



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

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SCHOOL OF BUILDING AND ENVIRONMENT

DEPARTMENT OF ARCHITECTURE

UNIT – II– Human Resources and Materials Management – SAR5201

UNIT II

Personnel management is a little old and a more traditional way of handling employees at a workplace. Personnel management is the seed and root for Human resources management. HRM is a more modern and a more specific approach to managing human resources in an organization

Personnel management.

- Employees were not given high priority in decision making process
- Weren't much allowed to interact with management.
- Personal manager was to see that everything was in compliance with the labour laws or not but not much emphasis made on the morale of employees.
- Employees were just treated as tools, obligation to the organisation but not as the asset of the organisation,
- they were seen as cost & expenditure to company rather than capital and investment.
- Personnel officers mostly used be disciplinary oriented instead of flexible and interactive with employees.
- Nurturing of employees was not priority by the personnel managers
- employees perspective was ignored which means personnel managers rather than understanding situation they used to be punitive if any error was committed by employee.

Human Resource Planning (HRP)

Meaning

The process by which a management determines how an organisation should move from its current manpower position to its desired manpower position. Through planning, a management strives to have the right number and the right kind of people at the right places, at the rights time, to do things which results in both the organisation and the individual receiving the maxium long-range benefits.

Definition

Ibid., P.157, HRP includes the estimation of how many qualified people are necessary to carryout the assigned activities, how many people will be available, and what if anything, must be done to ensure that personnel supply equals personnel demand at the appropriate point in the future.

According to Jeisler, "Manpower planning is the process including forecasting, developing and controlling— by which a firm ensures, it has the right number of people and the right kind of people and at the right places at the right time doing things for which they are economically most useful"

According to Dale S. Beach, "Human resource planning is a process of determining and assuring that the organisation will have an adequate number of qualified persons, available at the proper times, performing jobs which meet the needs of the enterprise and which provide satisfaction for the individuals involved."

According to Wickstron,

"Human resource planning consists of a series of activities viz.:

Forecasting future manpower requirement either in term of mathematical projection of trends in the economic environment and development in industry or in term of judgmental estimates based upon the specific future plans of a company.

Making an inventory of present manpower resources and assessing the extent to which these resources are employed optimally.

Anticipating manpower problems by projecting present resources into the future and comparing them with the forecast of requirements to determine their adequacy, both quantitatively and qualitatively

Planning the necessary programs of recruitment, selection, training, development, transfer, promotion, motivation and compensation to ensure that future manpower requirements are properly met.

Objectives of Manpower planning

1. To ensure optimum use of HR currently employed
2. To determine future recruitment level
3. To provide control measures to ensure that necessary resources are available as and when required
4. To anticipate redundancies and avoid unnecessary dismissals.
5. To forecast future skill requirements to serve as a basis for training and development programmes
6. To assess future housing needs of employees
7. To cost the manpower component in new projects
8. To decide whether any of the enterprise activities

Importance of HRP

1. Future personnel needs
2. Coping with change
3. Creating highly talented personnel
4. Protection of weaker sections
5. International strategies
6. Foundation for personnel functions
7. Increasing investment in HR
8. Resistance of change and move
9. Other benefits

The main problems in the process of HRP are as follows:

- a) Inaccuracy: Human Resource Planning is entirely dependent on the HR forecasting and supply, which cannot be a cent per cent accurate process.
- b) Employee resistance: Employees and their unions feel that by Human Resource Planning, their workload increases so they resist the process.

c) Uncertainties: Labour absenteeism, labour turnover, seasonal employment, technological changes and market fluctuations are the uncertainties which Human Resource Planning process might have to face.

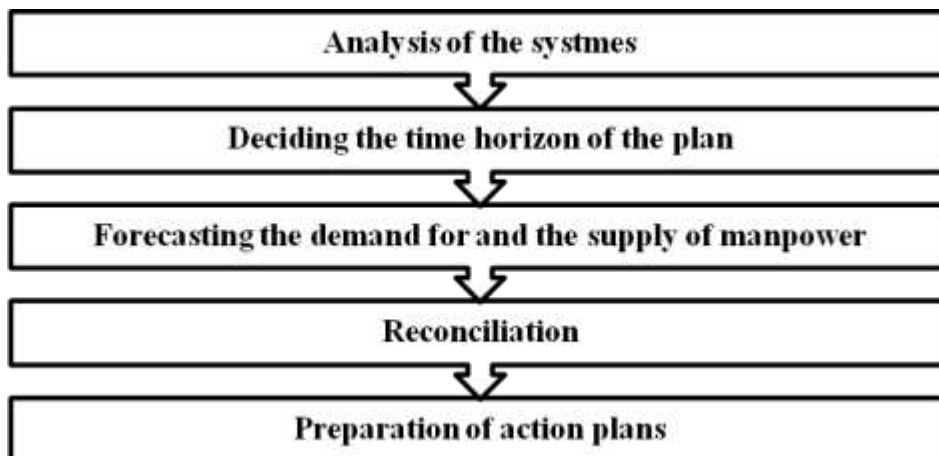
d) Inefficient information system: In Indian industries, HRIS is not much strong. In the absence of reliable data it is not possible to develop effective Human Resource Planning.

e) Time and expense: Human Resource Planning is time consuming and expensive exercise, so industries avoid.

Factors affecting HRP

1. Strategy and type of organisation
2. Organisational growth cycles and planning
3. Environmental uncertainties
4. Time horizons
5. Type and quality of forecasting information
6. Nature of jobs being filled
7. Off-loading the work

Manpower Planning Process or HRP



Meaning of HRP

The process of forecasting an organisation's future demand for and supply of, the right type of people in the right number. It is only after this, that the HRM department, can initiate the recruitment and selection process. HRP is a sub-systems in the total organisational planning.

Steps in Procurement of Personnel

1. Determination of the kind or quality of personnel needed:

- a. Job Analysis
- b. Job Description
- c. Job Satisfaction

2. Determination of the quantity of personnel required

- a. Manpower planning

3. Recruitment, selection and induction

Job Analysis

It is the process by means of which a description is developed of the present method and procedure of doing a job, physical conditions in which the job is done, relations of the job to other jobs and other conditions of employment.

Various point on which information may be gathered for Job Analysis are as follows:

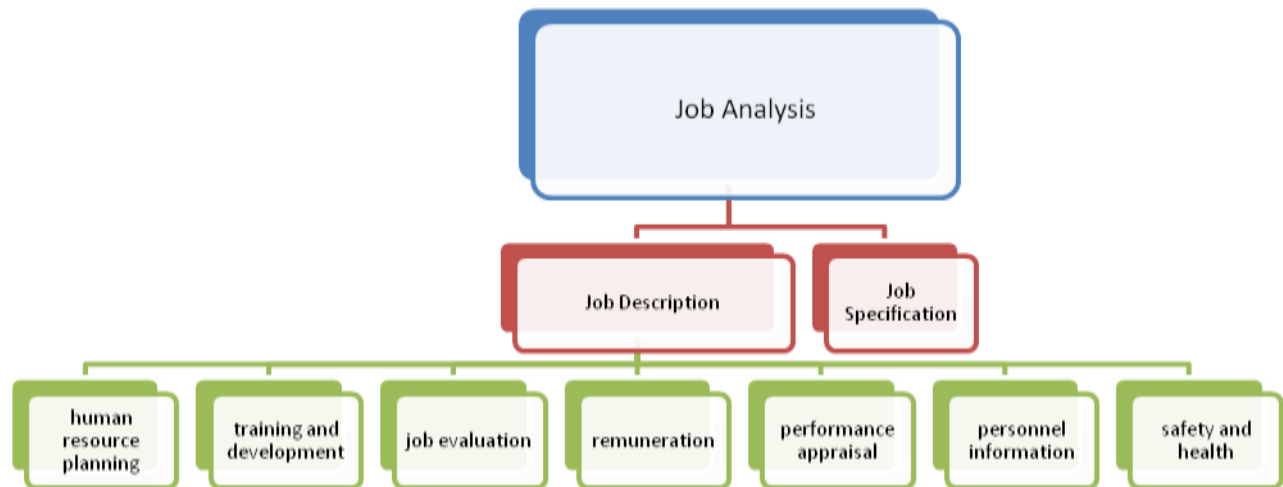
1. Job Title
2. Alternative Title
3. Work performed
4. Equipment used, Tools and Materials used
5. Reports and records made
6. Relation of the job to other jobs
7. Education
8. Experience
9. Physical and mental efforts required
10. Visual attention required
11. Responsibility
12. Discomforts and hazards
13. Supervision given and received

How to obtain data for Job Analysis?

1. Questionnaire
2. Checklist
3. Interview
4. Observation
5. Participation
6. Technical conference
7. Self – recording or diary
8. Critical incident

Uses of Job Analysis

1. It provides a complete knowledge about jobs
2. It is the first step in selection process and it is the best means of discovering the essential traits
3. A satisfactory evaluation of job is not possible without a comprehensive job analysis
4. Job analysis uncover many organisational ills
5. It help to rearrange the work flow and revise existing procedure
6. Reveal the required skills and knowledge for doing a job and determines the training needs
7. When considering for promotion, Job analysis may facilitate comparison of his current responsibilities with those of the post for which he is being considered
8. It helps in developing appropriate design of job for improved efficiency and productivity.



Job Description

It lists job titles, duties, machines and equipment involved working conditions, surrounding a job, etc

Definition

It defines the scope of job activities, major responsibility, and positioning the job in the organization. It provides the worker, analyst, and supervisor with a clear idea of what the worker must do meet the demand of the job. It also provides both organizational information and functional information.

Content / Components of Job Description

1. Job Identification or organizational position
2. Job summary
3. Job duties and responsibilities
4. Relation to other jobs
5. Supervision (Received and Given)
6. Machine, tools and equipments used
7. Working conditions
8. Hazards

Job Specifications

Job specifications list the human qualities and qualifications necessary to do the job.

Definition

Job specifications defines the human traits and experience are necessary to do the job. It portrays what kind of person to recruit and for what qualifies that person should be tested.

Content of Job specification

I. Physical characteristics

- a. Health, age, strength
- b. Size, height, weight, voice
- c. Eye, hand and foot co-ordination

II. Psychological characteristics

- a. Judgment
- b. Resourcefulness
- c. Analytical
- d. Mental concentration and alertness

III. Personal characteristics

- a. Emotional stability
- b. Appearance
- c. Good and pleasing manner
- d. Leadership and initiative
- e. Smell, hearing and adaptability

IV. Responsibility

V. Other features of a demographic nature

Recruitment

Meaning

It is the process of searching for and obtaining applicants for jobs, from among whom the right people can be selected.

Definition

Prof. William B. Werther and Keith Davis – HR and PM “It is the process of finding and attracting capable applicants for employment. The process begins when new recruits are starts

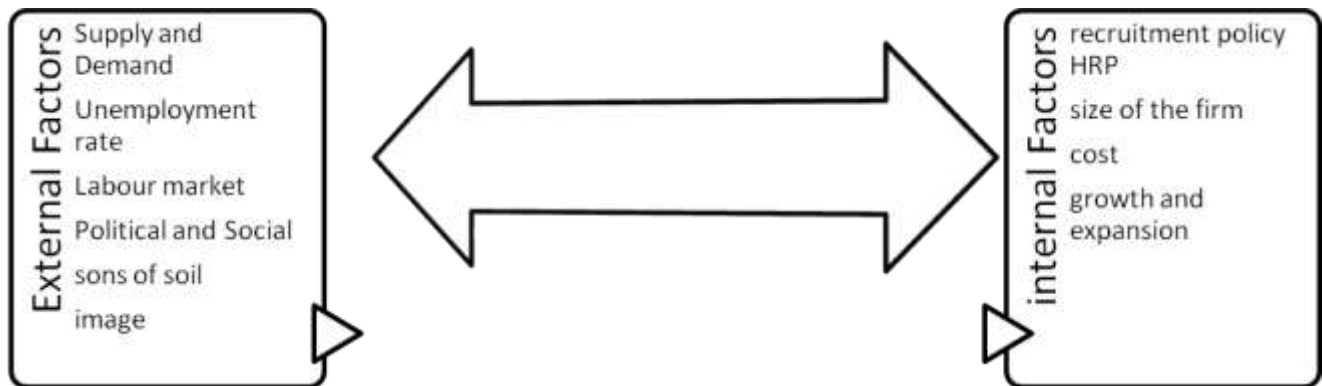
and ends when their applications are submitted. The results is a pool of applicants from which new employees are selected.

Purpose and importance of recruitment

1. Determine the present and future requirements of the organization with its human resource planning and job analysis
2. Increase the pool of job applicants at minimum cost.
3. Help to increase the success rate of the selection process, by reducing the number of visibly under qualified and over qualified applications
4. Help to reduce the probability of the job applicants, will leave the organization after a short period of time.
5. Begin identifying and preparing potential job applicants
6. Increase organizational and individual effectiveness in the short term and long term
7. Evaluate the effectiveness of various recruiting techniques and source for all types of job applicants.

Factors influencing Recruitment:

The following diagram represents the various factors or determinants of the effectiveness of the recruitment process done by the organisation;



Sources of Recruitment

The sources of recruitment can broadly be classified into two; internal and external.

I. Internal Sources

An internal source refers to the present working force of a company. In the event of a vacancy, some one already on the payroll is promoted. Thus, at the Tata Engineering and Locomotive Company and at Hindustan Unilever Ltd., outside recruitment is resorted to only when requirements cannot be met from internal promotions.

Filling a vacancy from internal sources by promotion people has the advantages of increasing the general level of morale of existing employees and of providing to the company a more reliable information about the candidate's suitability who has already worked with the company on a lower post.

The major weakness of this source are that it results into inbreeding depriving the organization of a fresh outlook, originality and initiative and offers limited choice.

Advantages of Internal Sources of Recruitment

1. Familiarity with the organisation and employees
2. Better use of talent
3. Economical and less time consuming
4. It will help to improve the morale, loyalty and belongingness of an employee
5. It will motivate the employees

Disadvantages of Internal Sources of Recruitment

1. Limited choice
2. Discourage competition
3. Creates conflicts

II. External Sources

The more commonly used external sources are the following;

1. Advertisement in the newspapers

Senior posts are largely filled by this method. This method is however, followed by companies in 3 different ways:

First, there are some companies which do not do their own advertising. On the other hand, they send their requisitions to certain specialized agencies which advertise positions in

leading newspapers without divulging the name of the client company. The applications received from the candidates by the agencies are duplicated and mailed to the clients.

Second, there are some companies which although do their own advertising but give only box numbers. Box number advertisements generally do not draw good candidates who feel that it is not worthwhile to apply without knowing employer's name. Both first and second types are called blind advertisements.

Third, there are some companies which divulge their names in their advertisements.

2. Employment Exchange

An employment exchange is an office set up by the government for bringing together as quickly as possible those men who are in search of employment and those employers who are looking for men. Employment exchange register unemployed people and maintain records of their names, qualifications, etc. the employers on their part intimate the exchange about the vacancies which occur in their factories and types of employees they required for from among the employment seekers already registered with it and forwards their names to the employers for consideration.

3. Field Trips

An interviewing team makes trip to towns and cities which are known to contain the kinds of employees required. Arrival dates and time and venue of interview are advertised in advance.

4. Educational Institutions

Sometimes recruiters are sent to educational institutions where they meet the members of the faculty and persons in charge of placement services who recommend suitable candidates. Some companies send representatives of professional meetings and convention to recruit people.

5. Labour Contracts

In many industries workers are recruited through contractors who are themselves the employees of these organizations.

6. Employee Referrals

Some industries with a record of good personnel relations encourage their employees to bring suitable candidates for various openings in the organization. Companies offer rich rewards

also to employees whose recommendations are accepted. The disadvantage of the method is that cliques of relations and friends may be formed within the enterprise.

7. Unsolicited Applicants

These are persons who gather at the factory gates to serve as casual workers or who send in their applications without any invitation from the factory. Sometimes already employed person may seek additional jobs. This is called moon-lighting. The number of unsolicited applicants at any point of time depends on economic condition, the image of the company and the job-seekers perception of the type of jobs that might be available.

8. Labour Unions

Organisations with 'closed shop' agreements with their unions are required to recruit union members only.

Advantages of External Sources of Recruitment

1. A better process of selection
2. Availability new and talented candidates
3. Opportunity to select the best candidates with innovative or creative thoughts
4. Provides healthy competition among the employees

Disadvantages of External Sources of Recruitment

1. Expensive and time consuming
2. Unfamiliarity with the organisation
3. Lack of mutual relations
4. Chances of faulty selection

SELECTION

Meaning:

Selection is the process of picking individuals (out of the pool of job applicants) with requisite qualifications and competence to fill jobs in the organisation. The objective of selection process is to determine whether an applicant meets the qualifications for a specific job and to choose the applicant who is most likely to perform well in that job.

Definition:

According to **Prof. Thomas H. Stone** defined selection as, “It is the process of differentiating between applicants in order to identify (& hire) those with a greater likelihood of success in a job”.

Selection Process:

Selection is a long process, commencing from the preliminary interview of the applicants and ending with the contract of employment.

In practice, the process differs among organisation between two different jobs within the same organisation. Selection procedure for Senior Manager will be long-drawn and rigorous, but it is simple and short while hiring shop-floor workers.

Environmental Factors Affecting Selection

Selection is influenced by several factors. More prominent among them are supply and demand of specific skills in the labour market, unemployment rate, labour-market conditions, legal and political considerations, company’s image, company’s policy, HRP, and cost of hiring. The last three constitute the internal environment and the remaining form the external environment of the selection process.

Preliminary Interview:

It helps to reject misfit for reasons, which did not appear in the applications forms. Besides, preliminary interview, often called ‘**courtesy interview**’ is a good public relations exercise.

Kinds of Interview:**1. Direct Planned Interview:**

This interview is a straight forward, face-to-face, question and answer situation intended to measure the candidate’s knowledge and background. Although it also provides an opportunity for observing the candidate’s personal characteristics and nothing his attitudes and motivations but the presentation is usually superficial. The interviewer, however, does some advance planning.

2 Indirect Non-directives Interview:

In this type of interview the interviewer refrains from asking direct and specific questions but creates an atmosphere in which the interviewee feels free to talk and go into any subject he considers important.

In such atmosphere the information obtained by the interviewer is more likely to be an accurate representation of what the individual believes than if the employee is asked specific questions. The interviewer, therefore, plays mainly a listening role.

3. Patterned Interview:

In this interview a series of questions which can illuminate the strategic parts of the applicant's background are standardized in advance and validated against the record of employees who have succeed or failed on the jobs. Answers to these questions are compared with a critical score and used in determining who is to be selected.

4. Stress Interview:

In this interview the interviewer deliberately creates stress to see how an applicant operates under it. To induce the stress, the interviewer responds to the applicants' answer with anger, silence, criticism or a flurry of incisive follow-up questions. Events such as noise, interruptions, or change of schedules are introduced to see how determined and inventive an applicant can be. The interviewer can add realism by acting uncooperatively and by raising objections.

5. Systematic Depth Interview:

In this interview, the interviewer has a plan of areas he wishes to cover. Ordinarily, the interviewer exhausts one area before launching into the next so that he can be more certain of complete coverage. Each answer must be interpreted in the context of many other interrelated circumstances. So the interviewer must weigh the meaning of various answers.

6. Panel or Board Interview:

In the board interview, more than one person interviews an applicant at the same time. Areas of questioning are allowed to each interviewer before the interview starts. One possible

disadvantage of this method is that on being stimulated by each other's questioning, interviewer may start competing with one another and thus create conditions of stress for the candidate.

7. Group Interview:

In this interview 5 or 6 applicants are placed together in a situation in which they must interact. The situation may be structured or unstructured. It is usual for the selector to remain silent throughout the discussion and make notes of the applicant's interactions unobtrusively. The applicant who verbalizes better and who has a better personality is likely to be selected under such circumstances.

8. Walk-in-Interview:

In this interview candidates are not required to apply for the post beforehand. They are asked to approach the employer for interview on the advertised date, time and place with their bio-data and a copy of their passport size photograph.

Procedure for an Interview

1. Reviewing Background Information:

Pertinent information about the candidate should be collected and noted beforehand. This preparation saves time and mental effort during the interview.

2. Preparing a question Plan:

Every interview should have a question plan. It is useful for inexperienced interviewers to have this written down in front of them so that questions can be ticked off as they are dealt with.

3. Creating a Helpful Setting:

Most interviews have overtones of emotional stress for the applicant. Success in interviewing depends on reducing this stress. This can be achieved if the following conditions are present at the place of interview. Privacy and comfort, atmosphere of leisure, freedom from interruptions, authentic feeling for an interest in the candidate.

4. Conducting the Interview:

Interviewing is much like fishing, where it is often necessary to change depth, lure and location order to get a bite. It is, therefore, necessary to use a number of different approaches during the course of an interview.

5. Concluding the Interview:

In this final movement the interviewer guides the interview to a close. After the candidate leaves, the interviewer looks over his notes, recalls his impressions, collates his observations and makes a provisional before seeing the next candidate. He fills up the interviewer's Rating Sheet meant for this purpose.

Advantages and Limitations of Interviewing:

Advantages:

- a) It can fill information gaps and can correct questionable response
- b) It can effectively bring out the behavioral characteristics of the applicants.

Disadvantages:

- a) Interview is an unreliable tool of selection because it has the maximum element of subjectivity.
- b) Same candidate may be rated differently by different interviewers. He may be rated as 'fit' by one interviewer and as 'unfit' by another.

Tests

Another important device used in selection is psychological test. A psychological test is designed to measure such skills and abilities in a worker as are found by job analysis to be essential for successful job performance.

a) Knowledge Test:

Tests measuring knowledge or information are the easiest to develop and most appropriate to use for jobs that require knowledge of certain things. Such knowledge tests become necessary when academic qualifications are not good indications of the capacity and knowledge of a candidate.

b) Ability or Proficiency Tests:

Ability or proficiency tests are those which measure the skills and abilities already present in the testee at the time of testing. These tests check an applicant's claim that he

possesses those abilities which are believed to be critical in the performance of his job. Ability tests are appropriate for lower levels jobs where ability is quantifiable.

c) Aptitude Tests:

Aptitude tests are those which measure skills and ability that have potentiality for later development in the testee. These tests measure whether or not an individual has the capacity or latent ability to learn a given job quickly and efficiently.

d) Personality Tests:

These tests, which are generally used in the selection of executives, measures the personality traits (such as honesty, Cheerfulness, Persistence, dominance, Cooperatives) of individuals.

e) Simulations Exercise:

Simulation exercise is a test which duplicates many of the operations and problems confronting the work on the job. Thus testing punch press operators by means of a miniature and hazardless facsimile of the actual machine or managers by means of the role-playing is a simulation test.

Reference:

Requesting reference is a widespread practice with substantial doubt as to its validity. References are usually obtained from the candidates' friends or from his previous employer. Some organisation have found that by assuring the referee of absolute confidentiality and by informing him that one adverse vote in three does not disqualify, frank, reliable and valid references have been obtained.

Selection Decision:

The final decision has to be made from the pool of individuals who pass the tests, interviews and reference checks. The view of the line manager will be generally considered in the final selection because it is he/she who is responsible for the performance of the new employee. The HR manager plays a crucial role in the final selection.

Physical Examination:

It reveals whether or not a candidate possesses the required stamina, strength and tolerance of hard working conditions. The basic purpose of a physical examination is to place selected candidates on jobs which they can handle without injury or damage to their health.

Job Offer:

The next step in the selection process is job offer to those applicants who have crossed all the previous hurdles. Job offer is made through a letter of appointment such a letter generally contains a date by which the appointee must report on duty.

Contract of Employment:

After the candidates accept the offer, certain documents need to be executed by the employer and the candidate. One such document is the attestation form. This form contains certain vital details about the candidate which are authenticated and attested by him/her. Attestation form will be a valid record for future reference.

Conducting the Selection Process:

There is another step- a more sensitive one – reassuring those candidates who have not been selected. Such candidates must be told that they were not selected, not because of any serious deficiency but because their profile did not match the requirements of the organisation. They must be told that those selected purely on merit.

Evaluation of Selection Program:

The broad test of the effectiveness of the selection process is the quality of the personnel hired. An Organisation must have competent and committed personnel. How to evaluate the effectiveness of a selection program? A periodic audit is the answer. Audit must be conducted by people who work independent of the HR department.

PLACEMENT**Meaning :-**

Placement is a process in which the new employee is allocated the job he is hired for and it is assignment of a new employee to the job.

The job assigned to him may be;

- i) Independent
- ii) Sequential
- iii) Or may be in the pool where he works with other to complete the assigned work.

Orientation / Induction:

Meaning:

Orientation is one component of the new employee socialization process. It is the ongoing process of instilling in all new employees prevailing attitudes, standards, values, patterns of behavior that are expected by the organisation and its departments.

Definition of Orientation:

Orientation defined by **Prof.Robert .L.Mathis** and **John H.Jackson** as, “It is a process of planned introduction of employees to their jobs, their co-workers and the organisation”.

Problems of Orientation

1. Supervisor not trained and is too busy
2. Overwhelmed with too much information in a short time.
3. Overload with forms to complete
4. Employee asked to perform task where there are high chances of failure that could needlessly discourage the employee.
5. Employee is forced to fill in the gaps between a broad orientation by the HR department and a narrow orientation at the department level.
6. Employee thrown into action too soon
7. Employee mistake can damage the company
8. Employee may develop wrong perception because of short period spent on each job

PROMOTION

Meaning:

Promotions means an improvement high pay, prestige, position and responsibility of an employee within his/her organisation. The new job is a promotion for the employee only when it carries increased responsibilities and enhanced pay.

Definition:

According to Scotl and Clothier, “A promotion is the transfer of an employee to a job which pays money or one that carries some preferred status”.

Purpose of Promotion:

- To motivate employees to higher productivity.
- To attract and retain the service of qualified and competent people.
- To recognize and reward the efficiency of an employee.
- To increase the effectiveness of the employee and of the organization.
- To fill up higher vacancies from within the organisation.
- To build loyalty, morale and a sense of belongingness in the employee.
- To impress upon other that opportunities are available to them.

Requirements of a Sound Promotion Policy:

- It must provide for a uniform distribution of promotional opportunities throughout the organisation.
- It must tell employee in advance what avenues advancement exist.
- There should be some definite criteria for the selection of employees who are to be promoted.
- All promotions should be finally sanctioned by concerned line heads.
- There must be suitable systems of follow-up, counseling and review.

Advantages of Promotion Policy:

- | | |
|----|--|
| 1. | It provides an opportunity for greater personal satisfaction and prestige |
| 2. | It ensures uniformity and consistency in the treatment of employees. |
| 3. | It offers opportunities to management to provide recognition and incentives to the better employees. |
| 4. | It serves as an orderly, logical and prompt source of recruitment for management to fill vacancies. |

Types of Promotion:

1. Horizontal Promotion:

This type of promotion involves an increase in responsibilities and pay, and a change in designation. But the employee concerned does not transgress the job classification. **For**

example; a lower division clerk is promoted as an upper division clerk. This type of promotion is referred to as upgrading the position of an employee.

2.

Vertical Promotion

This type of promotion involves a greater increase responsibility, prestige and pay, together with a change in the nature of the job. A promotion is vertical when a canteen employee is promoted to an unskilled job; the concerned employee naturally transgresses the job classification.

3.

Dry Promotions:

Dry promotions are sometimes gives in time of increases in remuneration. Designation is different but no change in responsibility. This promotion may be given one or two annual increments.

TRAINING AND DEVELOPMENT

Meaning:

Training is a process of learning a sequence of programmed behavior. It is an application of knowledge. It gives people an awareness of the rules and procedures to guide their behavior. It attempts to improve their performance on the current job or prepare them for an intended job.

In simple terms, training and development refer to the imparting of specific skills, abilities and knowledge to an employee.

Definition:

According to **Prof. Randall S.Schuler** has defined training as, “It is any attempt to improve current or future employee performance by increasing an employee’s ability to perform through learning, usually by changing the employee’s attitude or increasing his or her skills and knowledge . The need for Training and Development is determined by the employee’s performance deficiency, computed as follows:

Training & Development Need = Standard Performance – Actual Performance.

Difference between Training & Education:

Training	Education
1. Application	Theoretical orientation
2. Job Experience	Class room learning
3. Specific Tasks	General Concepts
4. Narrow Prospective	Broad Prospective.

Difference between Training & Development

Training & Development differ in four ways;

- i) **What** is learned?
- ii) **Who** is learning?
- iii) **Why** such learning takes place ? &
- iv) **When** learning occurs?

Inputs in Training and Development

1. Skills :

Training is imparting skills to employees. A worker needs skills to operate machines, and use other equipment with least damage and scrap. This is a basic skill without which the operator will not be able to function. Training should also provide other skills like **motor skills** and **interpersonal skills**.

2. Education:

The purpose of education is to teach theoretical concepts and develop a sense of reasoning and judgment. That any training and development program must contain an element of education is well understood by HR specialist.

3. Development:

Another component of Training & Development program is development which is less skill-oriented but stresses on knowledge. Knowledge about business environment management principles and techniques, human relations, specific industry analysis, and the like is useful for better management of a company.

4. Ethics:

There is need for imparting greater ethical orientation to a training and development program. Unethical practices abound in marketing, finance and production functions in an organization. If these personnel indulge in unethical practices the fault rests on the HR Manager. It is his/her duty to enlighten all the employees in the organization about the need for ethics.

5. Attitudinal change:

Attitudes represent feelings and beliefs of individuals towards others. Attitudes affect motivation, satisfaction and job commitment. Negative attitudes need to be converted into positive attitudes. Nevertheless, attitudes must be change so that employees feel committed to the organization are motivated for better performance, and derive satisfaction from their jobs and the work environment.

6. Decision Making & Problem Solving :

Learning related to decision making and problem solving skills seeks to improve trainees' abilities to define and structure problems, collect and analyse information, generate alternative solutions and make an optional decision among alternatives. Training of this type is typically provided for potential managers, supervisors and professionals.

Need for / Basic Purpose of Training:

1. To improve productive
2. To improve quality
3. To help a company fulfils its future personnel needs
4. To improve organizational climate
5. To improve health and safety
6. Obsolescence prevention
7. Personal Growth.

Objectives of Training and Development:-

1. To familiarize the employee with the company's culture.
2. To enable the employee to do new jobs and prevent his skills from becoming obsolete.
3. To increase the employees' quantity and quality of output.
4. To improve the employees' performance for promotion to higher jobs (or) to prepare the employees' quality for promotion to higher jobs.
5. To reduce supervision, wastage and accidents.
6. To teach the employee how to adjust better with different members of his role set.

Training Process



1. Organizational Objectives & Strategies:

The first step in the training process in an organization is the assessment of its objectives and strategies. What business are we in? At what levels of quality do we wish to provide this product or service? Where do we want to be in the future?

2. Assessment of Training Needs:

Needs assessment diagnoses present problems and future challenges to be met through training and development organization that implement training programs without conducting needs assessment may be making errors.

Various sources from which evidence of training needs may be gathered:

1. Informal observation
2. Performance appraisal
3. Suggestion system
4. Group discussion
5. Questionnaire to trainees and supervisors
6. Accident rates and scrap

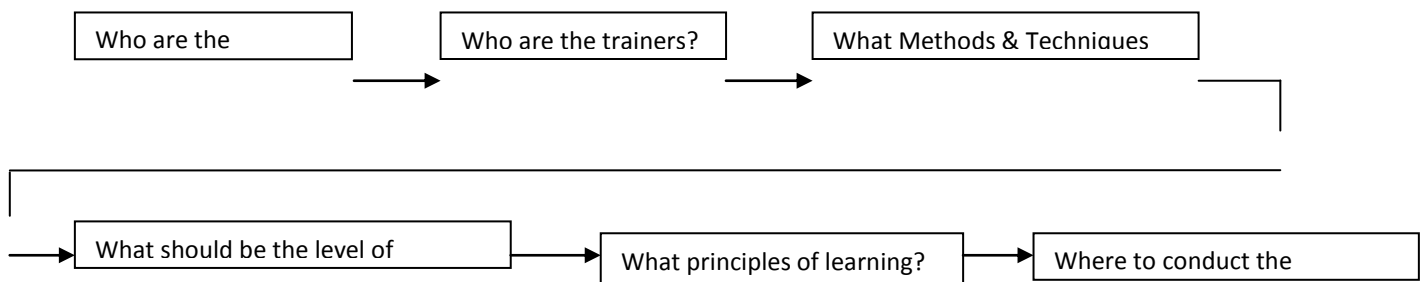
7. Morale survey
8. Test and Interview
9. Analysis Reports
10. Employee Counseling

3. Training & Development Objectives:

Without clear set goals, it is not possible to design a training and development programme and after it has been implemented there will be no way of measuring its effectiveness. Goals must be tangible, verifiable and measurable.

4. Designing Training & Development programme:

Every Training & Development programme must address certain vital issues like;



Steps in Training Program

- i. Deciding the location and organizing training and other facilities
- ii. Scheduling the training program
- iii. Conducting the training program
- iv. Monitoring the training progress of trainees.

5. Implementation of the Training program:

Once the training program has been designed, it needs to be implemented. Program implementation involves action on the following lines:

6. Evaluation of the program:

The last stage in the Training and Development process is the evaluation of results. Since huge sum of money are spent on training and development how far the program has been useful

must be judged/determined to make it effective in the future. And it helps to determine the results of the Training and Development program.

Methods / Techniques of Training:-

- I. Training Methods for Operative
- II. Training Methods for Executive

I. Training Methods for Operative:

Skills needs, size and tradition of the company, abilities of trainees, time and money, experience of the company about the training activities that have been carried on in the past all will affect the type of training.

1. Training on the Job:

This is an important type of training. It helps to learn to master the operations involved on the actual job situation under the supervision of the immediate boss.

Advantages:

1. It can be learned in a relatively short period of time say, a week or two.
2. No elaborate program is necessary
3. No line-staff conflict because his own supervisor
4. Highly economical
5. Not located in an artificial situation, either physically or psychologically

Therefore, eliminates the possible problem of transfer to learning.

- a. ***Job Rotation:*** It involves the employee being sent through different jobs, thereby providing him a wider exposure.
- b. ***Internship Training:*** It refers to a joint program of training in which schools and business Co- operates to enable the students to gain a good balance between theory and practice.
- c. ***Apprenticeship:*** It is used in those trade, craft and technical fields in which proficiency can be acquired after a relatively long period of time in direct association with the work and under the direct supervision of experts.

d. Vestibule School: A portions of this training is taken away from the line and assigned to staff through a vestibule school. The responsibility to operate a vestibule school generally rests with the personnel department. This training gets its name from the resemblance of the school to a vestibule through which one passes before entering the main room of a house.

2. General Education Programme:

Beyond the training of employees for specific job skills by offering programme of General Education content, such as, courses in economic, arts and science and so on.

3. Simulators and Training Aids:

Simulators are used to provide trainees with physical equipment that resembles to same degree the equipment that is to be used on the job.

PERFORMANCE APPRAISAL (PA)

Meaning:

Performance Appraisal refers to all the formal procedures used in working organizations to evaluate the personalities and contribution of group members.

Definition: (Prof. Randall S. Schuler)

“PA is a formal, structured system of measuring and evaluating an employee’s job related behavior and outcomes to discover how and why the employee is presently performing on the job and how the employee can perform more effectively in the future so that the employee, organization and society all benefit”.

Objectives / Purpose of PA

1. Basis for job change and promotion
2. Training and development program
3. Feedback to the employee
4. Incentive to all the employees
5. Provide the rational foundation for the payment of price, rate , wages, bonus etc.,
6. Evaluating the effectiveness of devices used for the selection and classification of workers.

Factor affecting PA

1. Environmental constraints
2. Organizational leadership
3. Interdependence of sub-systems
4. Organisational structure

Who can be the appraiser?

1. Immediate Manager
2. Higher Level manager
3. Employee's Peer
4. Employee's subordinates., etc.,

I.Traditional PA Methods

1. Ranking Method:

The oldest and simplest method of performance appraisal is to compare one man with all other men and place him in a simple rank order. In this way, ordering is done from best to worst of all individuals comprising the group.

2. Rating – Scale Method:

As the very name implies these methods provide some kind of a scale for measuring absolute difference between individuals. The scales used are generally of two types;

- i. Discrete
- ii. Continuous

3. Check List Method

This consists of a member of statements about the worker and his behavior. Each statement on this list is assigned a value depending upon its importance. Both statements and their values are derived from preliminary research in which the pooled judgments of persons familiar with the job are used.

4. Forced-Choice Method:

It consists of a number of statements which describe an individual being rated. These statements are grouped into two, three or four. Sometimes all groups of the form are made of favorable statements. Sometimes all have unfavourable statements only and sometimes they have both statements. Nevertheless, the rater is compelled to check a '**most**' and a '**least**' in each group-hence the term '**forced choice**'.

5. Field Review

The personnel officer meets small groups of raters from each supervisory unit and goes over each employee's rating with them to

- a) Identify areas of inter-related disagreement
- b) Help the group arrive at a consensus
- c) Determine that each rater conceives of the standards similarly.

6. Critical Incident Technique :

In this method the first step to draw up for each job a list of critical job requirements, that is, those requirements which are vital for success or failure on the job.

7. Confidential Report:

A confidential report by the immediate supervisor is still a major determinant of the subordinate's promotion or transfer. The format and pattern of this report varies with each organization.

Limitations of Traditional PA Methods:

1. Emphasis on Human Performance without regard for Human Values
2. Halo Effect
3. Hyper Critical or "**Horns**" Effect
4. Central Tendency and leniency
5. Reluctance to '**play God**'
6. Defensiveness of Employees.

WAGE AND SALARY ADMINISTRATION

Definition:

The establishment of an implementation of sound policies and practices of employee compensation. It includes such areas as job evaluation, development and maintenance of wage structures, wage changes, wage surveys and related issues.

Wages:

Payment made usually at the end of the day's work. The term further denotes payment made to workers doing physical work.

Salary:

Payment made to employees at the end of every month usually it refers to payment made to those who are doing white-collar job.

Compensation of wages:

- i. **Basic pay-** for the skill
- ii. **Increment-** for continued learning of the skill year after year.
- iii. **Incentive-** for efficiency
- iv. **Dearness allowances-**for cost of living.
- v. **Overtime-** for clearing extra workload which cannot be done during normal hours.
- vi. **H.R.A. -** allowance for rent.
- vii. **C.C.A. -** to meet additional cost of living in metros.
- viii. **Social Security Schemes-** like ESI and PF and pension.
- ix. **Welfare-fringe benefits-perquisites** (all other allowances and loan) like transport, medical facilities, housing, schooling, etc. - not related to efficiency or skill. These are given to enhance quality of work life-also called QWL.
- x. **Bonus:** sharing the profit.

Important Principles Of Wage And Salary Administration:

- ◆ The jobs that call for equal effort/skill/knowledge should be classified into one cadre.
- ◆ Find out the total no. of jobs and total positions as per MPP.
- ◆ The financial worth of each and every job should be ascertained based on job evaluation. After the financial worth of all the jobs is ascertained it should be fitted into the cadres. This is the starting point of pay scales.
- ◆ Fix the actual pay scales.
- ◆ Fix the increments, should the incremental slab be 15 or 10.
- ◆ Should there be fixed increments or flexible increments. Should there be an efficiency bar what should be the actual quantum of the increment?
- ◆ What should be the pay differentials (means the gap between two cadres or gap between one pay scale and the other?)
- ◆ For each job the highest point in career should be fixed- what is the highest cadre for each job? For example, a medical officer of a manufacturing organization cannot become the CEO, whatever is his salary.
- ◆ There should be a balance between reporting relationships and pay as far as possible-means the bosses generally should get more pay than the subordinates.
- ◆ The pay scale should be adequate in number to provide for promotional avenues.
- ◆ Any policy on compensation should be in tune with the overall company policies and the HR policies.

- ◆ The organization should have a clear policy on overtime and incentives.

Guiding principles of wages:

- ◆ Payment of remuneration determined in accordance of each job.
- ◆ The pay policy of the organization shall protect the interest of both the employer and the employee.
- ◆ The wages rate for similar job in similar organization shall be taken into consideration.
- ◆ The pay policy of the organization shall recognize individual differences, those employees contributing more.
- ◆ The employees and their union shall be informed of the procedure adopted to determine the wages raise.
- ◆ The pay structure shall be made flexible. So that any adjustment required can be made easily.
- ◆ There shall be a prompt payment of the amount due to the employees.
- ◆ The pay given to the employee shall assure him and his family a reasonable standard of living.
- ◆ There shall exist a forum too redress employees' grievances over pay inequalities.
- ◆ Wage policy of the organization shall be reviewed periodically in true with changing needs.

Basic kinds of wage plans

I. Time wage

- Oldest and most common method of fixing wages
- Workers are paid according to the work done during a certain period of time at the rate of per hour, per week, per tonight, or per month
- The essential point is that the production of a worker is not taken into consideration in fixing the wages

Merits of time wage system

1. it is simple, wage can be easily calculated
2. as there is no time limit for execution workers pay attention to the quality of their work
3. same wages are paid to same kind of job, avoids jealousy among workers
4. slow and study pace of the worker, there is no rough handling of machinery
5. this is a profitable system where output cannot be measured
6. it ensures a stable income to workers
7. it requires less administrative attention than others because the very basic of the time wage contract is good faith and mutual confidence between the parties

Demerits of time wage plan

1. all the persons are paid equally without considering ability differences

2. labour changes for a particular job do not remain constant, hence quoting rates for a particular piece of work becomes difficult
3. as there is no specific demand for the period of time of work there is possibility of systematic evasion.
4. the employees does not know the amount of work done by each other, so total expenditure on wages cannot be adequately assessed
5. as no record of workers output is maintained, it becomes difficult for the employees to determine the efficiency for the purpose of promotion.

II. **Piece wage plan** – [wage=no. of output*wage per output] [as output increases, wage increases]

- under this plan, workers are paid according to the amount of work done or the number of units completed, the rate at which each unit being settled in advance, irrespective of the time taken to do the work
- there is indirect implication that worker should not more than the average time, if he is not abiding to it he is at the risk of losing job.
- The worker is paid in direct proportion to output produced
- This is generally adopted in jobs of repetitive nature.
- Out its application be difficult where different shifts are employed on the same work or where a great Variety of different grades of workers are employed and immeasurable in services
- Formula

$$WE = NR$$

WE =workers earnings

N= no. of pieces produced

R= rate per piece

Merits of piece wage system

1. pay is according to the workers efficiency as reflected in the amount of work.
2. Efficiency of the workers is adequately rewarded which gives him a direct stimulus to increased his production
3. supervision is less required since wage depends upon the amount of work done or output shown by the worker
4. for the continuity of the work breakdown is prevented by the worker which in turn reduces the maintenance charges
5. direct labour cost per unit of production remain constant hence calculation of cost for filling tenders becomes easy
6. not only as output increase wage increase, the method of production also increases

Demerits of piece wage plan

1. rate per piece or output ids not done on scientific basis
2. rate is done by rule of thumb method

3. workers wish to perform their work at speed, may consume more power and result in high cost of production
4. excessive speeding of work may result in wear and tear
5. trade union often oppose to this system and might lead to labour disputes

Minimum Wages

The minimum wage is that wage which is sufficient to meet the worker's bare necessities. The minimum wage takes into the factor of the prevailing cost of essential commodities whenever such minimum wage is to be fixed.

State Governments have the power to fix different minimum rates of wages for different scheduled employments different class of work in the same scheduled employments adults, adolescents, children and apprentices and different localities.

Features of a good wage plan

- It should be linked to employee performance
- It should be communicated to employees
- Employee suggestions should be valued
- It should have monetary as well as non-monetary aspect
- It should be easily understandable.
- It should be capable of easy computation
- It should be capable of effectively motivating the employees
- It should provide for remuneration to employees as soon as possible after the effort has been made.
- It should be relatively stable rather than frequently varying.

Minimum Wages Act (1948)

- Objective: Fixing minimum rates of wages in certain employments
- Applicable to whole of India
- Central and State Government empowered to fix minimum wages
- Did not define “minimum wages”. Definition given by Fair Wages Committee
- Minimum Wages to be paid in Cash
- Defined normal working hours , one day rest in every period of 7 days

- Overtime fixed on a specific time unit

Incentive Scheme

“Wage incentives are extra financial motivation. They are designed to stimulate human effort by rewarding the person, over and above the time rated remuneration, for improvements in the present or targeted results”

-NATIONAL COMMISSION ON LABOUR.

Objectives of wage incentive scheme:

1. To improve the profit of a firm through a reduction in the unit cost of labor and materials.
1. To avoid or minimize additional capital investment for the expansion of production.
2. To increase a worker’s earnings without dragging the firm into a higher wage.
3. To use it as a tool for securing and better utilization of human resource.

Merits of incentives scheme:

- 1) Strengthens productivity
- 2) Advantages for both workers and employers.
- 3) Reduces supervision.
- 4) Low absenteeism.
- 5) Healthy industrial relations and reduces chances of dispute.
- 6) Better scheme for developing human resource.
- 7) Develops the feeling of co-operation among workers.

Demerits of incentive schemes:

- 1) There is possibility of reducing productivity.
- 2) Difficult to consider and achieve psychological and social dimensions.
- 3) Employment is uncertain.
- 4) Difficult to measure proportionate value of the extra work done.

Various types of incentive wage plans:

A. Individual incentive wage plans:

1. *Halsey premium plan*

- Combination of time –speed basis of payment.
- Standard time is fixed for each job, if the worker finishes the job before this standard fixed time, he gets bonus for the time saved by him.
- Bonus rate ranges from 30% to 50% of time saved.

MERITS:

- a. Slow workers are guaranteed of fixed wages.
- b. Efficient workers get extra wages.
- c. Easy and simple device to increase efficiency.

DEMERITS:

- a. Decreased quality of work.
- b. More wastage.
- c. No scientific method of wage fixing.
- d. Standards are fixed based on past performance.

2. Rowan premium plan:

- Widely used in England
- Introduced by James Rowan, David Rowan and Sons, Glasgow in 1901.
- It is modification of Halsey plan.
- Premium is calculated on a percentage of wages for the time worked and not for the time saved.
- $\text{Bonus} = \text{time saved} \times \text{time taken} / \text{standard time} \times \text{hourly rate}$.

MERITS:

- a. There is no possibility of over speeding since bonus earned is not based on time saved.
- b. Less cost of supervision.
- c. This plan is good for beginners and learners.
- d. No rush through the work.

DEMERITS:

- a. No difference is made between efficient and inefficient worker.
- b. Difficult for the workers to understand.
- c. As the time saved is increased, the bonus will be decreased proportionately.

3. Taylor's differential piece rate system:

- Provides greater incentives to efficient workers.
- A standard task is established by techniques of time and motion study and two piece rates are set up for each job.
- High piece rate is allowed to those who can make higher than standard performance.
- Lower piece rate for those who cannot reach the standard.
- This method penalizes slow and lazy workers and pays incentive to efficient workers.

MERITS:

- a. Efficient and inefficient workers are distinguished.
- b. Rates are fixed based on scientific method.
- c. Helps in spotting and eliminating inefficient workers.

DEMERITS:

- a. More mechanical and less humane.
- b. Leads to discontentment among workers.

- c. No guaranteed minimum wages.

4. Time rate system (Refer the above notes)

5. Piece rate system (Refer the above notes)

Profit sharing is an incentivized compensation program that awards employees a percentage of the company's profits. The amount awarded is based on the company's earnings over a set period of time, usually once a year. Unlike employee bonuses, profit sharing is only applied when the company sees a profit.

Profit sharing may be defined as an agreement freely entered into, by which the employees receive a share, fixed in advance, of the profits. This compensation is in addition to the regular wages and bears a definite percentage relationship to company profits. This definition would exclude bonuses based on profits which are not assured on a continuing basis.

Objectives of Profit Sharing:

- To promote worker's efficiency.
- To raise productivity.
- To make workers feel that their interests are identical with those of the employer.
- To make workers behave in a more responsible manner.
- To improve employee morale.
- To bring workers and management closer so that many problems can be sorted out due to already developed better mutual understanding and cooperative spirit.

Profits can be distributed to employees in a number of ways, such as:

- In the form of cash money.
- In the form of company shares.

Profits under the profit sharing scheme can be paid to employees on the basis of: their years of service with the company. A fixed percentage of their total wages during a stipulated period, Merit rating of the employees., Their attendance., Their good performance record., Their good general record, etc.

Advantages of Profit Sharing:

- i) Employees and employers develop better mutual understanding and cooperation.

- (ii) Industrial disputes tend to reduce.
- (iii) Productivity increases.
- iv) Worker's morale and motivation improves.

Payment of Bonus Act (1965)-Features

Objective: Share profit earned by organization with employees. Applies to every factory or establishing employing not less than 20 people. Employee drawing salary not beyond ₹ 10,000, per month, who has worked for not less than 30 days in an accounting year is eligible for bonus of minimum 8.33% of salary/wages and maximum of 20% of salary/wages. Applicable to whole of India, where 10 or more workers are working

Calculation: includes Wages + DA. Paid in Cash within 8 month of closing of accounting year..Payment Of Bonus (Amendment) Act, 2015

Amendment of Eligibility Limit

By amending Section 2(13) of the Principal Act, the Amendment Act has now widened the scope of employees eligible for payment of bonus from those drawing salary of INR 10,000 per month, to INR 21,000 per month. The Principal Act provided that the bonus payable to an employee shall be in proportion to his/her salary. However, where an employee's salary was over INR 3,500 per month, for the purposes of calculating bonus, the salary was to be assumed to be INR 3,500 per month. With a view to maximise bonus earnings, the Amendment Act has increased the wage ceiling for calculation to INR 7,000 and has also factored in possibilities where the minimum wage payable to such employees may be over INR 7,000, thereby giving employees the flexibility to draw a higher amount as bonus.

Productivity:

Productivity describes various measures of the efficiency of production. Often, a productivity measure is expressed as the ratio of an aggregate output to a single input or an aggregate input used in a production process, i.e. output per unit of input, typically over a specific period of time. One of the most widely used measures of productivity is Gross Domestic Product (GDP) per hour worked. This measure captures the use of labour inputs better than just output per employee.

Productivity in construction Industry:

Many terms are used to describe productivity in the construction industry:

- Performance factor,
- Production rate,

- Unit person-hour (p-h) rate and others.

Traditionally, productivity has been defined as the ratio of input/output, i.e., the ratio of the input of an associated resource to real output (in creating economic value). To restate this definition for use in the construction industry- Labour productivity is the physical progress achieved per p-h, e.g., p-hs per linear metre of conduit laid

Factors affecting productivity of labor :

a) Internal Factors:

1. Working hours
2. Place of carrying out the job (office, factory ,....)
3. Tools
4. Technology
5. Machines
- 6 Feeling of interest
7. Motivation
8. Satisfaction (salary , insurance,
9. Development and training
10. Career vision (upgrading , dedication ,....)

b) External factors

- 1-country rules and economic situation
- 2-traffic
- 3-family
- 4-distance between workplace and house
- 5-weather
- 6-culture
- 7-health care
- 8-population (may affect positive or negative)

The two most important measures of labour productivity are:

- the effectiveness with which labour is used in the construction process;
- the relative efficiency of labour doing what it is required to do at a given time and place.

Field rating

Field rating can be used to estimate crudely the level of activity of a construction operation. The method simply categorizes the observed worker as either "working" or "nonworking" and uses the "working" fraction as a measure of effectiveness. To collect a random sample, an observer on site observes the workers. Once a sample has been collected, the field rating is calculated as total observations in the "working" category divided by the total number of observations, plus 10% to account for foreman and supervisory activity as follows:

Field rating = total observations of working/ total number of observations+ 10%
The number should be roughly over 60% for a job to be satisfactory.

Work sampling

Work sampling is based on statistical sampling theory and is a slightly more sophisticated method than field rating. The basic objective is to observe an operation for a limited time and from the observations infer how productive the operation is. Work sampling estimates the percentage of time a labourer is productive relative to the total time the person is involved in the operation.

To accomplish this, the following approach can be adopted:

1. Classify the worker's activity as one of three modes of activity: productive, semi-productive (involved in supporting the main activity), and non-productive.
2. Develop a data collection form that will facilitate tallying the observations on site
3. Take random observations of workers involved in a given operation in the field. The observation should indicate the workers' activity mode, i.e., productive, non-productive, or semi-productive. Random, for all practical purposes, means without any bias as to who is being observed and that each worker will have the same chance of being observed as any other worker.
4. Record all observations on the form. Enter a checkmark under the appropriate mode of activity observed.
5. Add up all the checkmarks under each mode and calculate the percentage of activity. In the example (Figure 2.1), the 'percent productive' is calculated as $4/9$ (= 45%), the 'percent non-productive' is $3/9$ (= 33%), and the balance of 22%, semi-productive.

Five-minute rating

The five-minute rating technique, unlike work sampling, is not based on statistical sampling theory. The method relies on simply observing an operation for a short time. The observation does not result in a large enough sample to support work sampling. The method does, however, provide some insight as to the effectiveness of the crew and can identify areas where more observation is required:

1. Identify the members of the crew to be observed and structure a form with the crew to be observed noted in the column headings and the time of observation listed in the rows of the first column.
2. Observe the crews as they are working. For the observation interval -equals 5 minutes, determine whether the crew member has been active for over half the interval. If so, mark the observation cell with an "x"; if not, leave the cell empty.
3. Add the "x" observations for the entire table and divide the sum by the total number of observations. In the example of Table 2.3, 22 observations were positive out of a total of 32; therefore, the effectiveness is $22/32$ or 68%.

Total observations= 32 Effectiveness = $22/32$ Observed effective = 22

5-Minute Rating = 68%

Field Surveys

The work sampling methods covered in Section 2.2 measure efficiencies in the site operation, but do not go far enough in identifying the leading cause for the inefficiency. For example, work sampling might indicate that a craftsman spent 25% of the time being delayed because the required material was not available. The method cannot, however, pinpoint the real cause of the delay or what can be done to reduce it. Field surveys and questionnaires are organized ways of involving the foreman or craftsman in the site evaluation and productivity improvement process. Craftsmen are probably the persons most familiar with their work activity. They can easily identify sources of delay and obstacles in their progress. Likewise, a foreman is the person most familiar with the crew and the problems that restrict improvement in their productivity.

1 Foreman delay survey

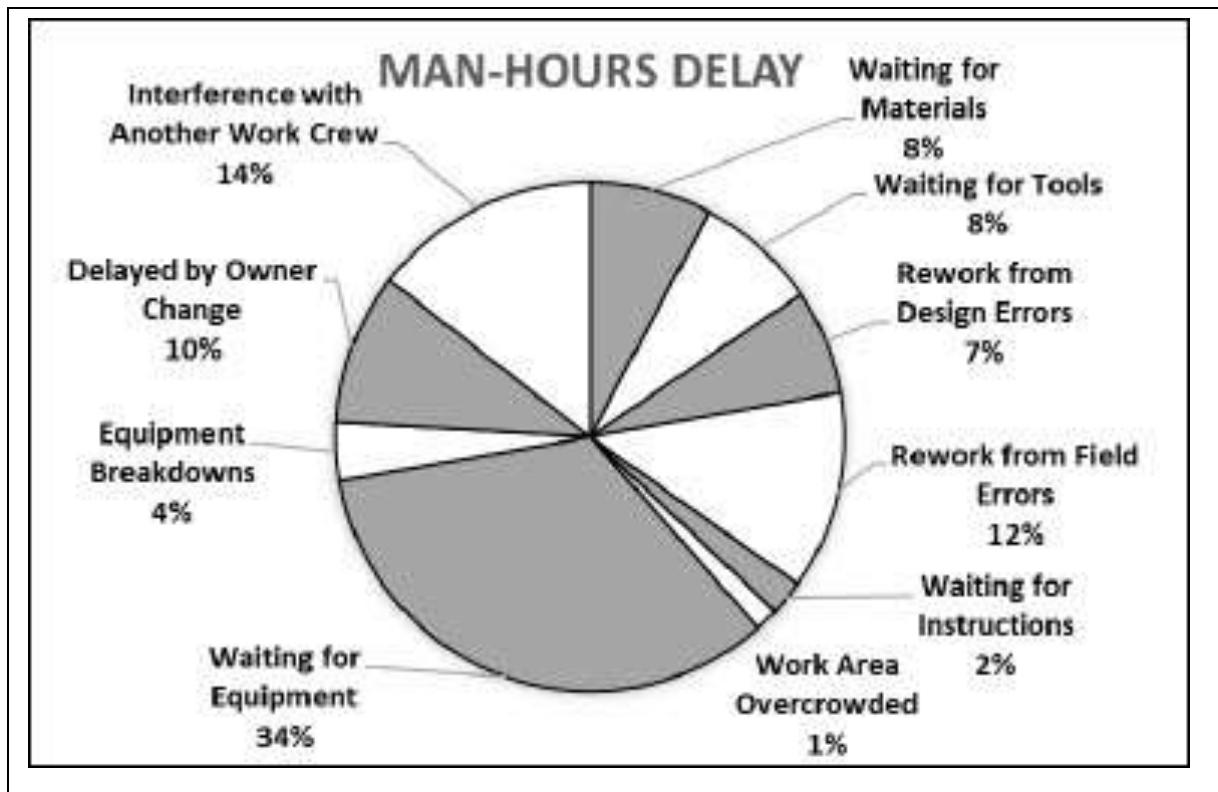
Foreman Delay Survey (FDS) relies on a questionnaire which is to be filled out by the job foreman at the end of a working day according to a particular survey schedule, e.g., one work week in each month. The questionnaire is primarily meant to identify the number of hours of a day lost due to delays. Most FDSs are divided into rework and delay categories. Once a form has been filled out, the information is extracted in the form of percentages and action taken to ensure that sources of delays are properly dealt with.

A typical FDS form is given below:

Problem Causing Area	Person-Hours Lost		
	No. of Hours Lost	No. of Workers	Total Person- Hours
Redoing work (design error or change)			
Redoing work (prefabrication error)			
Redoing work (field error or damage)			
Waiting for materials (warehouse)			
Waiting for materials (vendor furnished)			
Waiting for tools			
Waiting for construction equipment			
Construction equipment breakdown			
Waiting for information			
Waiting for other crews			
Waiting for fellow crew members			
Unexplained or unnecessary move			
Other:			
Comments:			

The results of the survey are converted from p-hs into equivalent percentages and reported on a form . The information on the report sheet will identify concerns that the foremen have with the operation. The example reveals that too much time is being spent on redoing work due to design error - 2.3% of the time - and waiting for construction equipment - 1.1% of the time.

The FDS is a relatively low-cost method for analyzing the sources of delay during construction. It can be easily stylized and implemented.



Craftsman questionnaire :

Craftsman questionnaire (CQ) is a questionnaire-oriented technique attempting to address issues and concerns that relate to a craftsman's productivity and motivation.

The basic idea is to distribute a simple questionnaire, to craftsmen on a job site to complete.

The aim is to identify major factors that inhibit the productivity of craftsmen and estimate the p-hs lost per craftsman per week due to specific causes.

The questionnaire can comprise 50 short questions addressing such areas of concern as material availability and site layout, equipment and tool availability, rework items and causes of rework, management interference and inspection, and suggestions for improving the process.

In addition, the questionnaire asks for the hours lost per week per craftsman on each area of concern listed. This is often supplemented with personal interviews with some of the craftsmen to validate the responses and test the level of seriousness.

Type of work		
Other		
	YES	NO
Material		
Is material always available when you need it?		
How many hours do you estimate are lost per week due to material not being available?		_____h
Tools		
Are tools always available when needed?		
Are tools in acceptable shape?		
Are tools supplied always the right ones for the job?		
Are there any specific tools in short supply (please name)		
How many hours do you estimate are lost per week due to tools not being available or acceptable for the job?		_____h
Equipment		
Question 1 (Add more questions as under material and tools)		
Question 2 (Add more questions as under material and tools)		
How many hours do you estimate are lost per week due to . . .		_____h
Rework		
Question 1 (Add more questions as under material and tools)		
Question 2 (Add more questions as under material and tools)		
How many hours do you estimate are lost per week due to . . .		_____h
Safety Concerns		
Question 1 (Add more questions as under material and tools)		
Question 2 (Add more questions as under material and tools)		
How many hours do you estimate are lost per week due to . . .		_____h
Others		
Question 1 (Add more questions as under material and tools)		
Question 2 (Add more questions as under material and tools)		

Employee relations and communications are some of the main factors that influence employee satisfaction and engagement. Therefore, many companies today invest more resources to

improve employee relations and keep their workplaces healthy. The main goal of every employee relations strategy is to improve relationships and collaboration in the workplace.

Employer- Employee Relation refer to the relationship shared among the employees in an organization. It is an art which effectively monitors and manages the relation between individuals either of the same team or from different teams.

“Employer and Employees” are the two wheels of the engine of the organization, a good and healthy relationship between these two wheels will only take the organization forward.”

Improves Productivity: Strong employment relations create a pleasant atmosphere within the work environment; it increases the employee motivation and can also be increased through improved employee morale.

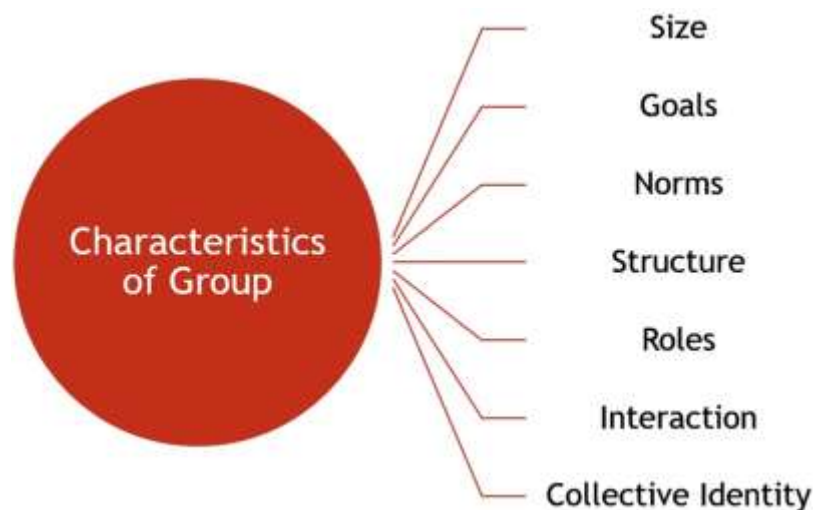
Increase Employee Loyalty: Creating the productive and pleasant work environment has a drastic effect on an employee’s loyalty to the business, it encourages a loyal workforce. Having such a workforce improves employee retention, in doing so the cost of recruitment, hiring and training is cut drastically.

Reduces Conflicts: When a work environment is efficient and friendly the extent of conflict within the workplace is reduced. Less conflict results in the employees being able to concentrate on the tasks at hand and they are therefore more productive.

Increased Morale: One feels secure and confident and thus delivers his best. It is okay if you share your secrets with your colleagues but you should know where to draw the line. A sense of trust is important.

Easy Delegation: This also allows you and the employees to acknowledge and understand their strengths and weaknesses.

Characteristics of Groups



Size: To form a group, it must be having at least two members. Practically, the number of group members ranges from 15 to 20. The more the members in the group, the more complex it is to manage.

Goals: Every group has certain goals, that are the reasons for its existence.

Norms: A group has certain rules, for interacting with the group members.

Structure: It has a structure, based on the roles and positions held by the members.

Roles: Every member of a group has certain roles and responsibilities, which are assigned, by the group leader.

Interaction: The interaction between the group members can occur in several ways, i.e. face to face, telephonic, in writing or in any other manner.

Collective Identity: A group is an aggregation of individuals, which are separately called as members, and collectively called as a group.

A group climate is an emotional setting of the group, that relies on participative spirit, coordination, trust and bonding among the members, open communication and other similar factors.



Formal Groups:

Groups that are formed consciously by the management, with an aim of serving an organizational objective

These are further classified as:

Self-directed teams: The group of employees which are so authorised to make decisions, on their own, as it is independent and self-governing in nature.

Quality Circles: A number of employees classed together belonging to the same field, who meet every week for an hour, to talk about their problems, identify the causes and find out solutions, to take necessary steps in this regard.

Committees: An association of people created by the management for different matters to identify and discuss the issues of the company and arrive at a conclusion. It can be:

- Standing Committee
- Advisory Committee
- Audit Committee
- Grievance Committee
- Adhoc Committee

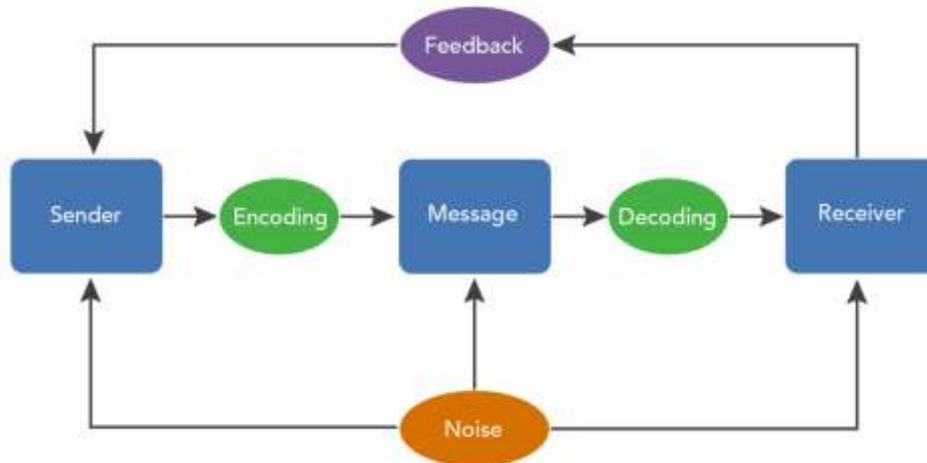
Task force: It is a temporary committee, wherein people belonging to different fields are grouped together for the performance of the task.

Communication:

It is a process of exchanging –

- Information
- Ideas
- Thoughts
- Feelings
- Emotions
- Through –
- Speech
- Signals
- Writing
- Behavior

Communication is a Latin word which means ‘to share’. It is the sharing of information between different individuals. It includes the sharing of ideas, concepts, imaginations, behaviours and written content. Communication is simply defined as the transfer of information from one place to another. This transfer of information can be conducted in different ways.



People communicate with each other in a number of ways that depend upon the message and its context in which it is being sent.

Types of communication based on the communication channels used are –

- Verbal Communication
- Nonverbal Communication

Verbal

It refers to the form of communication in which message is transmitted verbally.

Communication is done by word of mouth and a piece of writing.

In verbal communication it should be - short and simple.

Verbal Communication is divided into:

- Oral Communication
- Written Communication

In oral communication, Spoken words are used.

It includes face-to-face conversations, speech, telephonic conversation, video, radio, television, voice over internet. Communication is influenced by pitch, volume, speed and clarity of speaking.

Advantages –

It brings quick feedback. In a face-to-face conversation, by reading facial expression and body language one can guess whether he/she should trust what's being said or not.

Disadvantages

In face-to-face discussion, user is unable to deeply think about what he is delivering, so this can be counted as a fault.

In written communication, written signs or symbols are used to communicate.

In written communication message can be transmitted via email, letter, report, memo etc. Written Communication is most common form of communication being used in business.

Advantages –

Messages can be edited and revised

Written communication provide record and backup. A written message enables receiver to fully understand it and send appropriate feedback.

Disadvantages –

Written communication doesn't bring instant feedback. It take more time in composing a written message as compared to word-of-mouth and number of people struggles for writing ability.

Nonverbal communication is the sending or receiving of wordless messages. Such as gesture, body language, posture, tone of voice or facial expressions, is called nonverbal communication.

Nonverbal communication is all about the body language of speaker.

Nonverbal communication have the following three elements –

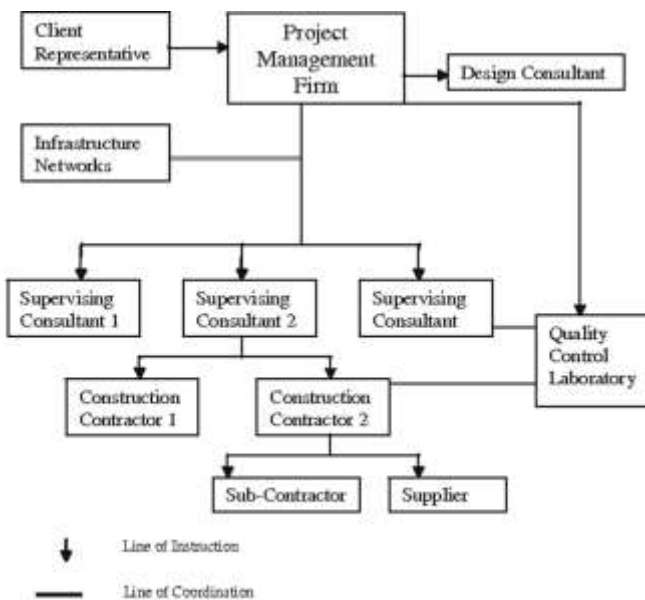
Appearance of Speaker – clothing, hairstyle, neatness, use of cosmetics

Surrounding – room size, lighting, decorations, furnishings

Body Language- facial expressions, gestures, postures

Sounds- Voice Tone, Volume, Speech rate

Communication in construction industry



JOB EVALUATION:

Meaning:

Finding the financial value or worth of assigned task or work, by using this method a company can easily fix the wages to their employees

Methods of job evaluation:

Ranking:

Throughout the organization, the relative worth of each job is measured and given a rank. Very subjective method. Not good.

Grading method:

Classify the jobs according to categories like skilled, highly skilled, semiskilled etc. Not a comprehensive method. However, it can be used along with other methods.

Point rating method:

This system uses internationally standardized manuals. The important factors of each standard job and marks for them are furnished in the manual. In other words, the manual gives the detailed breakdown factors of standard jobs and their marks. Against these data, the employer should break down each job in his organization into important factors and design marks or weight ages. The next step is to convert these marks into financial values.

Factor comparison method:

The manuals may not offer accurate weight age in the case in many jobs. Particularly specialized organizations. Therefore, under this method, the employer develops indigenous standards instead of relying on international manuals. Here the employer assembles a group of experts who will choose the key jobs within the organization, break them into factors and assign weight age- compare all other jobs against these key jobs, factor by factor and give relative weight age. Then convert them into financial values.

Difficultlies with job evaulation:

- Heavy time and cost factors.
- Union problems.
- Job Evaluation methods should be constantly updated with technology changes. However, this is rarely done.
- There are practical problems like difference of opinion between experts in assigning weight age in the comparative norms, etc.
- Job Evaluation tends to curb creativity. It lads to inflexibility. People stick to the job as done at present. It discourages exceptional workers.
- The greatest defect OF Job Evaluation it has no way of measuring actual performance on the job.

Merits of job evaluation:

- It is the only logical and systematic way of doing wage and salary administration.
- An exercise in job evaluation stabilizes internal norms and standards. Otherwise, there would be chaos in measuring what each job is expected to do.
- It removes wage inequalities because it links the job worth to the wages.
- It ensures proper wage cadres and classifications – also wage differentials.
- Jobs are properly classified as unskilled, semiskilled, etc.
- Helpful for recruitment.
- For promotions.
- For job rotation and training.
- It is the basis for resolving job anomalies, wage anomalies (high job paid low, low job paid high) and such other complaints.
- It forms the basis for any collective bargaining or union management negotiations.

How to proceed with job evaluation? Steps in job evaluation.

- ✓ Clear objectives
- ✓ Publicize the job evaluation scheme proposals and gain acceptance of all parties.
- ✓ Choose the key jobs carefully.
- ✓ Adopt a proper technique of job evaluation.
- ✓ Develop proper norms and standards for comparison.
- ✓ Constitute a proper team to carry out job evaluation—HR representative, technical reps, industrial engineering. Reps, and workers reps.
- ✓ Review the job evaluation periodically and make corrections.

Whether job evaluation alone can fix wages? Or factors other than job evaluation which influences wages:

- Capacity of the unit to pay.
- Prevailing wages rates in competitor's units.
- Demand and supply factors.
- Ability of the employees to bargain.
- Cost of living.
- Employee's job experience (sometimes you have to pay more than the job evaluation rates to get an experienced person)
- Employee's actual performance on the job.
- Legal factors. (Like min. wages act, PF, gratuity, leave benefits, medical benefits, etc.)
- Social factors (like the employer has to pay enough salary for the minimum subsistence of the workmen's family)—normally this is bound to be more than the job evaluation rates.

Wage agreement:

Most organization have periodic agreements between unions and management (say once in 4 to 5 years) to revise wages and salaries of all the HR in the organization (collective bargaining notes).

Incentive schemes:

- i. Simple piece rate.
- ii. Taylor's differential piece rate scheme.
- iii. Halsey
- iv. Rowan
- v. Budeaux multiple piece rate
- vi. Merricks
- vii. Gantts task/bonus plan.
- viii. Group incentive scheme.

Motivation is the process that initiates, guides, and maintains goal-oriented behaviors. It is what causes you to act, whether it is getting a glass of water to reduce thirst or reading a book to gain knowledge.

Motivation

The processes that account for an individual's intensity, direction, and persistence of effort toward attaining a goal.

Motivation involves the biological, emotional, social, and cognitive forces that activate behavior.

Motivation is an internal process.

Whether we define it as a drive or a need, motivation is a condition inside us that desires a change, either in the self or the environment

MOTIVATION METHODS

Empowerment

Giving employees more responsibility and decision-making authority increases their realm of control over the tasks for which they are held responsible and better equips them to carry out those tasks.

Creativity and Innovation

The power to create motivates employees and benefits the organization in having a more flexible work force, using more wisely the experience of its employees, and increasing the exchange of ideas and information among employees and departments

Learning

Companies can motivate employees to achieve more by committing to perpetual enhancement of employee skills. Accreditation and licensing programs for employees are an increasingly popular and effective way to bring about growth in employee knowledge and motivation.

Quality of life

Programs incorporating flex-time, condensed workweeks, or job sharing, for example, have been successful in focusing overwhelmed employees toward the work to be done and away from the demands of their private lives.

Monetary Incentive

The sharing of a company's profits gives incentive to employees to produce a quality product, perform a quality service, or improve the quality of a process within the company.

What benefits the company directly benefits the employee.

Motivation

Types of Motivation

Different types of motivation are frequently described as being extrinsic or intrinsic:

Extrinsic motivations are those that arise from outside of the individual and often involve rewards such as trophies, money, social recognition, or praise.

Intrinsic motivations are those that arise from within the individual, such as doing a complicated crossword puzzle purely for the personal gratification of solving a problem

ABRAHAM MASLOW--Theory of Human Motivation

INTRODUCTION:

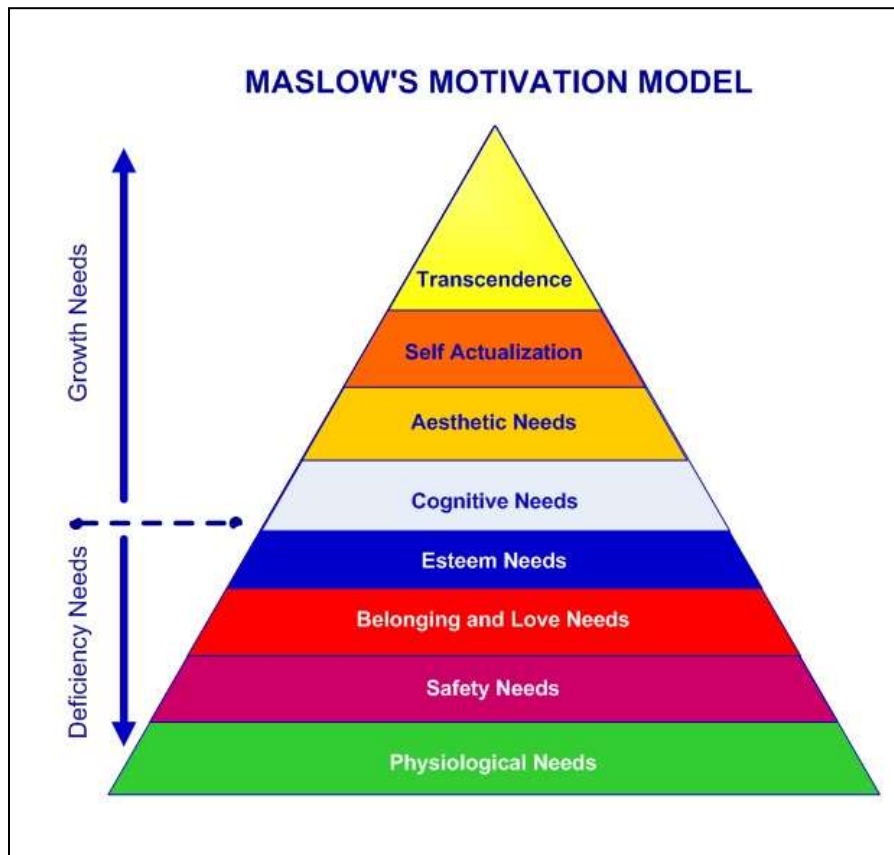
The basis of Maslow's theory is that human beings are motivated by unsatisfied needs, and that certain lower needs need to be satisfied before higher needs can be satisfied.

According to Maslow, there are general types of needs (physiological, safety, love, and esteem) that must be satisfied before a person can act unselfishly. He called these needs "deficiency needs."

" As long as we are motivated to satisfy these cravings, we are moving towards growth, toward self-actualization. Satisfying needs is healthy, while preventing gratification makes us sick or act evilly.

Maslow's Need Hierarchy

Maslow's theory assumes that a person attempts to satisfy the more basic needs before directing behavior toward satisfying upper-level needs.



Lower-order needs must be satisfied before a higher-order need begins to control a person's behavior.

A satisfied need ceases to motivate.

Physiological needs are those required to sustain life, such as:

- Air
- Water
- Food
- Sleep

Once physiological needs are met, one's attention turns to safety and security in order to be free from the threat of physical and emotional harm. Such needs might be fulfilled by:

Living in a safe area
 Medical insurance
 Job security
 Financial reserves

Once a person has met the lower level physiological and safety needs, higher level needs awaken. The first level of higher level needs are social needs.

Social needs are those related to interaction with others and may include:

Friendship

Belonging to a group

Giving and receiving love

Once a person feels a sense of "belonging", the need to feel important arises. Esteem needs may be classified as internal or external.

Internal esteem needs are those related to self-esteem such as self respect and achievement

External esteem needs are those such as social status and recognition. Some esteem needs are:

- Self-respect
- Achievement
- Attention
- Recognition
- Reputation

Self-actualization is the summit of Maslow's hierarchy of needs. It is the quest of reaching one's full potential as a person. Self-actualized people tend to have needs such as:

- Truth
- Justice
- Wisdom
- Meaning



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SCHOOL OF BUILDING AND ENVIRONMENT

DEPARTMENT OF ARCHITECTURE

UNIT – I – Human Resources and Materials Management – SAR5201

HUMAN RESOURCE DEVELOPMENT

Introduction

HRM is the most happening function as of now. This is so because people offer competitive advantage to a firm and managing people is the domain of HRM. An organization enjoys competitive advantage when it is the only one which can offer a product at a price and at quality while its competitor's cannot do so.

How do people lend competitive advantage? There are several ways. First, people offer skills, capabilities, systems, practices, speed, language, bonding and behaviours, which help execute firm's strategies successfully. Strategy implementation cannot be done by physical resources such as technology, buildings, machines and materials. It is the people who can craft strategies and execute them effectively.

Secondly, by aligning HR plans to business plan, HR managers are becoming strategic partners. HR professionals work with line managers to identify HR practices that help accomplish business strategy. The outcome of identifying HR planning with business planning is a frame work for integrating HR practices into business decisions to ensure results. On integration line managers and HR professionals work as partners to ensure that an integrated HR planning process occurs.

Third, innovation is the key to competitive advantage. Fortunes of several companies have been revised thanks to innovation. Fourth, HR function seeks to convert an adverse situation into an opportunity. HR often gets trapped in a policy role, mediating employee grievances, monitoring compliance with employment laws and enforcing codes of conduct. What is more, the function often has seen its mission as one of helping workers over-come deficiencies and obstacles that hinder their performances. Without ignoring these tasks, the new HR concentrates on the positive. How firms can enhances its revenue by doing more for its employees? Instead of trying to 'fix' a chronic employee weakness, how can the firm tailor a role that matches and capitalizes on strengths? For instance, after performance review rather than dwell on a talented marketing executive's creative talents in a broader marketing role – one that helps the company expand in key overseas markets.

Fifth, organizational designs do not remain static over a period of time. Environmental changes compel organizations redesign their structures. Along with changes in designs, organizations adopt uncertainty avoidance mechanisms, differentiation mechanisms and integrating mechanisms to cope with the compulsions of environmental changes. These changes in organizational designs need to be reinforced by innovative HRM strategies.

Finally, HR executive is becoming an effective change agent. Change management is critical to the success of any firm and marks a difference between winners and losers. While winners anticipate and prepare themselves to adapt and assimilate the change, losers are overtaken by events, ruminate over the events and are left behind. Business adopts three general response types to face change: initiatives, processes, and cultural adaptations.

HUMAN RESOURCE :

Behind production of every product or service there is an human mind, effort and man hours (working hours).

No product or service can be produced without help of human being.

Human being is fundamental resource for making or construction of anything.

Every organisation desire is to have skilled and competent people to make their organisation competent and best.

Among the five Ms of management-

men,

money,

machines,

materials

methods

HRM deals about the first M, which is men.

It is believed that in the five Ms, "men" is not so easy to manage. "every man is different from other"

Why do we call it as Human Resource Management?

Human: refers to the skilled workforce in an organization.

Resource: refers to limited availability or scarce.

Management: refers how to optimize and make best use of such limited or scarce resource so as to meet the organization goals and objectives.

You must treat your employees with respect and dignity because in the most automated factory in the world, you need the power of human mind. That is what brings in innovation. If you want high quality minds to work for you, then you must protect the respect and dignity. "

---Mr N.R. Narayana Murthy, Chairman Emeritus, Infosys Ltd

“Our progress as a nation can be no swifter than our progress in education. The human mind is our fundamental resource.”

- John F. Kennedy (35th President of the United States).

Meaning

HRM refers to the application of management principles to management of people in an organization. In order words, HRM consists of people-related functions as hiring, training and development, performance review, compensation, safety and health, welfare, industrial relations and the like. These are typically the functions of ‘personnel Management’ and are

administrative and supportive in nature. Appropriately called 'doables', these activities are highly reutilized and have been often outsourced.

Definition

According to Prof. Edwin Flippo, HRM is the process of planning, organizing, controlling and directing of the procurement, development, compensation, maintenance, integration and separation of the HR to the end that organizational individual and social objectives are accomplished.

The National Institute of Personal Management (NIPM) of India has defined human resources – personal management as “that part of management which is concerned with people at work and with their relationship within an enterprise. Its aim is to bring together and develop into an effective organization of the men and women who make up enterprise and having regard for the well – being of the individuals and of working groups, to enable them to make their best contribution to its success”.

According to Decenzo and Robbins,

“Human Resource Management is concerned with the people dimension” in management. Since every organization is made up of people, acquiring their services, developing their skills, motivating them to higher levels of performance and ensuring that they continue to maintain their commitment to the organization is essential to achieve organisational objectives. This is true, regardless of the type of organization – government, business, education, health or social action”.

Pigors and Myers –

“It is basically a method of developing potentialities of employees so that they feel maximum satisfaction of their work and give their best efforts to the organization”.

Ivancevich and Glueck –

“Human resource management is the function performed in organizations’ that facilitate the most effective use of people (employees) to achieve organizational and individual goals”.

EVOLUTION OF HRM:

Robert Owen , an industrialist was regarded as creator and originator for introducing reforms for workers in his own Lanark cotton mills. Initially he structured 10 hrs work / day

He created a principle of 8 hours day work, 8 hours recreation and 8 hours rest. Owen identified the importance of better working conditions at workplace and its impact on the productivity and efficiency of the workers. Owen after implementation of better working conditions at workplace, he observed change in the productivity of his workers as their efficiency increased.

He in those olden days implemented many social and welfare practices for his workers and saw his workers got happy, motivated and worked better. Therefore he was referred as father of Personnel management.

Nature of HRM

1. HRM necessitates alignment of HR policies and practices with the organisation's strategies – both corporate as well as functional. By meshing HR practices and policies with the strategies, the HR executive helps formulate and implement business strategies.
2. As stated above, HRM involves the application of management principles and functions to doables and deliverables of people management.
3. HRM assumes that it is the people who make the difference. They alone are capable of generating value and adding to the competitive advantage to organizations.
4. HR activities, both doables and deliverables, are not the sole responsibility of the HR specialists. Line managers are equally responsible for carrying out the activities
5. HR functions are not confined to business establishments only. They are applicable to non-business organizations too, such as education, health care, recreation and the like.

Objectives of HRM

The primary objective of HRM is to ensure that availability of a competent and willing work force to an organization. Beyond this, there are other objectives, too. Specifically, HRM objectives are four fold-societal, organizational, functional and personal.

1.Societal Objectives:

To be ethically and socially responsible to the needs and challenges of the society while minimizing the negative impact of such demands upon the organization. The failure of organizations to use their resources for the society's benefit in ethical ways may lead to restrictions.

2.Organisational Objectives:

To recognize the role of HRM in bringing about organizational effectiveness. HRM is not an end in itself. It is only a means to assist the organization with its primary objectives. Simply stated, the department exists to serve the rest of the organization.

3.Functional Objectives:

To maintain the department's contribution at a level appropriate to the organization's needs. Resources are wasted when HRM is either more or less sophisticated to suit the organization's demands. The department's level of service is must be tailored to fit the organization it serves.

4.Personal Objectives:

To assist employees in achieving their personal goals, at least insofar as these goals enhance the individual's contribution to the organization. Personal objectives of employees must be met if workers are to be maintained, retained and motivated. Otherwise, employee performance and satisfaction may decline and employee may leave the organization.

Functions of HRM

HRM objectives
functions

1. Societal Objectives
Compliance

management relations

2. Organizational Objectives
resource planning

relations

development

3. Functional Objectives

4. Personal Objectives
and development

Compensation

Supportive

1. Legal

2. Benefits

3. Union-

1. Human

2. employee

3. selection

4. training and

5. appraisal

6. placement

7. assessment

1. Appraisal

2. Placement

3. Assessment

1. Training

2. Appraisal

3. Placement

4.

5. Assessment

General Functions of HR

Planning:

Preparing forecasts of future HR needs in the light of an organization's environment, mission and objectives, strategies, and internal strengths and weaknesses, including its structure, culture, technology and leadership.

Staffing:

Obtaining people with the appropriate skills, abilities, knowledge and experience to fill jobs in the work organization. Key practices are human resource planning, job analysis, recruitment and selection.

Developing:

Analyzing learning requirements to ensure that employees possess the knowledge and skills to perform satisfactorily in their jobs or to advance in the organization. Performance appraisal can identify employee's key skills and 'competencies'.

Monitoring:

The design and administration of reward systems. HR practices include job evaluation, performance appraisal, pay and benefits.

Maintaining:

The administration and monitoring of workplace safety, health and welfare policies to retain a competent workforce and comply with statutory standards and regulations.

Managing relationships:

Encompasses a range of employee involvement/participation schemes in non-union or union work place. In a union environment this includes negotiating contracts and administering the collective agreement.

Managing change:

This involves helping others to envision the future, communicating this vision, setting clear expectations for performance and developing the capacity to reorganize people and reallocate other resources.

Evaluating:

Designing the procedures and processes that measure, evaluate and communicate the value-added component of HR practices and the entire HR system to the organization.

The ten "Cs" of human resources management are:

- cost effectiveness
- competitive
- coherence
- credibility
- communication
- creativity
- competitive advantage
- competence
- Change
- commitment.

The ten "Cs" framework was developed by Alan Price in his book "Human Resource Management in a Business Context".

Primary responsibilities of the Human resource manager:

- To develop a thorough knowledge of corporate culture, plans and policies.
- To act as an internal change agent and consultant.
- To initiate change and act as an expert and facilitator.
- To actively involve himself in company's strategy formulation.
- To keep communication lines open between the HRD function and individuals and groups both within and outside the organisation.
- To identify and evolve HRD strategies in consonance with overall business strategy.
- To facilitate the development of various organisational teams and their working relationship with other teams and individuals.
- To try and relate people and work so that the organisation objectives are achieved effectively and efficiently.
- To diagnose problems and to determine appropriate solution particularly in the human resources areas.
- To provide co-ordination and support services for the delivery of HRD programmes and services.
- To evaluate the impact of an HRD intervention or to conduct research so as to identify, develop or test how HRD in general has improved individual or organisational performance.

Role of HR Manager:

1. Personal Role:

- Advising
- Training and development
- Manpower planning, selection, recruitment, etc
- Measurement and assessment of individual and organizational behaviour

2. Welfare and Counselor Role

- Maintenance of services
- Group dynamics, group behaviour, motivation and leadership
- Research of personal and organizational problems

3. Administrative Role

- Salary and wage
- Maintenance of records
- Human engineering and Man-machine relations
- Effective utilization of HR

4. Fire fighting and legal Role

- Grievance handling
- Settlement of dispute
- Handling discipline and legal matters
- Joint consulataion

Functional areas of HRM

1.Organizational planning, development and task specialization

2.Staffing and employment

3.Training and development

4.Compensation, wage and salary administratio

5.Employees services and benefits

6.Employees services and benefits

7.Employees record

8.Labour and industrial relations and

9.Personnel research and personnel audit

Qualities of Good HR Manager

Some desirable personality traits of an effective HR manager are as under;

1. Insight in Human Nature

He must be able to understand various kinds of people and to get along with them at all levels. He should possess immense tact, practical mind, amiable disposition and sober temperament. He should be trained in behavioural sciences. The three disciplines comprising the core of behavioural science are anthropology, psychology and sociology.

2. Freedom from bias

He should be neither pro-management nor pro-labour. He should be pro-profession and should judge and advise on issues without fear or favour on the merits of the matter under consideration. He should be known for his honesty, integrity, strength of character, balance, justice and fair play.

3. Passion for Anonymity

He should be a credit-passer and not a credit-grabber. Since the personnel manager mostly plays a staff role, he can achieve his results only through line managers. These calls for a willingness to let credit for success go to them. He is best when people barely know that he exists.

4. Communication skill

A HR manager has not only to 'sell' his ideas to line people above him but also he is required to address several oral and written communications to people below him. The two groups which are different in culture, status, education and knowledge differ in their communication requirements also. Workers with poor education may not understand literary expressions of difficult language. They will prefer communication in their own colloquial language. Therefore, a HR manager must possess linguistic facility.

5. Leadership and organizational skills

A HR manager must also be a good leader and good organizer to be able to motivate the workers. He must possess emotional stability, adaptability and decisiveness.

Future role of HR Manager:

Future role of a HR manager will undergo dramatic changes as described below. He would end up getting marginalized if he does not change his old tools of the trade.

- Greater involvement in development planning
- Change in manpower planning and personnel policies

- Retaining of workers
- Greater emphasis on quality of work life
- Greater emphasis on productivity
- Greater attention to the human problem of adjustment to new work ethics
- Better performance appraisal devices
- Cultural change
- Check on rising money wages
- New quality standards

Future HR Manager

From the several changes sweeping through the corporate world, one can expect that the future role of a HR manager will undergo dramatic changes as described below. He would end up getting marginalized if he does not change his old tools of the trade.

- 1.Greater involvement in development planning
- 2.Change in manpower planning and personnel policies
- 3.Retaining of workers
- 4.Greater emphasis on quality of work life
- 5.Greater emphasis on productivity
- 6.Greater attention to the human problem of adjustment to new work ethics
- 7.Better performance appraisal devices
- 8.Cultural change
- 9.Check on rising money wages
- 10.New quality standards

Personnel management is a little old and a more traditional way of handling employees at a workplace. Personnel management is the seed and root for Human resources management.

HRM is a more modern and a more specific approach to managing human resources in an organization

Difference between personal management and HR management

Personal management

- 1.It is a routine maintenance oriented administration function

2. Personal management is mainly reactive and response to the demand of an organization wherever they arise.

3. Personal takes a narrow of its scope and objectives concentrate mainly on improving efficiency of the personal, without emphasizing the relevant of efficiency in the organizational context.

4. Clear rule and procedure.

5. Monitoring

6. Corporate plan is marginal

7. Speed of decision is slow.

8. Standardization is high

9. Pay is based on job evaluation.

10. Division of labour.

11. Labour management focus of collective bargaining.

12. Indirect communication.

13. Transactional leadership

14. Labour is treated as a tool.

15. Interests of organization are uppermost.

HRM place emphasis on the continuous development of people at work place. HRM is proactive function concern with future needs and act accordingly. HRM undertakes system view in which attempt is made and only to make people efficient but, to create organizational cultural to utilize the efficiency.

- Business needs.
- Nurturing.
- Corporate plan is central.
- Speed of decision is high.
- Standardization is low.
- Pay is based on job performance
- Division of work is a team work.
- Labour management focus on individual control.
- Direct communication.
- Transformational leadership.
- People are treated as assets.
- Mutuality of interest.

Personnel management.

- Employees were not given high priority in decision making process
- weren't much allowed to interact with management.
- Personal manager was to see that everything was in compliance with the labour laws or not but not much emphasis made on the morale of employees.
- Employees were just treated as tools, obligation to the organisation but not as the asset of the organisation,
- they were seen as cost & expenditure to company rather than capital and investment.
- Personnel officers mostly used to be disciplinary oriented instead of flexible and interactive with employees.
- Nurturing of employees was not priority by the personnel managers
- employees perspective was ignored which means personnel managers rather than understanding situation they used to be punitive if any error was committed by employee.

Human resource management

- employees are seen from the perspective as a most valuable resources for the organisation
- they consider their employees as assets and capital for their organisation.
- Motivating employees is a basic feature of human resource management in contrast with personal management.
- Main principle of the Human resource management is to see what should be given to an employee for extracting the desired work.
- HR Managers always encourage participation of employees in decision making and their suggestions are most valued.
- Flexibility in work, welfare and Work life balance to employees is high priority for Hr managers and they show much more concern towards employee issues.
- Adoption of new policies and optimisation methods by the Hr manager are well encouraged and swift.
- The finest difference between Personnel management and Human resource management is integration and augmentation of Information Technologies in the human resources management process and functions for enhanced productivity and time savings as time is money.

Types of Groups

From an organizational point of view, there are basically two types of groups. These are formal groups and informal groups.

A group is formal when it is purposely designed to accomplish an organizational objective or task. It is created via formal authority for some defined purpose.

A formal group can be a command group or a functional group that is relatively permanent is composed of managers and their subordinates who meet regularly to discuss general and specific ideas to improve product or service.

The formal groups usually work under a single supervisor, even though the structure of these groups may vary.

Informal Groups

Whereas formal groups are established by organizations to achieve some specific objectives, informal groups are formed by the members of such groups by themselves. They emerge naturally, in response to the common interests of organizational members. They are formed spontaneously, without any formal designation, and with common interests such as self-defense, work assistance, and social interaction. They exist outside the formal authority system and without any set rigid rules. Though officially unrecognized, they exist in the shadow of the formal structure as a network of personal and social relations that must be understood and respected by the management. They exist outside the formal authority system and without any set rigid rules. Though officially unrecognized, they exist in the shadow of the formal structure as a network of personal and social relations that must be understood and respected by the management.

Informal work groups are based upon socio-psychological support and reasoning and depend upon the member's interaction, communication, personal likings, and dislikings and social contacts within as well as outside the organization. Informal groups may have their own leaders and followers, group goals, social roles, and working patterns.

The leadership of the informal groups develops from within rather than a formal election.

An individual, who is working in a group for a long time and has a good rapport with other members, may emerge as a leader due to his technical expertise and his seniority. For any problem within the group, either technical or social, the members would go to this leader rather than the formally assigned supervisor.

Some Other Aspects of Informal Groups are as follows:

Group Norms

Groups Roles

Group Goals

Leadership

Group Cohesiveness..



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DEPARTMENT OF ARCHITECTURE

UNIT – IV – Human Resources and Materials Management – SAR5201

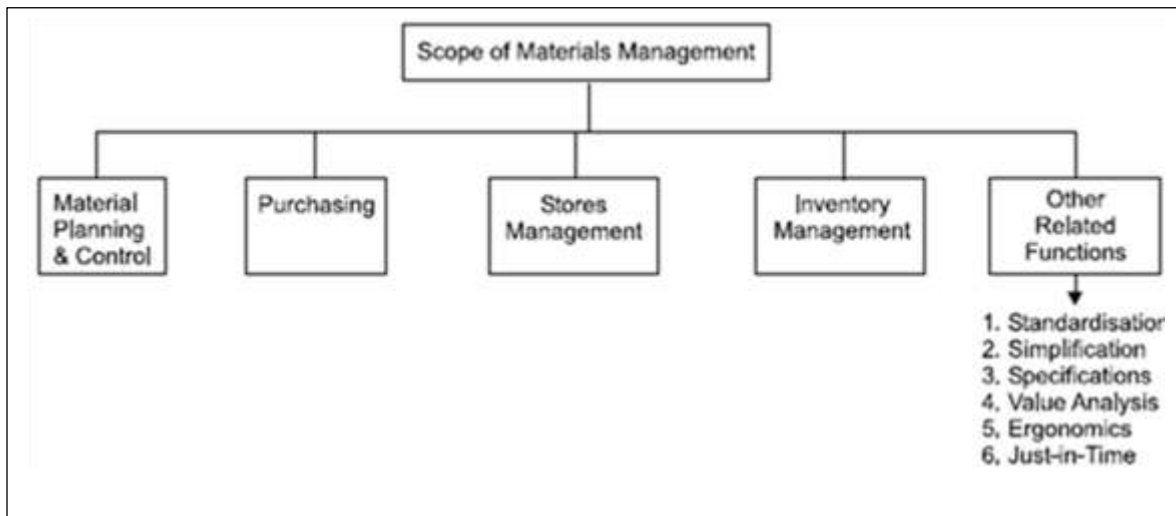
MATERIAL MANAGEMENT

“Material management is the planning, directing, controlling and co-ordination of all those activities concerned with material and inventory requirements, from the point of their inception to their introduction into manufacturing process.” - L.J. De Rose

“Material management is the integrated functioning of the various sections of an organization dealing with the supply of materials and allied activities in order to achieve maximum co-ordination.” - N.K. Nair

Definition :

Material management is defined as planning, identification, procuring, storage, receiving and distribution of materials. The purpose of material management is to assure that the right materials are in the right place, in the right quantity when needed. It is the responsibility of material management department for the flow of materials from the time the materials are ordered, received, and stored until they are used in the basis of material management.



AIM OF MATERIAL MANAGEMENT

1. The Right quality
2. Right quantity of supplies
3. At the Right time

4. At the Right place

5. For the Right cost

PURPOSE OF MATERIAL MANAGEMENT

- To gain economy in purchasing
 - To satisfy the demand during period of replenishment
 - To carry reserve stock to avoid stock out
 - To stabilize fluctuations in consumption
 - To provide reasonable level of client services
 - Objectives and Functions of Materials Management
- Primary objectives can be classified as:
- Efficient materials planning
 - Buying or Purchasing
 - Procuring and receiving
 - Storing and inventory control
 - Supply and distribution of materials
 - Quality assurance
 - **Secondary Objectives of Materials Management :**
- Efficient production scheduling
- Prepare specifications and standization of materials
 - To assist in product design and development
 - Forecasting demand and quantity of materials requirements
 - Quality control of materials purchased
 - Material handling
 - Use of value analysis and value engineering
 - Developing skills of workers in materials management
 - Smooth flow of materials in and out of the organization

Components of Material Management:

- Material estimation, budgeting, planning and programming.

- Scheduling , purchasing and procurement
- Receiving and inspection.
- Inventory control, storage and warehousing
- Material handling and transport
- Waste management
- Process of Construction Material Management

Material Planning

Materials planning include measuring, ordering and scheduling. It is emphasized that planning is a very important process to increase the productivity, profit, and assisting the time to complete the construction projects.

The productivity of the construction project will be hanged if the material planning process is not implemented properly.

The most commonly used basis for planning things out for the project is the BOQ prepared by the client.

Companies may have two major levels in planning- micro and macro level.

Time, cost, material and labour are the four major types of planning undertaken on sites.

The planning should be revised as frequently as possible in order to monitor whether work is progressing as planned.

2. Purchasing

For examples, a detailed material list and co-ordination of the purchasing and order of material are significant to assuring the material will available on construction site.

Step 1 – Material Indent

Step 2 – Enquiry to Vendors

Step 3 – Vendor Comparison

Step 4 – Vendor Selection and Negotiations

Step 5 – Purchase Order

Step 6 – Vendor Evaluation

3.Inventory control department:

The duties of the inventory control department is to decide about the types of ordering system, fixing the safety stock limits, fixing up the reorder level & maximum / minimum stock level.

4.Receiving, inspection and despatching department

The responsibility of Receiving, inspection and despatching department is to receive the materials when delivered by the suppliers. After receiving it, the quantity and quality must be checked. Production parts and materials are checked against blueprints and specifications. Non-production items are also reviewed. When once it is as per the specifications given, the goods will be accepted.

Receiving

The receipt system can be divided into:

- 1.Receipt from outside suppliers
- 2.Receipts from internal divisions.

System of receipt starts even before the material reaches the site.

The three documents that should be dispatched are copy of purchase order, supplier's advice document and the consignment note. This enables the Stores manager to organize and plan for clearances of materials.

For receipt from internal divisions, usually transfer notes and return to stores documents are used. Inspection can happen in two ways

Pre- dispatch inspection

Inspection on site

It is the responsibility of the inspector to inspect all materials

delivered to the site prior to their being used in the work.

It is desirable to perform inspection of materials or fabricated products prior to their delivery at site. E.g.: precast members.

The inspector shall have rights to reject faulty material and have it removed from site. With respect to manufactured goods, the quality requirements should be specified in the purchase order.

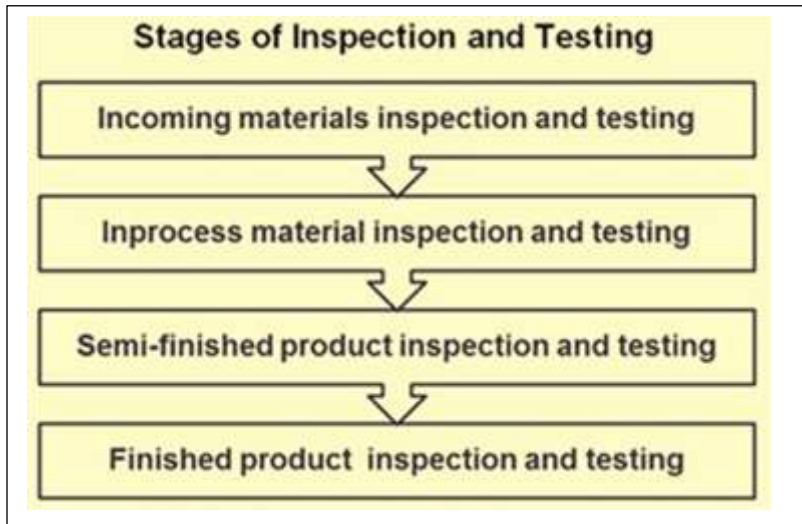
Methods of Inspection.

There are three methods of inspection:

-Visual

-Tactile

-Statistical



Storing and Stacking

Types of physical storage system on site vary according to the space availability and company practices. Industrial guidelines are also taken into consideration for the stacking and storage of particular materials. Materials are most often classified as per the comfort level of working of the workers. Basic categories followed are civil, electrical, plumbing, finishes, construction chemicals, miscellaneous.

The materials are also often stacked as per the specification of the vendor or manufacturer.

Relevant IS Codes (IS: 4082: recommendations on stacking and storage of construction materials at site) specifications are also followed. E.g. : As per IS : 4082,

The materials should not be affected by impurities or atmospheric agencies.

Materials like cement must be stored in covered sheds and stacked on timber raised platforms.

Reinforcing bars should be stacked yards away from moisture to prevent rusting and also away from oil and lubricants. Bars of different classification, sizes and lengths should be stored separately to facilitate issues.

- Issue of material
- Issues can be divided into

- Issues to consuming departments

2. Issues to outside suppliers for processing or conversion.

- Issuing on site does not happen in the case of all construction materials.
- In the case of sand or aggregate, the materials are consumed as and when required corresponding to the progress of the project.
- For other materials, issues are based on production programmes.

Based on this and the bill of materials, work orders are printed, listing for each material, quantity to be issued against each component requiring that material. This automatically controls consumption.

5. The Value Analysis and Standardization

The Value Analysis and Standardization offer greatest scope, in reducing the materials cost. It also reduce the number of varieties and also helps in finding the substitute for the materials at lesser cost. Value engineering identifies the areas of excessive or unnecessary expenses and attempts to improve the value of the product.

6. Logistics

Logistics is a concept that stresses movement of the materials and it involve planning, implementing, and controlling the movement and storage of all things from raw materials to the finished the product to meet client requirements. During construction project, routing of the materials will affect the cost and time to complete the construction projects.

7. Disposal of Scrap and Surplus, Material Preservation

Stock control can categorize as a technique planned to be the cover and to ensure all materials or equipment are available when needed.

Stock control include raw materials, processed materials, assembly components, consumable stores, general stores, maintenance materials and spares, work in progress and finished products.

At the same time, construction activities will generate big amount of the waste and it will cause difficulty to the construction industry.

However, with the planning of the material management which is effective will help to reduce the waste of material and increase the profit of the companies.

Importance of Materials Management

- Lower prices for material and equipment.
- Faster inventory turnover.
- Continuity of supply
- Reduced lead time
- Reduced transportation cost.
- Less duplication of efforts.
- Elimination of bulk- passing.
- Reduced materials obsolescence.
- Improved supplier relationship and better records and information.
- Better inter-department cooperation & Personnel development

Advantages of Materials Management

- The better accountability part of the material, as well as other departments and no one can blame others.
- As materials management by a single authority, which can lead to better coordination, because it became the central point of any substance-related problems.
- Materials management departments to ensure a better quality materials provide a request in a timely fashion department. This can lead to a better performance of the organization.

CODING AND CLASSIFICATION OF MATERIALS

Classification and codification:

The storekeeper keeps the material in the store.

The duties of storekeeper include accepting, identifying, classifying, and placing of materials.

Classification and codification of materials is necessary for keeping the material in store.

All items in the stores department are properly classified and codified to prevent mixing of one type of materials with the other and minimise the cost of retrieval.

Materials are classified according to nature in appropriate categories,

e.g., Materials related with engineering are classified as bronze, copper, steel, and mild steel etc., and each category is further classified suitably.

To save time in handling of materials, a written document known as material manual, is prepared in which description and code number to each store item is given.

Efficient storage requires the consideration of the following :

Checking of material

He should verify the materials received with consignment note, inspection report and materials received report.

He should send the copy of materials received report received by him, after due verification to the Accounts Department for payment purposes.

Following are the methods of coding of materials:

Alphabetical method

Numerical method

Alphabetical-cum-Numerical method

Alphabetical method

In this method first alphabet letters are used for codification of each category of materials.

For example, steel wire is coded as SW or steam coal is coded as SC etc.

Numerical method:

This method is used where materials accounting is to be mechanised by use of punched cards or computers.

For numerical coding a list is prepared for various departments and allotting to each of them a suitable number.

The first two digits of the code number represent the department for which the materials are meant and other two digits state the name of material as mentioned in the standard list or materials manual. For example, if code is

2341 it means Material No.41 [copper wire] is to be used in Department No.23.

Alphabetical-cum-Numerical method

In this method, a combination of these two methods is used for coding of materials.

For example, a steel wire of gauge 4mm quality A stored in rack/ bin No.22, is given the code number SW4A/22.

Such a method gives exact information than any of the above two methods.

Codification of materials helps in two ways:

In absence of coding the title of an account may have to be written a number of times. This results in unavoidable clerical work, particularly in case of lengthy account titles. Secrecy about the exact nature of the transaction from the office employees is maintained.

Procurement System

Objectives of procurement system

- Acquire needed supplies as inexpensively as possible
- Obtain high quality supplies
- Assure prompt & dependable delivery
- Distribute the procurement workload to avoid period of idleness & overwork
- Optimize inventory management through scientific procurement procedures

Inventory control

It means stocking adequate number and kind of stores, so that the materials are available whenever required and wherever required.

Scientific inventory control results in optimal balance.

Functions of inventory control

- To provide maximum supply service, consistent with maximum efficiency & optimum investment.
- To provide cushion between forecasted & actual demand for a material
- Inventory Control for Quantitative Analysis

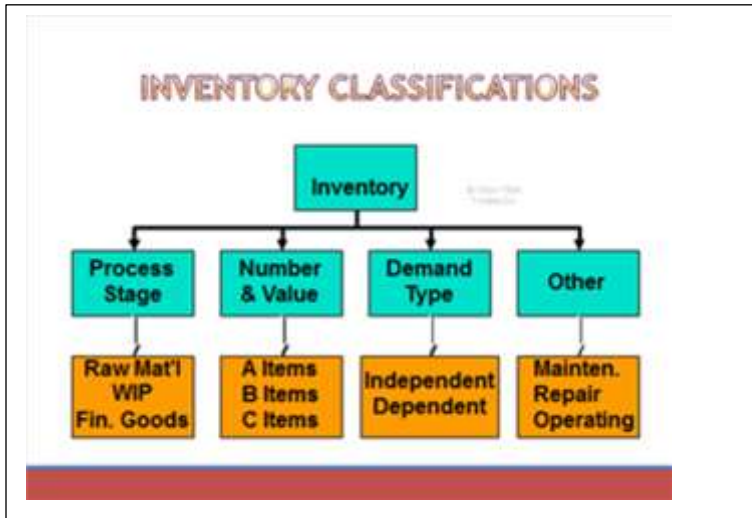
Definition:

Inventory control can be defined as, “which ensures the supply of required quantity and quality of inventory at the required time and at the same time prevent unnecessary investment in inventories”

Objectives of Inventory Control

- To ensure that the supply of raw material & finished goods will remain continuous so that production process is not halted and demands of customers are duly met.
- To minimise carrying cost of inventory.
- To keep investment in inventory at optimum level.
- To reduce the losses of theft, obsolescence & wastage etc.

- To make arrangement for sale of slow moving items.
- To minimise inventory ordering cost.



$$\text{Maximum stock level} = \text{Reorder level} + \text{Reorder quantity} - [\text{Minimum consumption} \times \text{minimum reorder period}]$$

Or

$$\text{Maximum stock level} = \text{Economic order quantity} + \text{Minimum stock}$$

$$\text{Minimum stock level} = \text{Re-order level} - [\text{Normal consumption} \times \text{average Reorder period}]$$

Re-order level

It is the point at which if material in store is reached, the order of further supply of material must be placed. This point is fixed between maximum level and minimum level. This point automatically initiates the process of placing a fresh order.

$$\text{Re-order level} = \text{Maximum re-order period} \times \text{Maximum usage}$$

Average stock level

This level indicates the average stock held by the firm. It is calculated with the help of following

$$\text{Average stock level} = 1/2 [\text{Maximum stock level} + \text{Minimum stock level}]$$

Or

$$\text{Average stock level} = \text{Minimum stock level} + 1/2 \text{ Re-order Quantity}$$

Basic Inventory Models (Economic Order

Quantity / EOQ Models)

Economic Order Quantity (EOQ) models are the most basic models of inventory management.

The approach in EOQ models is essentially to trade-off various relevant costs and derive an order quantity and time for placing an order such, that the total costs are minimized.

Economic order quantity

The economic order quantity (EOQ) is the size of the purchase order which gives maximum economy in purchasing material. It is also termed as standard order quantity.

It is fixed after taking into consideration the following points:

- Ordering cost

- Carrying cost

$$\text{EOQ} = \sqrt{\frac{2AB}{C}}$$

Where,

A = Annual consumption

B = Buying / Ordering cost per order

C = Carrying cost per unit per annum

EOQ = Economic order Quantity

Ordering cost

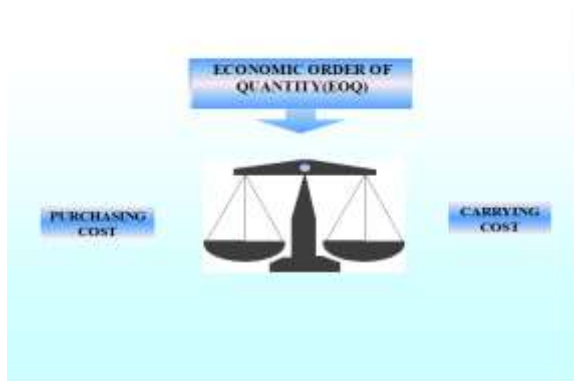
Cost of placing a order refers to the cost incurred for acquiring materials. It depends upon number of orders placed and the number of items ordered.

If the order size is larger in quantity, orders placing cost per unit is lower and if order size is smaller in quantity, order placing cost per unit is higher: It includes cost of preparing and placing an order, cost of transportation, cost of receiving and inspecting the materials.

Carrying cost

It is the cost that is incurred in maintaining a given level of stock. It includes cost of handling materials, insurance premium, cost of storage space, obsolescence losses etc., larger size of stock, higher the stock carrying cost per unit per annum and vice versa

EOQ = Average Monthly Consumption X Lead Time [in months] + Buffer Stock – Stock on hand



1.ABC Analysis

The ABC (Always Better Control) inventory control technique is based on the principle that a small portion of the items may typically represent the bulk of money value of the total inventory in construction process, while a relatively large number of items may form a small part of the money value of stores. The money value is ascertained by multiplying the quantity of material of each item by its unit price.

The ABC Analysis is a business term used to define an inventory categorization technique often used in material management. It is also known as Selective Inventory Control.

Policies based on ABC analysis:

A ITEMS: very tight control and accurate records.

B ITEMS: less tightly controlled and good records.

C ITEMS: simplest controls possible and minimal records.

‘A’ items – 20% of the items accounts for 70% of the annual consumption value of the items.

‘B’ items - 30% of the items accounts for 25% of the annual consumption value of the items.

‘C’ items - 50% of the items accounts for 5% of the annual consumption value of the items.

Procedure for ABC Analysis

Make the list of all items of inventory.

Determine the annual volume of usage & money value of each item.

Multiply each item’s annual volume by its rupee value.

Compute each item’s percentage of the total inventory in terms of annual usage in rupees

“A” Category – 5% to 10% of the items represent 70% to 75% of the money value.

“B” Category – 15% to 20% of the items represent 15% to 20% of the money.

“C” Category – The remaining number of the items represent 5% to 10% of the money value.

The relative position of these items show that items of category A should be under the maximum control, items of category B may not be given that much attention and item C may be under a loose control.

ABC ANALYSIS

(ABC = Always Better Control)

This is based on cost criteria.

It helps to exercise selective control when confronted with large number of items it rationalizes the number of orders, number of items & reduce the inventory.

About 10 % of materials consume 70 % of resources

About 20 % of materials consume 20 % of resources

About 70 % of materials consume 10 % of resources

‘A’ ITEMS

Small in number, but consume large amount of resources, Must have:, Tight control, Rigid estimate of requirements, Strict & closer watch, Low safety stocks, Managed by top management

‘B’ ITEM

Intermediate, Must have Moderate control, Purchase based on rigid requirements, Reasonably strict watch & control, Moderate safety stocks, Managed by middle level management

‘C’ ITEMS

Larger in number, but consume lesser amount of resources, Must have: Ordinary control measures, Purchase based on usage estimates, High safety stocks, ABC analysis does not stress on items those are less costly but may be vital.

Technologies in construction Material Management

The tools used in the construction industry change constantly with the continuous changes of technology. Researchers are finding ways to apply those changes in technology to construction in order to improve production and lower the cost of the operations.

Material Referencing:

Bar Codes Applications to Material Management

RFID-Radio Frequency Identification

1. Bar Codes Applications to Material Management

Bar code applications in construction are mostly intended to provide accuracy in data collection, to improve productivity and to save time in the data collection process.

Typically, bar codes are used for materials and inventory management. The scope of bar codes extends beyond materials management.

Bar codes provide the advantage of relatively error free data collection, which improves productivity and avoid errors.

Some construction firms that use bar codes claim that it saves time, money and labor while improving the accuracy of inventory.

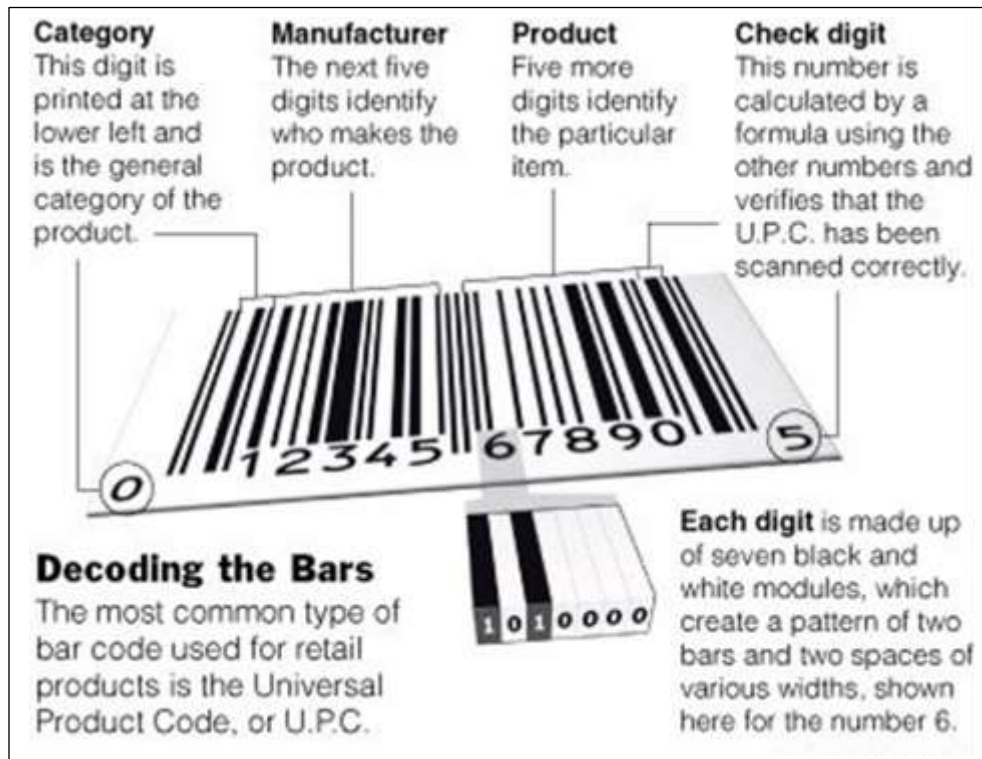
The major applications of bar code to material management identified in previous research can be identified as follows

Field material control

Warehouse maintenance and control

Inventory control applications and tool and consumable material issue

Purchasing and accounting



RFID-Radio Frequency Identification

A Radio Frequency Identification (RFID) system is an automated data collection system similar to bar code.

RFID is the use of wireless signals to transfer data between microchips. The chips can be inserted in tags, cards, or even living beings.

RFID systems consist of a reader or interrogator, which is a two-way radio transmitter that emits a signal to labels or tags.

The tags contain a microchip to store and process information and an antenna that receives and transmits a signal to the reader.

An ADC (Automated Data Collection) technology that:

- uses radiofrequency waves to transfer data between a reader and a movable item to identify, categorize, track..
- Is fast and does not require physical sight or contact between reader/scanner and the tagged item.
- Performs the operation using low cost components.
- Attempts to provide unique identification and backend integration that allows for wide range of applications.

RFID applications in construction are mostly intended to provide accuracy in data collection, to improve productivity and to save time in the data collection process. Radio frequency identification (RFID) technology is increasingly being used on construction projects to increase efficiencies, manage assets, and reduce theft. Throughout the past several years, a number of applications have been developed for use in the construction industry. As the cost of RFID systems continue to drop, their use in construction has continued to grow.

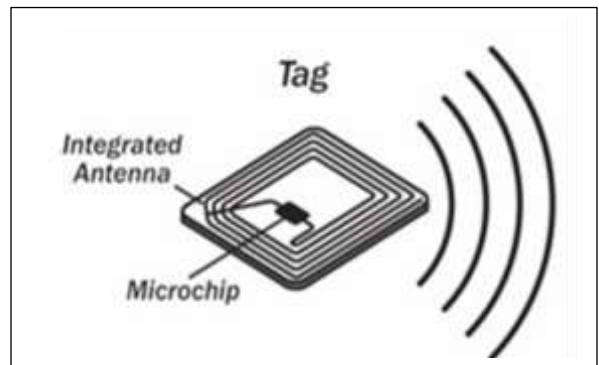
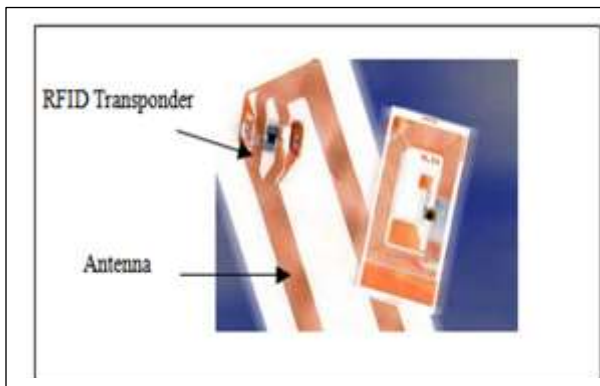
There are a variety of ways in which construction companies are taking advantage of RFID. In passive systems when the reader emits electromagnetic waves, it powers the tag, which transmits the data back to the reader. The simplest tags are labeled passive tags and need to be extremely close to a scanner to be read.

RFID Components	Details
Tags	Tags or transponder are normally located on the object or people to be identified.
Reader	Reader or interrogator provides, read and write/read facilities through a fixed or mobile reader to communicate data to and from the tags.
Antenna	Antenna is the conductive element that enables the tag to send and receive data

Passive RFID Tag

Generally, passive tags have shorter read ranges of a few inches to 30 feet, but have a long life than active tags.

The passive RFID tags consist of a microchip attached to an antenna and can be packaged in a different way such as mounted on a substrate to create a tag, sandwiched between an adhesive layer and a paper label to create a printable RFID label (or smart label), embedded in a plastic card, a key fob, the wall of a plastic container, and special packaging (to resist heat, cold or harsh cleaning chemicals).



Active RFID Tags

Active RFID tags have their own internal power supply and are rewritable.

The features of the active tags are much larger and heavier, and more expensive, but have a better noise protection than passive tags.

However, they have a shorter battery life of up to 10 years, with read range of 60 feet to 300 feet (20 metres to 100 metres).

Active tags are more reliable in environments such as water (including human/cattle, which are mostly water), metal (shipping containers, vehicles), or at longer distances for generating strong responses from weak requests.

They also have larger memories than passive tags and the ability to store additional information sent by the transceiver

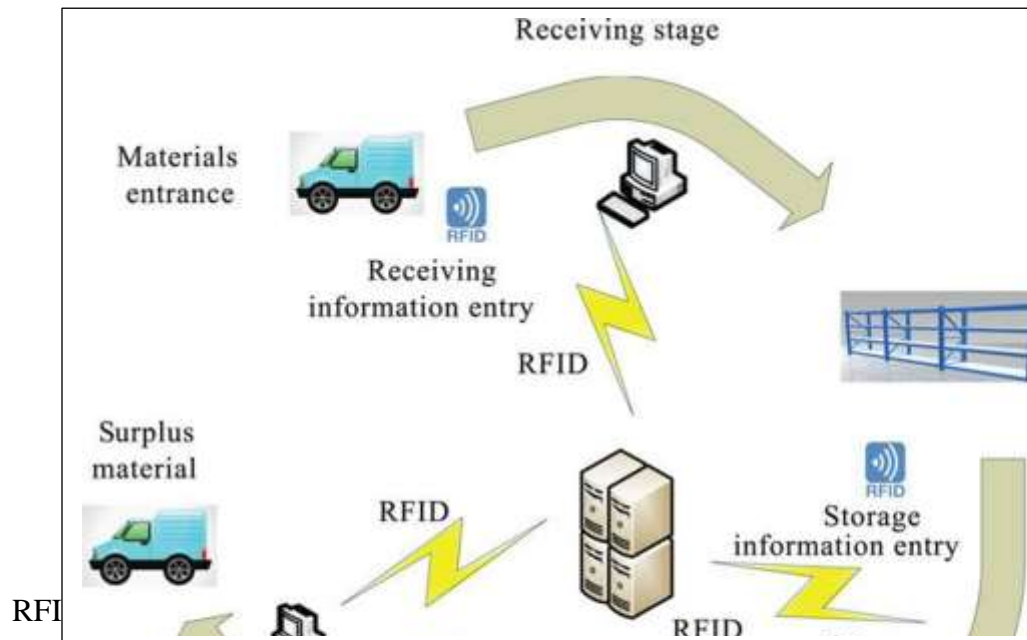
Uses of RFID:

RFID had been used for material tracking and material receipt in the construction industry.

Material Tracking: Material as the move in the jobsite since direct contact is not required for data collection. This can avoid theft and lost since managers can notice when materials are not where they are supposed to be.

Materials Receipt: Materials can be easily verified as they arrive to the site. The type of materials received can be known easily and verify if the right quantities were received.

Material Management using RFID



- No line of sight required for reading
- Multiple items can be read with a single scan
- Each tag can carry a lot of data (read/write)
- Individual items identified and not just the category
- Passive tags have a virtually unlimited lifetime
- Active tags can be read from great distances
- Can be combined with barcode technology

Different methods are in use concerning the pricing of materials issued from the store. They are as follows:

- First-in, First-out [FIFO]
- Last-in, First out [LIFO]

First-in, First-out [FIFO]

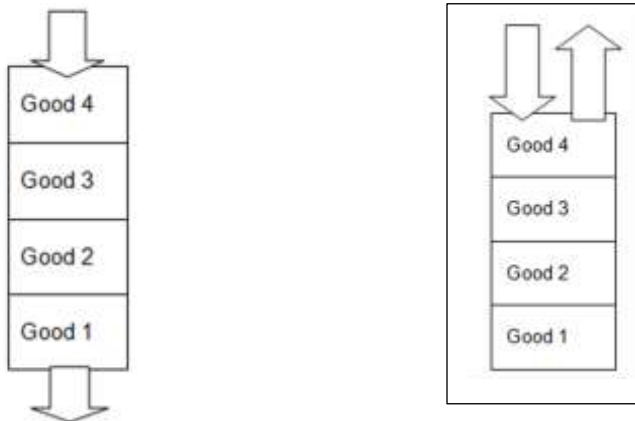
It is based on the assumption that the materials purchased and received first are issued first to the job.

A FIFO warehouse system is an inventory management system in which the first or oldest stock is used first and the stock or inventory that has most recently been produced or received is only used or shipped out until all inventory in the warehouse or store before it has been used or shipped out.

This ensures that the oldest stock is used first and reduces the costs of obsolete inventory. It is also considered the ideal stock rotation system.

This inventory system is common used in many industries and is sometimes combined with other warehouse, inventory management models and inventory systems such as the EOQ model or any other multiple order inventory model.

A good system of stock management requires that the oldest units are issued first and stock consists of the latest purchases. This system is found in the FIFO method of pricing the issues. No profit or loss occurs merely on the use of this method.



Last-in, First out [LIFO]

It is based on the assumption that the material purchased and received last are issued first to the job. The cost of last lot of materials received is used to price the materials issued until the stock of that lot is exhausted. Thereafter the next lot for pricing is used, and so on through successive lots. The stock is priced at the oldest cost.

PURCHASING POLICY AND PROCEDURES :

Purchasing Policy : Every organization sets the purchasing policy. In order to accomplish the aims and objectives of the organization, the directives and instructions issued to purchase the

materials are called the policy of purchasing. Policy means the set of principles, purposes and rules of action framed written or otherwise applied to fulfill the goals of organization.

The purchasing policy provides the guidelines and direction in the following categories. It defines:

- Rules of purchasing
- Conduct of purchasing personnel
- Social and minority business objectives
- Operational issues

The Selection of the supplier:

The process of selection of supplier involves two basic aspects: searching for all possible sources and short listing out of the identified sources.

The complete information about the supplier is available from various sources, such as, trade directories, advertisement in trade journals, direct mailing by the suppliers, interview with suppliers, salesmen, suggestions from business associates, visit to trade fair, participation in industries convention, etc.

Identification of more and more sources helps in selecting better and economical supplier.

It should be noted that the low bidder is not always the best bidder. When everything except price is equal, the low bidder will be selected. The important considerations in the selection are the price, ability to supply the required quantity, maintenance of quality standards, financial standing etc. It should be noted that it is not necessary to go for this process for all types of purchases.

For the repetitive orders and for the purchases of low-value, small lot items, generally the previous suppliers with good records are preferred.

Placing the order:

- Once the supplier is selected the next step is to place the purchase order.
- Purchase order is a letter sent to the supplier asking to supply the said material.
- At least six copies of purchase order are prepared by the purchase section and each copy is separately signed by the purchase officer.
- Out these copies, one copy each is sent to store-keeper, supplier, accounts section, inspection department and to the department placing the requisition and one copy is retained by the purchase department for record

A purchase order is a contract between the buyer and the seller and it gives specific information like product or services to be delivered, delivery date, and any other terms and conditions

including the price. The purchase order is also called as 'PO'. Below are details that usually forms part of purchase order:

- Products that are ordered
- Quantities i.e., (kg, meters, numbers etc.,)
- Price at which it is ordered
- Name of the vendor to whom the purchase order is being sent
- Shipment address or delivery location where the goods are required
- Billing address of the company
- Terms and conditions of payment.
- Due date of delivery/consignment

□

PURCHASE ORDER						
Invoice To Max Electronics A 204, Shivaji Nagar, Bengaluru GSTIN/UIN : 29AAACP7879D1Z0 State Name : Karnataka, Code : 29 Contact : 9810123456 E-Mail : Max@guruelectronics.com www.maxelectronics.com		Voucher No. 1		Dated 29-Mar-2020		
Despatch To Max Electronics A 204, Shivaji Nagar, Bengaluru e-mail : max@guruelectronics.com GSTIN/UIN : 29AAACP7879D1Z0 State Name : Karnataka, Code : 29		Supplier's Ref./Order No. PO/001		Mode/Terms of Payment Payment Via Cheque		
		Despatch through		Other Reference(s)		
Supplier A-One Electronics 261, 11th Main M.G Road Bengaluru GSTIN/UIN : 27AAACP98765A1Z State Name : Karnataka, Code : 29		Terms of Delivery Delivery at Ex-Factory				
Sl No.	Description of Goods	Due on	Quantity	Rate	per	Amount
1	Asus 16.6 inch Monitor	31-Mar-2020	5 Nos	5,300.00	Nos	26,500.00
2	Dell 17 inch Monitor	31-Mar-2020	7 Nos	6,700.00	Nos	46,900.00
		Total	12 Nos			₹ 73,400.00
Amount Chargeable (in words)						E. & O.E
INR Seventy Three Thousand Four Hundred Only						

The following table highlights the key difference between purchase order and purchase invoice

Purchase order	Invoice
Purchase order is a contract or confirmation of that the order for such a material is placed	Purchase invoice is a bill issued after fulling the delivery and request for the payment
Buyer initiates and sends to the supplier	Supplier initiates and sends it to the buyer
It is issued before receiving the goods	It is issued after or along with the delivery of goods by the supplier.

Follow-up of the order:

Follow-up procedure should be employed wherever the costs and risks resulting from the delayed deliveries of materials are greater than the cost of follow-up procedure, the follow-up procedure tries to see that the purchase order is confirmed by the supplier and the delivery is promised.

It is also necessary to review the outstanding orders at regular intervals and to communicate with the supplier in case of need.

Generally, a routine urge is made to the supplier by sending a printed post card or a circular letter asking him to confirm that the delivery is on the way or will be made as per agreement.

In absence of any reply or unsatisfactory reply, the supplier may be contact through personal letter, phone, telegram and/or even personal visit.

Receiving and inspection of the materials:

The receiving department receives the materials supplied by the vendor.

The quantity are verified and tallied with the purchase order.

The receipt of the materials is recorded on the specially designed receiving slips or forms which also specify the name of the vendor and the purchase order number.

It also records any discrepancy, damaged condition of the consignment or inferiority of the materials. The purchase department is informed immediately about the receipt of the materials.

Usually a copy of the receiving slip is sent to the purchase department.

Payment of the invoice:

When the goods are received in satisfactory condition, the invoice is checked before it is approved for the payment.

The invoice is checked to see that the goods were duly authorised to purchase, they were properly ordered, they are priced as per the agreed terms, the quantity and quality confirm to the order, the calculations are arithmetically correct etc.

STORES LEDGER CARD								
Description: Unit: Location: Code:								
Maximum: Minimum: Reorder level: Reorder quantity:								
Receipts			Issues			On order		
Date/ref	Quantity	\$	Date/ref	Quantity	\$	Date/ref	Quantity	\$



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SCHOOL OF BUILDING AND ENVIRONMENT

DEPARTMENT OF ARCHITECTURE

UNIT – III – Human Resources and Materials Management – SAR5201

LABOUR LEGISLATIONS

The term 'Labour Legislation' is - used to cover all the laws which have been enacted to deal with

- " employment and non-employment" wages,
- working conditions,
- industrial relations,
- social security and welfare of persons employed in industries.

- Thus '**Labour Legislation**' refers to all laws of the government to provide social and economic security to the workers.
- These **acts** are aimed at reduction of production losses due to industrial disputes and to ensure timely payment wages and other minimum amenities to workers.
- In India, labour legislation is treated as an **arm of the State for the regulation of working and living conditions of workers.**

“To secure to each labourer the whole product of his labour, or as nearly as possible, is a worthy object of any good Government” said Abraham Lincoln.

WHY LABOUR LAWS??????

The need for labour legislation may be summarized as under:

- Necessary for the **health, safety, and welfare of workers;**
- Necessary to protect workers against oppressive terms **as individual worker is economically weak and has little bargaining power;**
- To encourage and **facilitate the workers** in the organization;
- To deal with **industrial disputes;**
- To enforce **social insurance and labour welfare schemes.**

The Need of Labor Legislation becomes important because of following reasons :

a) **Weak Labor Organizations** :

Individual worker is economically very weak and is unable to bargain his terms with the employers. Even, Labor organizations are relatively weak and in most cases, they depend merely on the mercy employers. Now as the payment of wages, lay off, dismissal, retrenchments etc, are all governed by the legislations, economic insecurity of workers is removed to great extent.

b) **Occupational Insecurity** :

The workers in many organizations, did not get the amount in case of accidents, deaths etc. As a result, the workers faced occupational insecurity. Now, benefits such as Occupational Act, Employees State Insurance Act, etc have been statutorily given to the employees.

c) **Hazardous Working Conditions:**

Workers health and safety is always in danger due to harmful working condition in some factories. The Factories Act, contains a number of provisions relating to health, safety and welfare of workers.

d) **Law And Order :**

Labor legislation is also necessary in order to maintain law and order situation and national security of the country. The idea of welfare state is embodied in the directive principles of the constitution and for that reason various labor laws have been enacted to protect the sections of the society.

e) **Achieving Socio –economic Progress :**

Labor legislation is one of the most progressive and dynamic instruments for achieving socio – economic progress.

Objectives of Labor Legislation :

- To protect the workers from profit seeking exploiters.
- To ensure that the service conditions should be clearly spelt out by the employer to the employee.
- To improve and regulate the working conditions of workers employed in different factories and establishments.
- To make statutory provision for the regular trainings of a certain number of apprentices in different trades.

INDUSTRIAL RELATIONS

Meaning:

Industrial relations denote the collective relationship between management, employees and government in any industrial or non-industrial organisation.

Definition:

Industry is not a machine it is a complex form of human association. The true understanding of industry is to understand the thoughts of those engaged in it.

Prof. Oliver Sheldon.

Significance / Importance of IR

1. To help in the economic progress of a country.
2. To help in establishing and maintaining the industrial democracy

3. To help management both in the formulation of informal labour relations and policies.
4. To encourage collective bargaining.
5. To help government in making laws
6. To boost the discipline & morale of workers.

Conditions of Good Industrial Relations.

1. History of Industrial Relations.

No enterprise can escape its good and bad history of Industrial Relations. A good history is marked by harmonious relationship between management and workers. A bad history by contrast is characterized by militant strikes and lockouts. Both of history has a tendency to perpetrate themselves

2. Economic Satisfaction of workers:

Much of man's conduct is dominated by the needs. Man works because he wants to survive. This is all the more for under developed countries. Hence, economic satisfaction of workers are another important prerequisite for good IR.

3. Social & Psychological Satisfaction:

Identify the social and psychological urges of workers is a very important step in the direction of building good IR. As has been revealed by the Hawthorne experiments a man does not live by bread alone. He has several other needs besides his physical needs which should also be given due attention by the employer.

4. Off-the job conditions:

A person's home life is not totally separable from his work life, and his emotional condition is not separate from his physical condition. Each affects the other. Hence for good Industrial Relation it is not enough that the worker's factory life alone should be taken care of. His off – the – job conditions should also be improved.

5. Enlightened Labour Unions:

The most important single condition necessary for good IR is a strong & enlightened labour movement which may help to promote the status of labour without jeopardizing the interests of management. Many enlightened unions, however, usually do focus on employee contribution & responsibility and they have gained both social and economic rewards by this approach.

6. Negotiating Skills & Attitudes of Management and Workers:

Both management and workers representatives in the area of IR come from a great variety of backgrounds in terms of training, education, experience and attitudes. These varying backgrounds play a major role in shaping the characteristic of IR.

7. Public Policy & Legislation:

When government regulates employee relations, it becomes a third major force determining IR – the first two being the employer and the union. Governments in all countries intervene in management union relationships by enforcing labour laws and by insisting that the goals of the whole society shall take precedence over those of either of the parties.

8. Better Education:

With rising skills and education, workers' expectations in respect of rewards increase. Better workers' education can be a solution to mislead by outside TU leaders who have their own axe to grind. This alone can provide workers with a proper sense of responsibility which they owe to the organisation in particular and to the community in general.

Causes of poor IR

1. Uninteresting Nature of work:

The problem of poor IR is essentially a product of large-scale production which has made man subordinate to the machine. Owing to extensive specialization, a worker in a factory performs only a minor operation in the whole process of production. This made him lose his sense of pleasure, pride and satisfaction from work which he used to get earlier by producing the whole product. This led the shop floor worker culminated into big strikes and lockouts.

2. Political Nature of Unions

Another major irritant to good IR is the politicization of labour union by outside political leaders. This leads to multiple unions on the one hand and inter-union rivalry on the other. It depresses both a union membership and its finance.

3. Poor Wages:

Too much tight or complicated wage and incentive and payment systems are also a cause of poor IR. Wage and salary differentials between occupations also create feelings of inequity and mar poor IR.

4. Occupational Instability:

It makes workers feel secure on their jobs. It produces an enervating effect on them.

5. Poor Behavioural Climate:

The behavioural climate of an enterprise which is made up of its culture, traditions and methods of action may be either favourable or unfavourable. That unfavourable climate is one which prevents him from meeting his various types of needs and produces in his mind a poor image of the enterprise. This becomes a cause of poor IR.

EFFECTS OF POOR IR:

1. Multiplier Effect:

Modern industry and for that matter modern economy are inter-dependent. Hence, due to industrial conflict in any one plant may not be very great, the total cost loss caused due to its multiplier effect on the total economy is always very great.

2. Fall in Normal Tempo:

Disputes adversely affect the normal tempo of work so that plants work for below the optimum level. Costs build-up. Absenteeism and labour turnover increase. Plant discipline breaks down and both the quantity and quality of production suffer.

3. Resistance to Change:

Dynamic industrial situations call for change more or less continuously. Each of these tasks involves a whole chain of changes and this is resisted bitterly if there is industrial conflict.

4. Frustration and Social Cost:

Every man comes to the work place not only to earn a living. He wants to satisfy his social and egoistic needs also. When he finds difficulty in satisfying the needs he feels frustrated. They reduce cordiality and aggravate social tension.

SUGGESTIONS TO IMPROVE IR:

1. Both Management and Union should develop constructive attitudes towards each other.

2. All basic policies and procedures relating to IR should be clear to every body in the organisation to the union leaders.

3. The personnel manager should remove any distrust by convincing the union of the company's integrity and his own sincerity and honesty.

4. Management should encourage right kind of union leadership

5. After the settlement is reached the agreement should be properly administered.

COLLECTIVE BARGAINING

Meaning:

Collective Bargaining is the process in which conditions of employment are determined by agreement between representatives of the union, on the other hand and those of the employer on the other.

Benefits of Collective Bargaining:

- It provides a method for a regulation of conditions of employment
- It helps to know about the industry conditions and problem
- It helps for better understanding
- It helps to aware of the economic & technical factors involved in Industrial Management
- It provides a code defining the rights and obligations of each party
- It leads to better implementation of decisions.

Essential Conditions For Successful Collective Bargaining:

1. A favorable political climate
2. Stability of workers organizations
3. Recognition of Trade Union
4. Freedom of Association
5. Willingness to give and take
6. Avoidance of unfair labour practice.

Types of Activities in Collective bargaining

1. Distributive bargaining
2. Integrative bargaining
3. Attitudinal bargaining
4. Intra Organizational bargaining

1. Distributive bargaining – Economic issues like wages, bonus, salaries are discussed. However one party's gain is another party's loss.
2. Integrative bargaining – Here Issues where no party losses are discussed like better training programme, better job evaluation system etc.
3. Attitudinal bargaining – Attitudes of both the parties are shaped and re shaped like trust or distrust, friendliness or hostility between labour and management.
4. Intra Organizational bargaining – Type of maneuvering to achieve consensus with the workers and management.

Prerequisite for successful Collective bargaining:

I. Mutual Recognition

Trade Union must be recognized. Since Collective bargaining is a two way process it is necessary for both to shed their suspicion.

II. Mutual Accommodation

Collective bargaining is a process for continuous joint consideration and adjustment of problems. The approach must be mutual "Give and Take policy"

III. Single Strong Union

A stable Union is essential.

IV. Efficient Bargaining Mechanism

Availability of full information, selection of proper representative is crucial.

V. Bargainer must have authority

VI. Political climate must be positive.

Points to be remembered in the Negotiation Process:

1) Composition of Negotiation Team:

Members must possess analytical mind, problem solving ability and finding out the relevant parameter. They should have the full decision making power.

2) Ready Availability of relevant Material:

Necessary data should be collected and tabulated as needed.

3) Continuity of talks:

The important thing is never to reach an end but to keep talking continually. As the field of agreement is widened and the field of disagreement is narrowed down, small gaps can be bridged easily later.

4) Problem solving attitude:

Important factor is to replace opinions and impression of facts and figures and to assess these facts objectively and analytically.

5) It should have a good beginning

TRADE UNION

Meaning:

Trade Union is an association of workers in one or more professions – an association carried on mainly for the purpose of protecting and advancing the members' economic interests in connection with their daily wage.

Definition:

According to Trade Union Act, 1926, Sec-2 (h), to defines “it means any combination, whether temporary or permanent, formal .

1. Primarily for the purpose of regulating the relations;
 - a. Between workmen and workmen or
 - b. Between workmen and employer or
 - c. Between employer and employer
2. For imposing restrictive conditions on the conduct of any trade or business.

Why do workers join Trade Union?

1. To attain economic security

2. To improve their bargaining power
3. Workers like to resist or sustain the management irrational, illogical and discriminatory actions.
4. To ventilate the workers' grievances to the management
5. To inform workers' views, aims, ideas and dissatisfaction, frustration to the management.
6. To secure protection from unexpected economic needs like illness, accidents, injury , etc.,
7. To satisfy their social needs
8. To secure power.

Registration of Trade Union

1. Application for Registration
2. Rules and a statement of the following particulars
 - a. The names, occupations and address of the members making the application
 - b. The name and address of the Trade Union and Head Office
 - c. The title name, age, address and occupation of the officers of the Trade Union.
3. Registration
4. Certificate of Registration

Rights & Privileges of a Registered Trade Union:

1. Body Corporate
2. Separate fund for political purpose
3. Right to inspect books of Trade Union
4. Enforceability of Agreements
5. Rights of minors to be a member
6. Change of name
7. Amalgamation of Trade Union

Trade Union Federation:

I. National:

AITUC – All India Trade Union Congress

INTUC – Indian National Trade Union Congress

II. Central

BMS – Bharathiya MazdoorSangh

HMS – Hindu Mazdoor Sabha

CITU – Centre of Indian Trade Union

Types & Structure of Trade Union:

I. Reformist Unions:

Aims at the preservation of the capitalist economy and the maintenance of competitive production based Industrial Relation.

a. Business Union: Protect workers interest by participating in CB with the employer.

b. Friendly or Uplift Unions: Aspire to elevate the moral, intellectual and social life of workers, like education, health, insurance and other benefits.

II. Revolutionary Unions:

This union aims at replacing the present system with the new and different institutions based on the ideas that are regarded as preferable. Destroying the capitalistic system and abolish private property and installing socialist or communistic system.

III. Craft Union / Horizontal Union

If the workers of the same craft, or category of the job form into an union, that union is called craft union. Example: Drivers' Association, Lawyers Associations etc.,

IV. General Unions:

If the worker of any industry , any region and of any job or occupation form into one union in order to protect the overall interest of the workers, such unions are called general union.

V. Industrial Unions / Vertical Union:

Different categories form into a union that union is called Industrial union. The logic behind this is , workers of the same industry have the common bend and they are governed by same rules and regulations and are administered by same management.

Functions of Trade Union:

1. Achieving higher wages
2. Better working conditions and living conditions
3. Acquiring control of the industry by workers
4. Minimizing the helplessness of the Individual workers by making them stand collectively
5. Increasing their resistance power
6. Protecting members against victimization and injustice of employer
7. Raising status of the workers
8. Providing self-confidence
9. Taking up welfare measures for improving the morale of workers.
10. To enlarge the opportunities for promotion and training
11. To provide for educational, cultural and recreational facilities
12. To offer responsive co-operation in improving levels of production and productivity and discipline.

New Activities which unions can undertake in future area as follows:

- a. Communication
- b. Counseling
- c. Education and Training
- d. Welfare
- e. Family and vocational guidance
- f. Research
- g. Team building
- h. Employee ownership

- i. New work force
- j. HRD

LABOUR LAWS & EMPLOYMENT LAWS

The final goal of **labour law is to bring both the employer and the employee on the same level**, thereby mitigating the differences between the two ever-warring groups.

Labour Laws **are different** from employment laws which deal only with **employment contracts** and issues regarding employment and workplace discrimination and other private law issues.

Employment Law is a broad area including all areas of the **employer/employee relationship** except the negotiation process covered by labour law and collective bargaining. Many employment laws (**e.g., minimum wage regulations, employment discrimination**) were enacted as protective labour legislation. Other employment laws take the form of public insurance, such as unemployment compensation

LABOUR LAWS deals . . .

- Employment Contract
- Minimum wage
- Working time
- Health and safety
- Anti-discrimination
- Unfair dismissal
- Child labour

EMPLOYMENT CONTRACT

The basic feature of labour law in almost every country is that **the rights and obligations** of the **worker and the employer** between one another are mediated through the **contract of employment** between the two.

The **CONTRACT** aims to allow the employee to know concretely **what to expect and is expected**; in terms of **wages, holiday rights, notice in the event of dismissal, job description and so on**.

An employer may not legally offer a contract in which the employer pays the worker less than a minimum wage. An employee may not for instance agree to a contract which allows an employer to dismiss them unfairly.

MINIMUM WAGE

- There may be law stating the minimum amount that a worker can be paid per hour. Many countries across the world have laws of this kind.
- The minimum wage is usually different from the lowest wage determined by the forces of **supply and demand in a free market**.
- Each country sets its **own minimum wage laws and regulations**, and while a majority of industrialised countries has a minimum wage, many developing countries have not.
- Minimum wage laws were first introduced nationally in the **United States in 1938, India in 1948, France in 1950, and in the United Kingdom in 1999**.

WORKING TIME

- Before the **Industrial Revolution**, the workday varied between **11 and 14 hours**. With the growth of industrialism and the introduction of machinery, longer hours became far more common.
- **14-15 hours being the norm**, and 16 not at all uncommon. Use of child labour was commonplace, often in factories.
- In England and Scotland in 1788, about two-thirds of persons working in the new water-powered textile factories were children.
- The **eight-hour movement's** struggle finally led to the first law on the length of a working day, passed in 1833 in England, limiting miners to 12 hours, and children to 8 hours. The 10-hour day was established in 1848, and shorter hours with the same pay were gradually accepted thereafter.

HEALTH AND SAFETY

- The passage of the Health Insurance Act, which entitled workers to **health insurance**; the worker paid two-thirds, and the employer one-third, of the premiums.
- **Accident insurance** was provided in 1884, while old age pensions and disability insurance were established in 1889. Other laws restricted the employment of women and children.
- **Compensation for injuries** suffered by a workman in the course of and arising out of his employment according to the nature of injuries suffered and disability incurred.

ANTI - DISCRIMINATION

- This clause means that discrimination against employees is morally unacceptable and illegal, on a variety of grounds, in particular racial discrimination or sexist discrimination. **Anti-discrimination law** refers to the law on people's right to be treated equally.

- Most developed countries mandate that in employment, in consumer transactions and in political participation people may be dealt with on an equal basis regardless of
- **sex, race, ethnicity, nationality, sexuality and sometimes religion political views.**

Examples of anti-discrimination law include,

Age Discrimination Act of 1975

Racial Discrimination Act 1975

Disability discrimination act

Anti-Discrimination Act 1977

CHILD LABOUR

- Child labour is the employment of children under an age determined by law or custom.
- This practice is considered exploitative by many countries and international organisations.
- Child labour was not seen as a problem throughout most of history, only becoming a disputed issue with the beginning of universal schooling and the concepts of labourers' and children's rights.
- Child labour can be factory work, mining or quarrying, agriculture, helping in the parents' business, having one's own small business (for example selling food), or doing odd jobs.

Protective Labor Legislations :

The legislations whose primary purpose is to protect minimum labor standards and improve working conditions are protective labor legislations. Legislations laying down the minimum labor standards in the areas of work, safety, employment of children and women and also the manner of wage payment come under this category. The Indian labor laws under this category are :

- 1) The Factories Act, 1948,
- 2) The Mines Act, 1952,
- 3) The Plantation Labor Act, 1951,
- 4) The Motor Transport Workers Act, 1961,
- 5) The Shops and Establishment Act passed by various states,
- 6) The Payment of Wages Act, 1936,
- 7) The Minimum Wages Act, 1948,
- 8) The Child Labor (Prohibition and regulation) Act, 1986 and
- 9) Contract Labor (Regulation and Abolition) Act, 1970.

II)Regulative Legislations :

The legislations whose primary purpose is to regulate the relations between employers and employees and to provide for methods and manners for settling industrial disputes are Regulative Legislations. This laws also regulate the relationships between workers and trade unions, the rights and obligations of the organizations of employers and workers, as well as their mutual relationships. The laws under this category are as follows :

- 1) The Trade Unions Act, 1926,
- 2) The Industrial Disputes Act, 1947, and
- 3) The Industrial Employment (Standing Orders) Act, 1946

III) **Social Security Legislations** :

The Legislations which intend to provide social security benefits to the workmen during certain contingencies of life are Social Security Legislations. Though this legislations may cover other classes of citizens also, their primary goal has been to protect the workers. The laws under this category are as follows:

- 1) The Workmen's Compensation Act, 1923,
- 2) The Employees State Insurance Act, 1948,
- 3) The Coal Mines Provident Fund and Miscellaneous Provisions Act, 1948,
- 4) The Employees Provident Funds and Miscellaneous Provisions Act, 1952
- 5) The Maternity Benefit Act, 1961, and

The Payment of Gratuity Act, 1972.

IV) **Welfare Legislations**:

The legislations which aim at promoting the general welfare of the workers and improve their living conditions are Welfare legislations. Such laws carry the term “Welfare” in their titles. The Laws under this category are as follows :

- 1) Mica Mines Labor Welfare Fund Act, 1946,
- 2) Iron Ore Mines, Manganese Ore Mines and Chrome Ore Mines labor Welfare Fund Act, 1976 and
- 3) Beedi Workers Welfare Fund Act, 1976.

All of these laws provide for the funds which is spent on improving the general welfare of workers including housing, medical, educational and recreational facilities.

The legislations can be categorized as follows:

- Labour laws enacted by the Central Government, where the Central Government has the sole responsibility for enforcement.
- Labour laws enacted by Central Government and enforced both by Central and State Governments.
- Labour laws enacted by Central Government and enforced by the State Governments.
- Labour laws enacted and enforced by the various State Governments which apply to respective States.

Labour Laws may be classified under the following heads:

- Laws related to Industrial Relations
- Laws related to Wages
- Laws related to Working Hours, Conditions of Service and Employment
- Laws related to Equality and Empowerment of Women
- Laws related to Deprived and Disadvantaged Sections of the Society
- Laws related to Social Security

Laws related to Industrial Relations such as:

- Trade Unions Act, 1926
- Industrial Employment Standing Order Act, 1946.
- Industrial Disputes Act, 1947.

WAGES

Payment of Wages Act, 1936 (amended 12 times in 1937 twice, 1940, 1951, 1957, 1960, 1964, 1971, 1974, 1976, 1977, 1982)
Minimum Wages Act, 1948 (amended 8 times in 1950, 1951, 1954, 1957, 1961, 1970, 1986)
Employee's Provident Fund and Miscellaneous Provisions Act, 1952 (amended 14 times)
Payment of Bonus Act, 1965 (amended 3 times in 1976, 1980, 1995)
Payment of Gratuity Act, 1972 amended 5 times in 1984 twice, 1987, 1994, 1999)
Equal Remuneration Act, 1976 (Amended once in 1987)

HEALTH & SAFETY

Factories Act, 1948
Mines Act, 1952
Personal Injuries (Compensation Insurance) Act, 1970
Fatal accidents Act, 1855
Employees State Insurance Act, 1948 (amended 6 times in 1951, 1966, 1970, 1975, 1984, 1989)
Child Labour (Prohibition and regulation) Act, 1996
Workmen's compensation Act, 1923 (amended 4 times in 1933, 1959, 1962, 1995)
Maternity Benefit Act, 1961 (amended 6 times in 1970, 1972, 1973, 1976, 1988, 1995)
Children Pledging of Labour Act, 1933

EMPLOYMENT

Contract Labour(Regulation and Abolition) Act, 1970 (amended once in 1986)
Interstate Migrant Workmen (Regulation of employment and conditions of Service) Act, 1979
Employment Exchanges(Compulsory Notification of Vacancies) Act,1959 ,(amended once in1986)
Trade Union Act, 1926
Bonded Labour System (abolition) Act,1976 (amended once in 1985)
Apprentices Act ,1961 (amended 4 times in 1964,1968,1973,1986)
Employers Liability Act,1938 (amended 3times,in 1951 twice and 1970)
Weekly holidays Act 1942 (amended 2 times in 1970, 1986)
Industrial Disputes Act, 1947
Building and other construction worker's (Regulation of Employment and conditions of service) Act,1996
Building and other Construction Worker's Welfare Cess Act, 1996

Laws related to Equality and Empowerment of Women such as:

Maternity Benefit Act, 1961
Equal Remuneration Act, 1976.

Laws related to Deprived and Disadvantaged Sections of the Society such as:

Bonded Labour System (Abolition) Act, 1976
Child Labour (Prohibition & Regulation) Act, 1986
Children (Pledging of Labour) Act, 1933

Laws related to Working Hours, Conditions of Service and Employment such as:

Factories Act, 1948.
Plantation Labour Act, 1951.
Mines Act, 1952.
Working Journalists and other Newspaper Employees' (Conditions of Service and Misc. Provisions) Act, 1955.
Merchant Shipping Act, 1958.
Motor Transport Workers Act, 1961.

Beedi & Cigar Workers (Conditions of Employment) Act, 1966.
Contract Labour (Regulation & Abolition) Act, 1970.
Sales Promotion Employees Act, 1976.
Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979.
Dock Workers (Safety, Health & Welfare) Act, 1986.
Building & Other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996.
Building and Other Construction Workers Welfare Cess Act, 1996
Cine-Workers and Cinema Theatre Workers (Regulation of Employment) Act, 1981

Dangerous Machines (Regulation) Act, 1983
Dock Workers (Regulation of Employment) Act, 1948
Dock Workers (Regulation of Employment) (Inapplicability to Major Ports) Act, 1997
Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993
Industrial Employment (Standing Orders) Act, 1946
Mines and Mineral (Development and Regulation) Act, 1957
Plantation Labour Act, 1951
Private Security Agencies (Regulation) Act, 2005

Laws related to Social Security such as:

Workmen's Compensation Act, 1923.
Employees' State Insurance Act, 1948.
Employees' Provident Fund & Miscellaneous Provisions Act, 1952.
Payment of Gratuity Act, 1972.
Employers' Liability Act, 1938
Beedi Workers Welfare Cess Act, 1976
Beedi Workers Welfare Fund Act, 1976
Cine workers Welfare Cess Act, 1981
Cine Workers Welfare Fund Act, 1981
Fatal Accidents Act, 1855
Iron Ore Mines, Manganese Ore Mines and Chrome Ore Mines Labour Welfare Cess Act, 1976
Iron Ore Mines, Manganese Ore Mines and Chrome Ore Mines Labour Welfare Fund Act, 1976
Limestone and Dolomite Mines Labour Welfare Fund Act, 1972
Mica Mines Labour Welfare Fund Act, 1946

Personal Injuries (Compensation Insurance) Act, 1963
Personal Injuries (Emergency Provisions) Act, 1962
Unorganised Workers' Social Security Act, 2008

Workmen Compensation Act, 1923

Sec. 1(3) All workers irrespective of their status or salaries either directly or through contractor or a person recruited to work abroad.

Sec. 3 Employers Liability to pay compensation to a workmen: On death or personal injury resulting into total or partial disablement or occupational disease caused to a workmen arising out of and during the course of the employment.

Amount of compensation

□ Where death of a workman results from the injury - An amount equal to fifty per cent of the monthly wages of the deceased workman multiplied by the relevant factor on an amount of eighty thousand rupees, whichever is more.

□ Where permanent total disablement results from the injury - An amount equal to sixty per cent of the monthly wages of the injured workman multiplied by the relevant factor or an amount of ninety thousand rupees, whichever is more

Higher the age – Lower the compensation

Payment of Wages Act, 1936

Coverage of Employees

Drawing average wage upto Rs.6500 pm as amended w.e.f. 06.09.05.

Time of payment of wages

The wages of every person employed be paid.

When less than 1000 persons are employed shall be paid before the expiry of the 7th day of the following month.

When more than 1000 workers, before the expiry of the 10th day of the following month.

Deduction made from wages

Deductions such as, fine, deduction for amenities and services supplied by the employer, advances paid, over payment of wages, loan, granted for house-building or other purposes, income tax payable, in pursuance of the order of the Court, PF contributions, cooperative societies, premium for Life Insurance, contribution to any fund constituted by employer or a trade union, recovery of losses, ESI contributions etc.

Building and Other Constructions Workers (Regulation of Employment and Conditions of Service) Act, 1996

The Government of India enacted the Building and Other Constructions Workers (Regulation of Employment and Conditions of Service) Act, 1996

The BOCW Act is a social welfare legislation that aims to benefit workers engaged in building and construction activities across the country.

"An act to regulate the employment and conditions of service of building and other construction workers and to provide for their safety, health and welfare measures and for other matters connected therewith or incidental thereto."

The BOCW Act stipulates health, safety and welfare measures applicable to building workers. Building worker is defined in Section 2(e) of the BOCW Act as "a person who is employed to do any skilled, semi-skilled or unskilled, manual, supervisory, technical or clerical work for hire or reward, whether the terms of employment be expressed or implied, in connection with any building or other construction work."

SPECIAL PROVISIONS

. Responsibility of employers:

-An employer shall be responsible for providing constant and adequate supervision of any building or other construction work in his establishment as to ensure compliance with the provisions of this Act relating to safety and for taking all practical steps necessary to prevent accidents.

Responsibility for payment of wages and compensation:-

An employer shall be responsible for payment of wages to each building worker employed by him and such wages shall be paid on or before such date as may be prescribed.

(2) In case the contractor fails to make payment of compensation in respect of a building worker where he is liable to make such payment when due, or makes short payment thereof, then, in the case of death or disablement of the building worker, the employer shall be liable to make payment of that compensation in full or the unpaid balance due in accordance with the provisions of the Workman's

Compensation Act, 1923 (8 of 1923), and recover the amount so paid from the contractor either by deduction from any amount payable to the contractor under any contract or as a debt payable to the contractor.

Factories Act, 1948

Applicability of the Act

Any premises whereon 10 or more persons with the aid of power or 20 or more workers are/were without aid of power working on any day preceding 12 months, wherein Manufacturing process is being carried on. Sec.2(ii)

Employer to ensure health of workers pertaining to

- Cleanliness Disposal of wastes and effluents
- Ventilation and temperature dust and fume
- Overcrowding Artificial humidification Lighting
- Drinking water Spittons. Secs. 11 to 20

Safety Measures

- Fencing of machinery
- Work on near machinery in motion.
- Employment prohibition of young persons on dangerous machines.
- Striking gear and devices for cutting off power.
 - Self-acting machines.
 - Casing of new machinery.
 - Prohibition of employment of women and children near cotton-openers.
- Hoists and lifts.

Welfare Measures

- Washing facilities
- Facilities for storing and drying clothing
- Facilities for sitting
- First-aid appliances – one first aid box not less than one for every 150 workers.
- Canteens when there are 250 or more workers.
- Shelters, rest rooms and lunch rooms when there are 150 or more workers.
- Creches when there are 30 or more women workers.

- Welfare office when there are 500 or more workers

Working Hours, Spread Over & Overtime of Adults

Weekly hours not more than 48. Daily hours, not more than 9 hours. Intervals for rest at least ½ hour on working for 5 hours.: Spreadover not more than 10½ hours. Overlapping shifts prohibited. Extra wages for overtime double than normal rate of wages. Restrictions on employment of women before 6AM and beyond 7 PM. Secs. 51, 54 to 56, 59 & 60

The Maternity Benefits Act, 1961

Objective

Maternity Leave and benefit

To protect the dignity of Motherhood by providing complete & healthy care to women and her child when she is unable to perform her duty due to health condition.

Maternity Act 1961 : Gives her the assurance that her rights will be looked after while she is at home to care for her child.

Applicability:

The Act extends to whole to India.

Every factory, mine or plantation (including those belonging to Government) and to every shop or establishment wherein 10 or more persons are employed on any day preceding 12 months.

Eligible for Maternity Benefit?

Must work in the establishment for 80 days in 12 months before her date of Delivery.

Women earning less than 15,000 may be offered ESI scheme by her employer and will not be eligible for maternity benefit and but will receive the maternity benefit under ESI scheme

Duties of Employee for Maternity Benefit:

- Ten weeks before the expected delivery date she may ask employer to give her light work.[Produce certificate of pregnancy]
- Should intimate the employer Seven Weeks before her delivery date about the leave period.
- Name the person to whom the payment will be made in case she cannot take herself.

Non Cash Benefits

Light work for 10 weeks (6 weeks plus 1 month) before delivery.

2 Nursing breaks of 15 Minutes until the child is 15 months old.

No discharge or dismissal while on maternity leave.

No charge to her disadvantage in any conditions of her employment while on maternity leave.

Pregnant women discharged or dismissed may still claim maternity benefit from employer.

Cash Benefits

84 Days Leave with pay before/after delivery.

A medical bonus of Rs. 1,000/-

Take the pay for 6 weeks after/before child birth within 48 hrs of request

An additional leave with pay up to one month

[Proof of illness]

In case of miscarriage Six weeks leave with average pay.

The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 is a legislative act in India that seeks to protect women from sexual harassment at their place of work.

The Act defines sexual harassment at the work place and creates a mechanism for redressal of complaints. It also provides safeguards against false or malicious charges. The definition of "aggrieved woman", who will get protection under the Act is extremely wide to cover all women, irrespective of her age or employment status, whether in the organised or unorganised sectors, public or private and covers clients, customers and domestic workers as well.

Every employer is required to constitute an Internal Complaints Committee at each office or branch with 10 or more employees. The District Officer is required to constitute a Local Complaints Committee at each district, and if required at the block level.