to the job description it is a standard of personnel and designates the qualities required for acceptable performance.

Departmental human resource management plans are used to link together the overall policies of the Civil Service Branch, the mission, objectives and values of the department, and any specific Human Resource Management activities being

undertaken at line management level. The plans thereby provide clear policies and guidelines for staff and managers.

Plans should provide answers to three fundamental questions:

- What staff will be need, and how are we going to acquire and retain the number and quality of people required to meet the forecast needs of the department?
- How are we going to ensure that we have a well motivated workforce?
- What actions will be needed to train, develop and fit people for greater responsibility and responsiveness to change and the resulting demands for different skills and abilities?

In answering these questions, the Human Resource Management plan must refer to and support departmental plans. This ensures the relevance and credibility of Human Resource Management.

Thus the Human Resource Management plan should relate to the department's organization structure, mission, values and programme objectives for the planning period.

Before a Human Resource Management plan is drawn up, it should be considered how Human Resource Management will be organized and managed in the department. Due to the importance of the subject, an officer at the directorate level should normally be assigned the responsibility for Human Resource Management in the department. An officer at this level should have the broad understanding of the department's mission, values and objectives. It needs to be considered what the relationship should be between managers and administration staff, and/or officers charged with specific human resource management responsibilities, e.g. training officers.

Once these aspects of the planning process have been established, then the key areas of Human Resource Management can be addressed and initiatives mapped out.

Key components

The plan needs only be as detailed as the department determines is appropriate, and may not necessarily show specific activities in all areas of Human Resource Management. However, the component areas are:

1. MANPOWER PLANNING

2. RECRUITMENT

3. PERFORMANCE MANAGEMENT

4. TRAINING AND DEVELOPMENT

5. STAFF RELATIONS

6. MANAGEMENT INFORMATION SYSTEMS

MANPOWER PLANNING

Introduction

Manpower planning enables a department to project its short to long term needs on the basis of its departmental plans so that it can adjust its manpower requirements to meet changing priorities. The more changing the environment the department is in, the more the department needs manpower planning to show:

✓ the number of recruits required in a specified timeframe and the availability of talent

✓ early indications of potential recruitment or retention difficulties

- ✓ surpluses or deficiencies in certain ranks or grades

- ✓ availability of suitable qualified and experienced successors

Key components

Manpower planning comprises two key components:

- succession planning
- turnover

Succession Planning

Succession planning assesses the likely turnover in key posts, identifies suitable candidates to fill these posts in future, and ensures that they have the right training and exposure for their future work. Given the effort and support required for undertaking succession planning, it is normally confined to the directorate and those ranks immediately below, plus any grades with high turnover or anticipated expansion.

Succession planning is a very important exercise because it minimizes the impact of turnover in these key ranks and gives a branch or department early warning of any skill shortages or likely difficulties in finding suitable candidates. Ideally a succession plan should cover 3 to 5 years. The succession plan should identify

- ➢ key posts and possible successors
- ➢ causes of turnover
- ➢ competencies of successors and the training required for them
- ➢ posts for which no apparent successor exists and the remedial action planned

The information derived from the succession plan should feed into the training and development of the individuals concerned by ensuring that they attend the necessary training and are posted to jobs that will provide them with the experience for their intended role.

Turnover

Turnover refers to retirement, resignation and redundancy. While a department cannot plan turnover because there are factors, such as resignation, which are beyond its control, it can monitor turnover carefully to ensure the department will have minimal difficulties in retaining staff. If such difficulties are envisaged or experienced, the department will find out the causes for them and take early steps to address them by improving, for example, motivation or training and development opportunities.

When addressing the aspects of succession and turnover, the department also needs to consider other manpower planning factors:

- · external factors
- · internal factors

External Factors:

A number of factors may affect whether talent is available in the market to fill posts in a department. These include the availability of the required personnel with the necessary qualifications, skills and experience at a specified time, the relative job opportunities in the private sector and the general outlook of the economy.

Internal Factors:

Departmental Plan: A department assesses the number of staff it requires at different levels, at specified timeframes, in the light of its present and planned future work commitments. This may lead to an increase or decrease of the current manpower.

RECRUITMENT

Introduction

Before a department takes steps to employ staff, it should work out the type of staff it needs in terms of grade and rank, and the time scale in which the staff are required.

The general principles underpinning recruitment within the civil service are that recruitment should:

- use procedures which are clearly understood by candidates and which are open to public scrutiny;
- be fair, giving candidates who meet the stipulated minimum requirements equal opportunity for selection; and
- select candidates on the basis of merit and ability.

Recruitment of overseas officers is undertaken only when no or insufficient local candidates are available.

Key components

There are three key components to the recruitment process:

- ❖ deciding on terms of appointment
- ❖ selection of candidates
- ❖ probation

Deciding on Terms of Appointment

Terms of Appointment: Having decided on the grade and rank of the staff required, and the timing concerned, the department should consider what the most appropriate terms of appointment would be. This should take into account the nature of the duties to be performed and the overall manpower deployment of the department. The different terms of appointment that can be offered are -

1. permanent and personable terms;
2. agreement terms;
3. temporary terms (month-to-month or day-to-day);
4. part-time;
5. non-civil service appointment; and
6. consultancy

Guides to Appointment: Entry requirements of staff in each rank and grade are agreed between the Head of Grade/Department concerned and the Civil Service Branch, taking into account the advice of the Standing Commission on Civil Service Salaries and Conditions of Service or other relevant advisory bodies. These requirements are periodically reviewed and laid down in Guides to Appointments.

Selection of Candidates

Advertising: Vacancies in the civil service are normally advertised in newspapers and through circulars.

Screening and Selection: Departments screen applications to see if the applicants meet the specified qualifications and other requirements of the post. Suitable candidates are then shortlisted for subsequent examination and/or interviews. Not all grades/departments would require candidates to undergo examination, but candidates would normally be required to be interviewed by a recruitment board or an officer from the recruitment team.

Roles and Responsibilities: The Civil Service Branch recruits staff of some General Grades while Heads of Grades/Departments recruit staff of their own grade/department. For recruitment to middle and senior ranks, the advice of the Public Service Commission has to be sought before appointment is offered.

Flexibility: To minimize recruitment difficulties as well as attract and retain the best people, there are flexibilities which include recruitment overseas, offer of agreement terms, lowering entry qualifications and granting incremental credit for experience.

Probation

During probation staff is introduced to the mission, objectives and values of the civil service and their departments. Probation is a serious process which provides regular feedback on performance and assesses suitability for employment in the civil service.

It include:

1. **On-the-job training:** staff should be exposed to the different duties required for their rank. In this way they can learn the skills expected of them and managers can verify their long-term suitability.
2. **supervision and guidance :** staff should receive close and sympathetic supervision and guidance to enable problems and difficulties to be identified early and timely counseling or other action to be take.

Newly joined staff must be told the length of their probationary period, which varies with the requirements of each grade. If there are indications that staff are not suitable for confirmation, they must be counseled and then warned in writing if the problem persists. Confirmation is the step whereby a member of staff on probation is found suitable for the job and employed on permanent and personable terms.

UNIT-4

PROJECT MANAGEMENT

Introduction

Project management is a very important Human Resource Management function. Its objective is to improve overall productivity and effectiveness by maximizing individual performance and potential. Performance management is concerned with

- ❖ improving individual and collective performance;
- ❖ communicating management's expectations to supervisors and staff;
- ❖ improving communication between senior management, supervisors and staff;
- ❖ assisting staff to enhance their career prospects through recognizing and rewarding effective performance;
- ❖ identifying and resolving cases of underperformance; and
- ❖ Providing important links to other Human Resource Management functions, such as training.

Key Components

Performance management therefore consists of several key components -

- ➢ motivation
- ➢ performance appraisal
- ➢ promotion
- ➢ guidance and supervision
- ➢ addressing poor performance

MOTIVATION

Motivation is in many ways the key to the success of Human Resource Management development. Managers should aim to increase performance through self-motivation, rather than having to use external motivation (i.e. the imposition of rules and continual improvements to conditions of service) to bring about higher standards of performance.

The civil service has many formal programmers to enhance motivation, and these are discussed in the "staff relations" section of this booklet. However, even more important is the motivational impact that supervisors have on their staff.

Principle: The basic principle underpinning motivation is that if staff are managed effectively, they will seek to give of their best voluntarily without the need for control through rules and sanctions - they will eventually be self-managing.

Procedures: Some of the most effective ways for managers to motivate staff include giving praise; recognition; and positive feedback; passing on feedback from more senior managers; and letting other staff know which staff have been responsible for praiseworthy work and/or effort. Too often staff experience 'management by mistake', where most of the feedback received is corrective or punitive for mistakes they are perceived to have made.

If staff feels that their decisions are generally supported, and when genuine mistakes are made they will be guided in the right direction, they will be more positive, confident and prepared to take on responsibility and decision-making.

When staffs are shown clear expectations, valued, trusted, encouraged and motivated, then they will be more likely to give of their best.

Performance Appraisal

Performance appraisal assesses an individual's performance against previously agreed work objectives. It serves two functions. First, it enables management to evaluate an individual's performance in the current job to identify strengths and overcome weaknesses. Second, it provides information to assist management plan postings, transfers and promotions. In so doing, management is able to compare performance and potential between officers of the same rank.

Principles: The basic principles governing performance appraisal are -

➢ Heads of Department/Heads of Grade have the flexibility to design their own appraisal system within the framework of these principles;

➢ Performance appraisal should be regarded as a multi-purpose management tool. Outcomes from staff appraisal should guide other Human Resource Management functions;

➢ it is a joint responsibility of the individual and the supervisor;

➢ it is a continuous and ongoing process;

➢ it should relate individual performance to departmental objectives;

➢ checks and balances should be built into the system to ensure fairness and objectivity; and

➢ Outstanding performance at one rank does not necessarily indicate suitability for promotion to a higher rank.

Procedure: Except for officers on probation, performance appraisal is normally carried out once a year. Different grades/departments may have their own performance appraisal form which enshrines the principles set out in the preceding paragraph.

At the beginning of the reporting cycle, the appraise should agree with the appraising officer on the main objectives or responsibilities over the reporting period. The list of objectives or responsibilities should be reviewed between the appraise and the appraising officer during the reporting cycle to see if changes are necessary. At the end of the reporting cycle, the appraising officer will write his assessment. He will pass his assessment to the countersigning officer for the latter's views.

To provide feedback to the appraisee, the appraising officer and the countersigning officer decide between them who should interview the appraisee to discuss with him/her the performance during the reporting period. The interviewing officer should show the entire report to the appraisee before the interview. A summary of the discussion at the interview and the points made by the appraisee should be recorded in the appraisal form. After the interview, the appraisal form is passed to the grade manager for his assessment.

Promotion

Promotion denotes that an individual has the competencies, i.e. the skills, abilities, knowledge and attitudes, required to perform effectively at the next higher rank. The competencies reflect the knowledge and skills exhibited in observable behaviour in the relevant areas of work. Promotion provides motivation to perform well and is an important part of performance management.

Principles : The principle of merit, or the best person for the job is key to promotion. Ability, potential and experience are taken into account in the assessment. The process of assessment should be fair and transparent. It is kept separate from the day to day management of performance and from the annual performance appraisal. The former should be a continuous process, while the latter can be used to assist in determining suitability for promotion.

Promotion Procedures: Heads of Department/Heads of Grade have flexibility to invite certain officers to apply for promotion, or allow officers to opt out of promotion.

> As a general rule promotion boards are convened to increase transparency and impartiality; and

> provide an opportunity to consider eligible officers' potential and organizational succession planning.

Where necessary and appropriate, promotion interviews are held to assist in assessment to supplement information provided in staff reports. This will apply to situations where staff reports are insufficient and questionable in terms of fairness or

consistency. The promotion boards should be aware of potential unfairness if some staff are interviewed and others are not.

It is good management practice to provide promotion feedback to the staff who were considered but were not selected after a promotion exercise, to enhance communication. Departments respond to enquiries from staff arising from promotion exercises. They are encouraged to take a proactive approach in giving promotion feedback to staff after the relevant exercise has taken place.

Guidance and Supervision

Day-to-day guidance and supervision is necessary to provide direction and feedback to staff. It reinforces the annual performance appraisal, helps groom officers for promotion, and assists staff who is not performing well.

Principles: Guidance and supervision reinforces behavior that contributes to good performance and discourages behavior that blocks progress. Feedback should be -

- frequent - staff should not have to wait until formal performance review or appraisal for feedback;
- balanced - it should focus on good and bad performance;
- immediate - immediate feedback has much more impact than feedback given several weeks or months later;
- specific - staff should be in no doubt what actions feedback covers; and
- constructive - feedback should focus on overcoming difficulties or reinforcing successful behavior.

Procedure: Guidance and supervision is offered on a day-to-day basis as needed.

Addressing Poor Performance

Poor performers need to be appropriately handled to ensure they will not persist in their adverse performance, and will give of their best to the civil service. Management must take action to tackle such performers; otherwise there may be an adverse effect on the morale of staff who are performing satisfactorily.

Principle: When staffs are not performing at the level appropriate for their rank and experience, they should be told so, and be helped to overcome the poor performance through close supervision and counseling. When it is clear that these are to no avail, retirement in the public interest would need to be resorted to. The whole procedure needs to be handled in a sensitive, objective and fair manner.

Procedure: Each instance needs to be handled in the light of circumstances. The normal sequence of action is as follows –

- counseling - staff should be told the areas where they need to improve and how this should be achieved; and
- appraisal - if staff do not respond to counseling their poor performance will be indicated in their annual appraisal.

  If no improvement is shown after counseling and appraisal, there is a formal process of dealing with non-performance involving written warning, stoppage of increment and retirement in the public interest.

TRAINING AND DEVELOPMENT

Introduction

The objective of training and development is to enable civil servants to acquire the knowledge, skills, abilities and attitudes necessary to enable them to improve their performance.

Staff training and development should focus on the department's objectives and goals and staff's competencies in achieving them. A strategic approach has the following characteristics:

- ❖ commitment to training and developing people;
- ❖ regular analysis of operational requirements and staff competencies;
- ❖ linking training and development to departmental goals and objectives;
- ❖ skilled training personnel;

- ❖ regular evaluation;
- ❖ a continuous learning culture;
- ❖ joint responsibility between managers and staff for identifying and meeting training needs; and
- ❖ a variety of training and development methods for different circumstances and learning styles.

Key components:

Training and Development consists of two main aspects :

- training
- development

Training

Departments manage their own training function and have varying levels of responsibility to do this effectively:

- Management formulates departmental training policies and draws up training and development plans to support departmental missions, objectives and values.
- Managers identify competencies and training needs, implement training activities and provide coaching and supervision to ensure staff development occurs.
- Staff takes responsibility to make the most of the opportunities provided to maximize their potential.
- Various types of training are provided in the civil service –

- **Induction:** to familiarize new recruits with job requirements and procedures, departmental objectives and performance standards; and the values and norms of the department.
- **Management development:** to equip managers with the knowledge and skills required and to widen their perspective.

- **Vocational:** to provide staff with the professional or technical knowledge and skills required for work.
- **Language and communication:** to meet operational needs (e.g. Thai, Vietnamese) and to prepare for the future (Putonghua and written Chinese).
- **Computer:** to provide staff with basic computers skills.

Development

The purpose of career development is to identify and develop the potential within staff, to build existing skill levels, and to prepare staff to take on greater responsibility during their career.

Career development has to balance the needs and aspirations of the individual with the needs of the service - where these conflict, the needs of the service should prevail.

Posting

Postings for staff should take account of the previous experience of the individual and his future needs and potential. Staff can either be developed to have a broad experience across a number of areas or they can focus on a particular area and develop in-depth experience. Determining the most appropriate way to develop staff is a balance between the needs of the organization and the aspirations of the individual. Future posting aspirations should be discussed with staff on the understanding that in the final analysis the needs of the civil service are paramount.

Acting Appointment

There are three kinds of acting appointments:

- ➢ Acting "with a view" - whereby staff are posted to the acting rank to assess their suitability for substantive promotion
- ➢ Acting "with a singling out effect" - whereby staff who do not merit immediate promotion or an acting appointment with a view to substantive promotion but who are nevertheless assessed to have better potential than other officers to undertake the more demanding duties in the higher rank, are placed in the higher rank to assess their suitability for substantive promotion.

➢ Acting for administrative convenience - whereby staff are placed in a higher rank to cover the absence of the normal post holder, e.g. through sickness, long holiday or maternity leave. Staff acting for administrative convenience reverts to their substantive rank on the return of the substantive post holder.

Apart from acting for administrative convenience which is more ad hoc, the other two types of acting provide opportunities for staff to be exposed to more onerous duties and responsibilities, thereby testing their ability.

Secondment

Secondment from departments for attachments in policy branches in the Government Secretariat are good ways to expose staff to a different working environment which places greater emphasis on policy formulation and resource control. Apart from secretariat attachments, secondments and exchange schemes with overseas and private sector counterparts can be arranged to broaden staff's exposure.

STAFF RELATIONS

Introduction

The purpose of staff relations is to ensure effective communication between management and staff, to secure maximum cooperation from staff, and to motivate staff to give their best by ensuring that they feel fairly treated, understand the overall direction and values of the Civil Service and those of their departments, and how decisions that affect them have been reached.

The principles that govern staff relations are that, where possible:

❖ management should communicate regularly and openly with staff;

❖ staff should be consulted on matters that affect them;

❖ problems and disputes should be resolved through discussion and consultation;

❖ the Government should uphold the resolutions of the International Labour Organization conventions; and

❖ management should devise and encourage activities that contribute to staff's well being.

Key components

Staff relations cover:

- securing staff commitment
- dispute resolution
- addressing grievances
- welfare

Securing staff commitment

The public judges service by personal experience. This is largely determined by the staff who handles individual cases - often front-line staff. Staff commitment is thus crucial to providing the quality of service that the public expects.

Front-line staff has difficult jobs to do and should be fully trained to answer questions, to know the rules they must administer, and to be taught how to deal with unusual cases as well as the inevitable difficult customer. In short they need to know how to be positive, helpful and courteous - everyday.

Managers are responsible for ensuring that programmes are in place for this purpose. They must also lead by example, so that the principles of good service cascade through all levels of the department.

Consultation

At the central level, there are four staff consultative councils : the Senior Civil Service Council, the Model Scale I Staff Consultative Council, the Police Force Council and the Disciplined Services Consultative Council. It is Government's policy that staff should be consulted on all significant changes to terms and conditions of service.

At the departmental level, Departmental Consultative Committees provide a consultative channel between management and staff representatives, mainly on departmental matters.

Managers should listen to their staff, and encourage them to air their views or make suggestions. In addition to formal channels, this can be achieved through opinion surveys, suggestion schemes, working groups, and other informal discussions.

Communication

Communication is a two-way process, for releasing staff's ideas, energy and ambitions. Through communication, management helps staff understand the mission, objectives and values of the department, and staff can let management know their ideas and aspirations for giving their best. To achieve effective communication, managers normally consider the following -

- ❖ the message they intend to send
- ❖ who they need to communicate with
- ❖ the most effective form of communicating this particular message
- ❖ how the audience would be likely to receive the message.

Formal communication channelsbriefings, newsletters and circulars. activities, and day-to-day contact.

Recognition

Recognition of individual or group achievements and efforts will help promote the right attitude to work, and bring out the best in staff.

Apart from pay increase, promotion and job extension, recognition is a good way to motivate staff. The following formal schemes help to motivate staff -

- ➢ Commendation/Appreciation Letters
- ➢ Long Service Travel Awards
- ➢ Long and Meritorious Service Award
- ➢ Retirement Souvenirs
- ➢ Honours and Awards
- ➢ Staff Suggestions Scheme
- ➢ Staff Motivation Scheme

Objects of materials :

- Minimization of materials costs

- To reduce inventory for use in production process and to develop high inventory turnover ratios.

- To procure materials of desired quality when required, at lowest possible overall cost of the country.

- To reduce paper work procedure in order to minimize delays in procuring materials.

- To note changes in market conditions and other factors affecting the concern.

- The purchase, receive, transport, store materials efficiently

- To reduce cost, through simplification, standardization, value analysis etc.

- To conduct studies in new areas e.g., equality consumption and cost of materials so as to minimize cost of production.

Function of Materials Management:

- Materials planning and programming

- Purchasing materials inspection of materials

- Inspection of Materials

- Classification, codification and standardization in stores

- Storage of materials

- Issuing of materials

- Maintence of proper inventory records

- Materials receiving

Inventory: It defined as a comprehensive list of movable items which are required for manufacturing the products and to maintain the plant facilities in working conditions.

Inventory Control: The systematic location, storage and recording of goods in

such a way the desired degree of service can be made to the operating shops at minimum ultimate cost.

Objectives of Inventory Control:

1. To support the production departments with materials of the right quality in the right quantity, at the right time and the right price, and from the right supplier

2. To minimize investments in the materials by ensuring economies of storage and ordering costs

3. To avoid accumulation of work in process

4. To ensure economy of costs by processing economic order quantities

5. To maintain adequate inventories at the required sales outlets to meet the market needs promptly, thus avoiding both excessive stocks or shortages at any given time

6. To contribute directly to the overall profitability of the enterprise

Functions of inventory control:

To develop policies, plans and standards essential to achieve the objectives

- To build up a logical and workable plan of organization for doing the job satisfactory

- To develop procedure and methods that will produce the desired results economically

- To provide the necessary physical facilities

- To maintain overall control by checking results and taking corrective actions.

Inventory Management System or Level:

The objects of inventory control are to establish level of inventory which will serve to minimize the company's costs and maximize its revenue.

It is determined by five basic variables

a) Minimum inventory

b) Reorder point

c) Recorder quantity

d) Procurement lead time

e) Maximum inventory.

Minimum inventory: Minimum inventory or buffer stock is needed to take care of any temporary unpredictable increase in the part usage or in the procurement lead time.

Reorder point: It is sufficiently above the minimum inventory to allow for issuing the purchase order and for delivery by a vendor. Reorder point stock level is equal to the minimum stock plus the expected consumption during the procurement lead time.

Reorder Quantity: This is the fixed quantity of item for which order is placed every time the stock drops to the reorder point. This quantity is fixed either on the basis of experience or calculated.

Procurement lead time: This comprises the time required for preparing the purchase order, the time gap between placing an order and receiving supplies and time required for inspection etc.

Maximum inventory: It is approximately the sum of the order quantity and minimum inventory. It will exactly equal the sum of these two quantities if the ordered material is received just when the minimum stock is reached.

First in First Out (FIFO): In this system, the materials first received are issued first materials from the second lot are issued only, when first lot is exhausted and so on. The prices of the materials are charged at the cost at which that lot was purchased.

Last in First out (LIFO): In this system, the materials first received are issued first materials from the second lot are issued only when first lot is exhausted and so on. The prices of the materials are charged at the cost at which that lot was purchased.

Simple average price method: In this method, the stock are issued at an average price. The average price is determined by dividing the sum of the prices (at which the goods are received) by the number of price available.

Weighted average price method: This method is an improvement over simple average price. While calculating the average price, the quantities of each of the receipts are considered. The weighted average price is calculated as given below:

$$\text{Weighted average price} = \frac{(W_1 \times P_1) + (W_2 \times P_2) + (W_3 \times P_3)}{W_1 + W_2 + W_3}$$

Where W_1, W_2, and W_3 refer to the quantities of each of the three receipts and P_1, P2, and P_3 are the prices of each of the receipts. Under this method, the quantity of each of the receipts is called the weight. Hence, the average price so computed is called the weighted average price. Weighted average is calculated after each time a purchase is made.

Purchasing: It deals with investment, overheads dealing with other and also result in server losses mass production industries that requires large purchasing for a continues flow of materials, demand for an efficient purchase decision. It implies procurement of raw materials machinery, service etc. needed for production and maintenance of the concern.

It has several benefits in terms of reduced costs, higher inventory turnover, buying the materials at the best prices, turnover, buying the materials at the best prices, continues supplies, reduced lead time and so on.

Objectives:

- To procure right material
- To procure materials in desired quantities
- To procure material of desired quality
- Purchasing from reliable source
- To pay less for materials purchased
- To receive and deliver materials at right place and time.

Purchasing process:

The following are the logical steps in the purchasing process:

- Requisitioning purchases

- Exploring sources of supply

- Issuing of tenders and obtaining quotations

- Opening of tenders and quotations and preparation of comparative statement

- Negotiating over the purchase price and terms of supply

- Placing purchase order

- Receiving of materials along with the invoice

- Checking inward invoice

- Inspecting and testing materials

- Forwarding the materials to stores

- Checking invoice and passing of bills for payments

Stores Management: It deals with planning, coordination and control of various activities pertaining or effective efficient and economic storage and store keeping.

Store: Generally, un worked material is known as store Storage:
The store room is the place where stores are housed

Storage: Storage is meant holding in custody all kinds of stores and materials semi-processed and fully processed products.

Store Keeping: It may be defined as that aspect of materials control concerned with physical storage of goods.

Functions of stores:

- To receive raw materials, semi-finished or purchased items from vendors and to check them for identification.

- To receive parts and components which has been processed in the factory?

- To make a record of material receipt and current status of material in the

store

- To maintain positioning of materials in the store.

- To maintain stock safety and in good condition to ensure that they do not suffer from damage

- Issuing the items/materials to operational personnel

- Making a record of receipt and issue slips

- To avoid illegal attics in store areas.

- To plan for optimum utilization of space.

- Cooperating to full extent which purchasing, manufacturing and production planning and control departments.

Stores Records:

Material requisition note: Whenever the materials are required by a department/section, this form has to be filled in. This note provides information about the job number, description of the items required in terms of number. The head of the department/section should authorize it. Whenever the materials are issued, the receiving person should sign the note.

This is to be entered in the materials issued record, which is to be signed by the storekeeper.

Purchase order: The purchasing officer will release the purchase order. The following is the format of a purchase order. Here, we find Vivek enterprises placing a purchase order on Business Solutions Ltd., for the following materials. The terms and conditions of the purchase order such as delivery, payment, and other have to be mentioned clearly.

Invoice: Invoice is a statement sent by the seller to the buyer mentioning the particulars of the goods supplied, net amount payable for the goods, and the terms and conditions governing the sale. It is very important document because it shows the net amount payable by the buyer after all the discounts and the taxes, if any.

Goods received note: The goods received note furnishes the particulars of the

suppliers, purchase order number, purchase requisition number, and the job for which the goods are received. These details are to be certified by a competent authority. On this basis, the accounts department initiates the process of payment for the goods received.

Selling	Marketing
1. Product enjoys the supreme importance	1. Customer enjoys unique Importance
2. Emphasis on company (sellers) needs	2. Emphasis an market customers Needs
3. Company oriented selling effects	3. Market oriented selling effects
4. Goods are already produced and then sold as profit	4. Customers demand determines production supply is adjusted to Demand
5. Selling aims at short-term objectives	5. Marketing aims as long-term Objectives
6. Top priority is given to sales volume rather than profits increasing sales	6. To priority is given to profitable volume of sales and market share at fair prices and reasonable risk
7. Production oriented	7. Customer oriented.

Goods returned note: Sometimes, a part or whole of the goods received may not be of acceptable quality, and hence, these have to be returned to the supplier. In this context, the goods received note is prepared. This is also called the 'debit note' because the suppliers or creditors' account has to be debited by the amount mentioned in this debit note for the goods returned.

Stores ledger account: This is maintained to provide the details of the quantity,

price and amount of the receipts, issues, and balance of stocks on a day-to-day basis. At any given time, the physical quantity of stocks should match with the balance as per the stores ledger account. A separate account is maintained for each type of the material in the stores. It should necessarily mention the method such as FIFO or LIFO, followed to value the issues of stocks. It is a valuable tool for the costing department in exercising stores control. It facilitates the valuation of

stock from time to time.

Bin card: Bin card is the slip or tag attached to the bin where the goods are stocked. Whenever the materials are received or issued, an entry is made on the bin card. The purpose of bin card is to reveal the particulars of the quantities received, issued, and available as on a given date at a glance. Where separate bins are maintained for each item of the store, each bin will have a tag hung to it.

Marketing Management

Marketing: Marketing as a social process by which individuals and groups obtain what they need and want through creating, offering exchanging products and services of value with others.

Selling versus Marketing:

Selling refers to the act of transferring the ownership of the goods and services from the seller to the buyer.

Marketing refers to the whole process encompassing the entire range of activities starting from identifying the customers requirements to satisfying these in a mutually beneficial manner.

Marketing Function:

Buying: Buying involves both the marketing and the customers. The marketing manager must know about the type of customers, their consuming habits demands and buying pattern.

Selling: It creates a demand for a product selling function involves.

- Product planning and development
- Finding out or locating buyers
- Demand creation through salesmanship, advertising and sales promotion
- Negotiation of terms of sales such as price, quantity and quality etc.

Transporting: It involves the creation of place utility. In order to have value goods must first be transported from the place they are produced to the place where they are needed.

Storage: It concerned with storing finished products properly without any damage, until they are dispatched to the customers it is also concerned to the customers it is also concerned with maintaining stock of raw materials with maintaining stock of raw materials, components etc. to meet production schedules.

Standardization and grouping: These two functions are supplementary and complementary to each other. A standard is a measure of fixed value. The standard could be based on colour, weight, quality, and number of items, price, or any other parameter. Both domestic and export markets rely extensively on this function. Grading is the process of sorting the goods. The price varies with the grade of the goods. This function enables the marketer to fix a uniform price for a given grade of the goods. It further promotes good understanding between the buyer and the seller.

Finance: Finance is the life blood of business value of goods is expressed is money and it donated by price to be paid by buyer to seller credit is necessary in marketing it plays all important role in retail trade particularly in the sales of costly consumer goods.

Marketing research: The marketing personnel must study the trends in market demand, supply prices and related market information. The knowledge about the latest market information may help the firm to reduce risk loss in purchasing, in pricing, in forecasting market demand and in facing competition in the market.

Marketing Mix: It refers to the combination of four basic elements, viz., product, price, promotion and the place, known as the four P's of marketing.

Product Mix: It is used to describe the assortment of different product types (product lines) and their varieties (product depth). In addition, different tangible and intangible features of the product also form the product mix.

Price Mix: Price mix refers to the decisions relating to the price charged for the product, service or idea.

Promotion Mix: Refers to the activities relating to promotion of the product, service or idea.

Place Mix: Place or physical distribution mix refers to the activities that are involved in transferring ownership to consumers at the right time and price.

Product life cycle:

- Products have limited life.
- Products sales pass through distinct stages, each passing different challenges, opportunities and problems to seller.
- Profits rise and fall at different stages of product life cycle.

Rapid growth: A new product enters the stage of rapid growth when it satisfies the needs of the customers. The sales start picking up with repeat purchases and by word of mouth publicity, coupled with continued promotion outlay from the manufacturer's side. As new customers get attracted to the product for the first time, sales soar, sales revenues increase faster than costs, and profits start accruing. This trend attracts the attention of the competitors who release a similar product copying the best features of the new product.

Maturity: when the product's sales growth slows down, it is called maturity. Due to this slow down, the industry as a whole suffers from overcapacity. At this stage, firms tend to attract the customers away from their competitors through cheaper prices and larger promotional efforts and outlay. Those who

cannot afford such large promotional outlay and woo customers of the competitors.

Saturation: When the sales growth slows down to zero, such a stage is called saturation. This size of the market does not increase beyond this stage. In other words, old customers who have stopped buying the product replace any new customer entering the market. All sales are simply replacement sales or repeat purchases by the same customers.

Decline: When sales of a product tend to fall, such a stage is called decline. When a product ceases to satisfy the customer's needs in relation to those available in the market, it is no more preferred. As a result, its competing products offering superior benefits take over the market. This leads to weakened profitability.

Type of Channels of Distribution: Channels of distribution refer to the ways and means of reaching the customer through the intermediaries such as wholesalers, retailers, and other agencies, if any.

However, consumer product manufacturers also through Internet, mail order operations, and door-to-door selling are following this method. It is common sight to find the representatives of the manufacturers going from house to house to sell their products, which are normally used in the households.

Manufacturer – wholesaler – consumer: This channel is primarily used in the case of industrial goods and high-value consumer durable products. The wholesaler, who may also be called as distributor in this channel, carries out the functions of retailing to large customers who may in themselves be the manufacturers also. The wholesalers in this channel buy goods from many manufacturers, stock, and subsequently, sell them through internet or directly to the customers in a wider geographical area. An example of the use of this method can be observed in the computer hardware industry.

Manufacturer – retailer – consumer: Here, the large retailing chains, including

supermarkets, use this channel to buy products in large quantities from manufacturers at a very competitive price and sell the same to the ultimate consumers. As the retailers enjoy large discounts in this process, they share this benefit with their customers by keeping their products competitively priced. The consumers patronage this channel because they can buy in small quantities from a wide variety at lower prices.

Manufacturer – wholesaler – retailer – consumer**:** This is a chain widely followed for fast moving consumer goods, which are likely to have mass markets. When the consumers are large in number, widely dispersed geographically, and products are of low value, this channel is favoured. Manufacturers would find it prohibitively expensive to set up their own outlets in such circumstances. For manufacturers of consumer goods such as hosiery, food items, confectionery, clothes, and readymade garments, cosmetics, and so on, intermediaries are indispensable in the distribution chain

UNIT – 5

STRATEGIC MANAGEMENT AND CONTEMPORARY STRATEGIC ISSUES

STRATEGIC Management: Human resource management is the process of managing the human resources of an organization in tune with the vision of the top management.

Personnel Management: Defines personnel management as the planning, organizing, and controlling of the procurement, development, compensation, integration and maintenance of people for the purpose of contributing to the organizational goals.

Personal management versus Human resource management:

5. Personnel management function is often viewed as a function of the specialized staff. Human resource management function is the responsibility of all the line managers in the organization.

6. Personnel management goal is employee orientation Human resource management goal is organization orientation .

7. Personnel management managerial function Human resource management operative function

8. Personnel management cooperative level manager concern Human resource management top level manager concern.

Definition of HRM: According to Flippo HRM is planning, organizing , directing and controlling of the procurement development, Compensation, integration, maintenance and suppuration of human resources to the objectives.

FUNCTION OF HRM:

Most experts agree that managing involves 5 functions

- Planning
- Organizing
- Staffing
- Leading
- Controlling

- **Planning:** Establishing goals and standards, developing rules and procedures, developing plans and forecasting.

- **Organising:** Giving each sub ordinate a specific staff establishing departments deligating authority,Communication and co-ordinating work.

- **Staffing:** Manning the position. Determining the required people, selecting training, developing, Evaluating and compensating.

- **Leading:** Getting others to get the job done, maintain moral, motivating sub-ordinates.

- **Controlling:** Setting standards such as sales quota, quality standards production levels, checking Actual performance and comparing with standards, taking necessary action.

Line and staff aspects of HRM:

Types of Authority:

Line authority: Line authority entitles a manger to direct the work of an employee. It is the employer-enployee authority relationship that extends from top to bottom. A line manager directs the work of employees and makes certain decisions without consulting anyone. Sometimes the term line is used to differentiate line managers from staff managers. Line emphasizes managers whose organizational function contributes directly to the achievement of organizational objectives.

Staff managers and Staff authority: Staff managers have staff authority. A managers function is classified as line or staff based on the organizations objectives.

As organizations get larger and more complex, line managers find that they do not have the time, expertise or resources to get their jobs done effectively. They create staff authority functions to support, assist, advice, and generally reduce some of the informational burdens they have.

Functional control: The authority exerted by a personnel manager as a coordinator of personnel activities. Here the manager acts as the right arm of the top executive.

JOB ANALYSIS

Harry L.Wylie: "Job analysis deals with the anatomy of the job. This is the complete study of the job embodying every known and determinable factor. Including the duties and responsibilities involved in its performancve. The conditions under which performance is carried on, the nature of the task; the qualifications required in the worker, and the conditions of employment such as pay, hours, opportunities and privileges".

Objectives of Job analysis:

Job Description:

Job description is a job profile which describes the contents environment and condition of jobs. It is prepared on the basis of data collected through job analysis. It provides information relating to activities and duties to be performed in a job. It differentiate one job from another by introducing unique characterstics of each job.

Job Specification:

Job specification is another notable objective of job analysis. It includes the information relating to the requirements of skills and abilities to perform a specific task. It states the minimum acceptable qualifications that an incumbent must possess to perform the assigned duty successfully. The job specification statement identifies he knowledge, skills, abilities needed to perform that task effectively.

Job evaluation:

Job analysis also provides required information which are necessary for evaluating the worthiness of jobs. After the preparation of job description and job specification statements. It assists for the evaluation of actual performance against the predetermined standard. Then the deviation is found out that has taken place during the course of action. Moreover, it helps to establish the value of different jobs in a hierarchical order which allows to compare jobs one from another.

Steps involved in Job Analysis or Job Analysis Process:

- Information collection
- Review background information
- Selection of representative position to be analyzed
- Analysis of job by collecting data
- Develop job description
- Develop job specification

USES OF JOB ANALYSIS:

- HR planning
- Recruitment and selection
- Training and development
- Compensation management

- Performance appraisal

- Information of duties

- Health and safety

- Job re-engineering

- Employee counseling

METHODS OF COLLECTING JOB ANALYSIS INFORMATION:

- Job identification

- Significant characteristics of a job

- What the typical worker does?

- Job duties

- What materials and equipment the worker uses?

- How a job is performed?

- Required personal attributes

- Job relationship

JOB DESCRIPTION:

Job description is an important document which is basically descriptive in nature and contains a statement of job analysis. It serves to identify a job for consideration by other job analysis. It tells us what should be done, why it should be done and where it should be done.

A job description is "an organized, factual statement of duties and responsibilities of a specific job". It tells what is to be done, how it is done and why?

Contents of Job Description:

- ❖ Job title

- ❖ Location of the job

- ❖ Supervision given and receive

- ❖ Materials, tools, machinery

- ❖ Designation of superior/sub-ordinates

- ❖ Salary particulars

- ❖ List of duties

- ❖ Conditions of work

- ❖ Training and development facilities

JOB SPECIFICATIONS:

Job specification is a written statement of qualifications, traits and mental characterstics that all individual must possess to perform the job duties and discharge responsibilities effectively.

A job specification is " a statement of minimum acceptable human qualities necessary to perform a job properly. In contrast to the job description it is a standard of personnel and designates the qualities required for acceptable performance.

Departmental human resource management plans are used to link together the overall policies of the Civil Service Branch, the mission, objectives and values of the department, and any specific Human Resource Management activities being

undertaken at line management level. The plans thereby provide clear policies and guidelines for staff and managers.

Plans should provide answers to three fundamental questions:

- What staff will be need, and how are we going to acquire and retain the number and quality of people required to meet the forecast needs of the department?
- How are we going to ensure that we have a well motivated workforce?
- What actions will be needed to train, develop and fit people for greater responsibility and responsiveness to change and the resulting demands for different skills and abilities?

In answering these questions, the Human Resource Management plan must refer to and support departmental plans. This ensures the relevance and credibility of Human Resource Management.

Thus the Human Resource Management plan should relate to the department's organization structure, mission, values and programme objectives for the planning period.

Before a Human Resource Management plan is drawn up, it should be considered how Human Resource Management will be organized and managed in the department. Due to the importance of the subject, an officer at the directorate level should normally be assigned the responsibility for Human Resource Management in the department. An officer at this level should have the broad understanding of the department's mission, values and objectives. It needs to be considered what the relationship should be between managers and administration staff, and/or officers charged with specific human resource management responsibilities, e.g. training officers.

Once these aspects of the planning process have been established, then the key areas of Human Resource Management can be addressed and initiatives mapped out.

Key components

The plan needs only be as detailed as the department determines is appropriate, and may not necessarily show specific activities in all areas of Human Resource Management. However, the component areas are:

- o MANPOWER PLANNING

- o RECRUITMENT

- o PERFORMANCE MANAGEMENT

- o TRAINING AND DEVELOPMENT

- o STAFF RELATIONS

- o MANAGEMENT INFORMATION SYSTEMS

MANPOWER PLANNING

Introduction

Manpower planning enables a department to project its short to long term needs on the basis of its departmental plans so that it can adjust its manpower requirements to meet changing priorities. The more changing the environment the department is in, the more the department needs manpower planning to show:

- ✓ the number of recruits required in a specified timeframe and the availability of talent

- ✓ early indications of potential recruitment or retention difficulties

- ✓ surpluses or deficiencies in certain ranks or grades

- ✓ availability of suitable qualified and experienced successors

Key components

Manpower planning comprises two key components:

- succession planning
- turnover

Succession Planning

Succession planning assesses the likely turnover in key posts, identifies suitable candidates to fill these posts in future, and ensures that they have the right training and exposure for their future work. Given the effort and support required for undertaking succession planning, it is normally confined to the directorate and those ranks immediately below, plus any grades with high turnover or anticipated expansion.

Succession planning is a very important exercise because it minimizes the impact of turnover in these key ranks and gives a branch or department early warning of any skill shortages or likely difficulties in finding suitable candidates. Ideally a succession plan should cover 3 to 5 years. The succession plan should identify

- ➢ key posts and possible successors
- ➢ causes of turnover
- ➢ competencies of successors and the training required for them
- ➢ posts for which no apparent successor exists and the remedial action planned

The information derived from the succession plan should feed into the training and development of the individuals concerned by ensuring that they attend the necessary training and are posted to jobs that will provide them with the experience for their intended role.

Turnover

Turnover refers to retirement, resignation and redundancy. While a department cannot plan turnover because there are factors, such as resignation, which are beyond its control, it can monitor turnover carefully to ensure the department will have minimal difficulties in retaining staff. If such difficulties are envisaged or experienced, the department will find out the causes for them and take early steps to address them by improving, for example, motivation or training and development opportunities.

When addressing the aspects of succession and turnover, the department also needs to consider other manpower planning factors:

- · external factors
- · internal factors

External Factors:

A number of factors may affect whether talent is available in the market to fill posts in a department. These include the availability of the required personnel with the necessary qualifications, skills and experience at a specified time, the relative job opportunities in the private sector and the general outlook of the economy.

Internal Factors:

Departmental Plan: A department assesses the number of staff it requires at different levels, at specified timeframes, in the light of its present and planned future work commitments. This may lead to an increase or decrease of the current manpower.

RECRUITMENT

Introduction

Before a department takes steps to employ staff, it should work out the type of staff it needs in terms of grade and rank, and the time scale in which the staff are required.

The general principles underpinning recruitment within the civil service are that recruitment should:

- use procedures which are clearly understood by candidates and which are open to public scrutiny;
- be fair, giving candidates who meet the stipulated minimum requirements equal opportunity for selection; and
- select candidates on the basis of merit and ability.

Recruitment of overseas officers is undertaken only when no or insufficient local candidates are available.

Key components

There are three key components to the recruitment process:

- ❖ deciding on terms of appointment
- ❖ selection of candidates
- ❖ probation

Deciding on Terms of Appointment

Terms of Appointment: Having decided on the grade and rank of the staff required, and the timing concerned, the department should consider what the most appropriate terms of appointment would be. This should take into account the nature of the duties to be performed and the overall manpower deployment of the department. The different terms of appointment that can be offered are -

- permanent and personable terms;
- Agreement terms;
- Temporary terms (month-to-month or day-to-day);
- Part-time;
- Non-civil service appointment; and
- Consultancy

Guides to Appointment: Entry requirements of staff in each rank and grade are agreed between the Head of Grade/Department concerned and the Civil Service Branch, taking into account the advice of the Standing Commission on Civil Service

Salaries and Conditions of Service or other relevant advisory bodies. These requirements are periodically reviewed and laid down in Guides to Appointments.

Selection of Candidates

Advertising: Vacancies in the civil service are normally advertised in newspapers and through circulars.

Screening and Selection: Departments screen applications to see if the applicants meet the specified qualifications and other requirements of the post. Suitable candidates are then shortlisted for subsequent examination and/or interviews. Not all grades/departments would require candidates to undergo examination, but candidates would normally be required to be interviewed by a recruitment board or an officer from the recruitment team.

Roles and Responsibilities : The Civil Service Branch recruits staff of some General Grades while Heads of Grades/Departments recruit staff of their own grade/department. For recruitment to middle and senior ranks, the advice of the Public Service Commission has to be sought before appointment is offered.

Flexibility : To minimize recruitment difficulties as well as attract and retain the best people, there are flexibilities which include recruitment overseas, offer of agreement terms, lowering entry qualifications and granting incremental credit for experience.

Probation

During probation staff are introduced to the mission, objectives and values of the civil service and their departments. Probation is a serious process which provides regular feedback on performance and assesses suitability for employment in the civil service. It include

on-the-job training : staff should be exposed to the different duties required for their rank. In this way they can learn the skills expected of them and managers can verify their long-term suitability;

supervision and guidance : staff should receive close and sympathetic supervision and guidance to enable problems and difficulties to be identified early and timely counseling or other action to be taken.

Newly joined staff must be told the length of their probationary period, which varies with the requirements of each grade. If there are indications that staff are not suitable for confirmation, they must be counseled and then warned in writing if the problem persists. Confirmation is the step whereby a member of staff on probation is found suitable for the job and employed on permanent and personable terms.

PERFORMANCE MANAGEMENT

Introduction

Performance management is a very important Human Resource Management function. Its objective is to improve overall productivity and effectiveness by maximizing individual performance and potential. Performance management is concerned with

- ❖ improving individual and collective performance;
- ❖ communicating management's expectations to supervisors and staff;
- ❖ improving communication between senior management, supervisors and staff;
- ❖ assisting staff to enhance their career prospects through recognizing and rewarding effective performance;
- ❖ identifying and resolving cases of underperformance; and
- ❖ providing important links to other Human Resource Management functions, such as training.

Key Components

Performance management therefore consists of several key components -

- ➢ motivation
- ➢ performance appraisal
- ➢ promotion
- ➢ guidance and supervision
- ➢ addressing poor performance

MOTIVATION

Motivation is in many ways the key to the success of Human Resource Management development. Managers should aim to increase performance through self-motivation, rather than having to use external motivation (i.e. the imposition of rules and continual improvements to conditions of service) to bring about higher standards of performance.

The civil service has many formal programmes to enhance motivation, and these are discussed in the "staff relations" section of this booklet. However, even more important is the motivational impact that supervisors have on their staff.

Principle : The basic principle underpinning motivation is that if staff are managed effectively, they will seek to give of their best voluntarily without the need for control through rules and sanctions - they will eventually be self-managing.

Procedures : Some of the most effective ways for managers to motivate staff include giving praise; recognition; and positive feedback; passing on feedback from more senior managers; and letting other staff know which staff have been responsible for praiseworthy work and/or effort. Too often staff experience 'management by mistake', where most of the feedback received is corrective or punitive for mistakes they are perceived to have made.

If staff feel that their decisions are generally supported, and when genuine mistakes are made they will be guided in the right direction, they will be more positive, confident and prepared to take on responsibility and decision-making.

When staff are shown clear expectations, valued, trusted, encouraged and motivated, then they will be more likely to give of their best.

Performance Appraisal

Performance appraisal assesses an individual's performance against previously agreed work objectives. It serves two functions. First, it enables management to evaluate an individual's performance in the current job to identify strengths and overcome weaknesses. Second, it provides information to assist management plan postings, transfers and promotions. In so doing, management is able to compare performance and potential between officers of the same rank.

Principles : The basic principles governing performance appraisal are -

➢ Heads of Department/Heads of Grade have the flexibility to design their own appraisal system within the framework of these principles;

➢ performance appraisal should be regarded as a multi-purpose management tool. Outcomes from staff appraisal should guide other Human Resource Management functions;

➢ it is a joint responsibility of the individual and the supervisor;

➢ it is a continuous and ongoing process;

➢ it should relate individual performance to departmental objectives;

➢ checks and balances should be built into the system to ensure fairness and objectivity; and

➢ outstanding performance at one rank does not necessarily indicate suitability for promotion to a higher rank.

Procedure : Except for officers on probation, performance appraisal is normally carried out once a year. Different grades/departments may have their own performance appraisal form which enshrines the principles set out in the preceding paragraph.

At the beginning of the reporting cycle, the appraisee should agree with the appraising officer on the main objectives or responsibilities over the reporting period. The list of objectives or responsibilities should be reviewed between the appraisee and the appraising officer during the reporting cycle to see if changes are necessary. At the end of the reporting cycle, the appraising officer will write his assessment. He will pass his assessment to the countersigning officer for the latter's views.

To provide feedback to the appraisee, the appraising officer and the countersigning officer decide between them who should interview the appraisee to discuss with him/her the performance during the reporting period. The interviewing officer should show the entire report to the appraisee before the interview. A summary of the discussion at the interview and the points made by the appraisee should be recorded in the appraisal form. After the interview, the appraisal form is passed to the grade manager for his assessment.

Promotion

Promotion denotes that an individual has the competencies, i.e. the skills, abilities, knowledge and attitudes, required to perform effectively at the next higher rank. The competencies reflect the knowledge and skills exhibited in observable behaviour in the relevant areas of work. Promotion provides motivation to perform well and is an important part of performance management.

Principles : The principle of merit, or the best person for the job is key to promotion. Ability, potential and experience are taken into account in the assessment. The process of assessment should be fair and transparent. It is kept separate from the day to day management of performance and from the annual performance appraisal. The former should be a continuous process, while the latter can be used to assist in determining suitability for promotion.

Promotion Procedures : Heads of Department/Heads of Grade have flexibility to invite certain officers to apply for promotion, or allow officers to opt out of promotion.

> As a general rule promotion boards are convened to increase transparency and impartiality; and

> provide an opportunity to consider eligible officers' potential and organizational succession planning.

Where necessary and appropriate, promotion interviews are held to assist in assessment to supplement information provided in staff reports. This will apply to

situations where staff reports are insufficient and questionable in terms of fairness or consistency. The promotion boards should be aware of potential unfairness if some staff are interviewed and others are not.

It is good management practice to provide promotion feedback to the staff who were considered but were not selected after a promotion exercise, to enhance communication. Departments respond to enquiries from staff arising from promotion exercises. They are encouraged to take a proactive approach in giving promotion feedback to staff after the relevant exercise has taken place.

Guidance and Supervision

Day-to-day guidance and supervision is necessary to provide direction and feedback to staff. It reinforces the annual performance appraisal, helps groom officers for promotion, and assists staff who are not performing well.

Principles : Guidance and supervision reinforces behaviour that contributes to good performance and discourages behaviour that blocks progress. Feedback should be -

- ➢ frequent - staff should not have to wait until formal performance review or appraisal for feedback;
- ➢ balanced - it should focus on good and bad performance;
- ➢ immediate - immediate feedback has much more impact than feedback given several weeks or months later;
- ➢ specific - staff should be in no doubt what actions feedback covers; and
- ➢ constructive - feedback should focus on overcoming difficulties or reinforcing successful behaviour.

Procedure : Guidance and supervision is offered on a day-to-day basis as needed.

Addressing Poor Performance

Poor performers need to be appropriately handled to ensure they will not persist in their adverse performance, and will give of their best to the civil service. Management must take action to tackle such performers, otherwise there may be an adverse effect on the morale of staff who are performing satisfactorily.

Principle : When staff are not performing at the level appropriate for their rank and experience, they should be told so, and be helped to overcome the poor performance through close supervision and counseling. When it is clear that these are to no avail, retirement in the public interest would need to be resorted to. The whole procedure needs to be handled in a sensitive, objective and fair manner.

Procedure : Each instance needs to be handled in the light of circumstances. The normal sequence of action is as follows –

- counseling - staff should be told the areas where they need to improve and how this should be achieved; and
- appraisal - if staff do not respond to counseling their poor performance will be indicated in their annual appraisal.

If no improvement is shown after counseling and appraisal, there is a formal process of dealing with non-performance involving written warning, stoppage of increment and retirement in the public interest.

TRAINING AND DEVELOPMENT

Introduction

The objective of training and development is to enable civil servants to acquire the knowledge, skills, abilities and attitudes necessary to enable them to improve their performance.

Staff training and development should focus on the department's objectives and goals and staff's competencies in achieving them. A strategic approach has the following characteristics :

- ❖ commitment to training and developing people;
- ❖ regular analysis of operational requirements and staff competencies;
- ❖ linking training and development to departmental goals and objectives;
- ❖ skilled training personnel;

- ❖ regular evaluation;
- ❖ a continuous learning culture;
- ❖ joint responsibility between managers and staff for identifying and meeting training needs; and
- ❖ a variety of training and development methods for different circumstances and learning styles.

Key components

Training and Development consists of two main aspects :

- training
- development

Training

Departments manage their own training function and have varying levels of responsibility to do this effectively :

- Management formulates departmental training policies and draws up training and development plans to support departmental missions, objectives and values.
- Managers identify competencies and training needs, implement training activities and provide coaching and supervision to ensure staff development occurs.
- Staff take responsibility to make the most of the opportunities provided to maximize their potential.
- Various types of training are provided in the civil service –

- **induction :** to familiarize new recruits with job requirements and procedures, departmental objectives and performance standards; and the values and norms of the department.
- **management development :** to equip managers with the knowledge and skills required and to widen their perspective.

- **vocational :** to provide staff with the professional or technical knowledge and skills required for work.
- **language and communication :** to meet operational needs (e.g. Thai, Vietnamese) and to prepare for the future (Putonghua and written Chinese).
- **computer :** to provide staff with basic computers skills.

Development

The purpose of career development is to identify and develop the potential within staff, to build existing skill levels, and to prepare staff to take on greater responsibility during their career.

Career development has to balance the needs and aspirations of the individual with the needs of the service - where these conflict, the needs of the service should prevail.

Posting

Postings for staff should take account of the previous experience of the individual and his future needs and potential. Staff can either be developed to have a broad experience across a number of areas or they can focus on a particular area and develop in-depth experience. Determining the most appropriate way to develop staff is a balance between the needs of the organization and the aspirations of the individual. Future posting aspirations should be discussed with staff on the understanding that in the final analysis the needs of the civil service are paramount.

Acting Appointment

There are three kinds of acting appointments :\

- ➢ Acting "with a view" - whereby staff are posted to the acting rank to assess their suitability for substantive promotion
- ➢ Acting "with a singling out effect" - whereby staff who do not merit immediate promotion or an acting appointment with a view to substantive promotion but who are nevertheless assessed to have better potential than other officers to undertake the more demanding duties in the higher rank, are placed in the higher rank to assess their suitability for substantive promotion.

> Acting for administrative convenience - whereby staff are placed in a higher rank to cover the absence of the normal post holder, e.g. through sickness, long holiday or maternity leave. Staff acting for administrative convenience revert to their substantive rank on the return of the substantive post holder.

Apart from acting for administrative convenience which is more ad hoc, the other two types of acting provide opportunities for staff to be exposed to more onerous duties and responsibilities, thereby testing their ability.

Secondment

Secondment from departments for attachments in policy branches in the Government Secretariat are good ways to expose staff to a different working environment which places greater emphasis on policy formulation and resource control. Apart from secretariat attachments, secondments and exchange schemes with overseas and private sector counterparts can be arranged to broaden staff's exposure.

STAFF RELATIONS

Introduction

The purpose of staff relations is to ensure effective communication between management and staff, to secure maximum cooperation from staff, and to motivate staff to give their best by ensuring that they feel fairly treated, understand the overall direction and values of the Civil Service and those of their departments, and how decisions that affect them have been reached.

The principles that govern staff relations are that, where possible:

- ❖ management should communicate regularly and openly with staff;
- ❖ staff should be consulted on matters that affect them;
- ❖ problems and disputes should be resolved through discussion and consultation;
- ❖ the Government should uphold the resolutions of the International Labour Organization conventions; and
- ❖ management should devise and encourage activities that contribute to staff's well being.

Key components

Staff relations cover:

- ➢ securing staff commitment
- ➢ dispute resolution
- ➢ addressing grievances
- ➢ welfare

Securing staff commitment

The public judges service by personal experience. This is largely determined by the staff who handles individual cases - often front-line staff. Staff commitment is thus crucial to providing the quality of service that the public expects.

Front-line staff has difficult jobs to do and should be fully trained to answer questions, to know the rules they must administer, and to be taught how to deal with unusual cases as well as the inevitable difficult customer. In short they need to know how to be positive, helpful and courteous - everyday.

Managers are responsible for ensuring that programmes are in place for this purpose. They must also lead by example, so that the principles of good service cascade through all levels of the department.

Consultation

At the central level, there are four staff consultative councils : the Senior Civil Service Council, the Model Scale I Staff Consultative Council, the Police Force Council and the Disciplined Services Consultative Council. It is Government's policy that staff should be consulted on all significant changes to terms and conditions of service.

At the departmental level, Departmental Consultative Committees provide a consultative channel between management and staff representatives, mainly on departmental matters.

Managers should listen to their staff, and encourage them to air their views or make suggestions. In addition to formal channels, this can be achieved through opinion surveys, suggestion schemes, working groups, and other informal discussions.

Communication

Communication is a two-way process, for releasing staff's ideas, energy and ambitions. Through communication, management helps staff understand the mission, objectives and values of the department, and staff can let management know their ideas and aspirations for giving their best. To achieve effective communication, managers normally consider the following -

- ❖ the message they intend to send
- ❖ who they need to communicate with
- ❖ the most effective form of communicating this particular message
- ❖ how the audience would be likely to receive the message.

Formal communication channelsbriefings, newsletters and circulars. activities, and day-to-day contact.

Recognition

Recognition of individual or group achievements and efforts will help promote the right attitude to work, and bring out the best in staff.

Apart from pay increase, promotion and job extension, recognition is a good way to motivate staff. The following formal schemes help to motivate staff -

- Commendation/Appreciation Letters
- Long Service Travel Awards
- Long and Meritorious Service Award
- Retirement Souvenirs
- Honours and Awards
- Staff Suggestions Scheme
- Staff Motivation Scheme