#### **ENGINEER IN SOCIETY - ENG 104.2**

#### PERSONNEL MANAGEMENT

Personnel management can be defined as obtaining, using and maintaining a satisfied workforce. ...

According to Flippo, "Personnel management is the planning, organizing, compensation, integration and maintenance of people for the purpose of contributing to organizational, individual and societal goals."

#### **SELECTION**

Definition: The Selection is the process of choosing the most suitable candidate for the vacant position in the organization. In other words, selection means weeding out unsuitable applicants and selecting those individuals with prerequisite qualifications and capabilities to fill the jobs in the organization

#### RECRUITMENT AND TRAINING

Recruitment takes place from the point when a business decides that it needs to employ somebody up to the point where a pile of completed application forms has arrived in the post. Selection then involves choosing an appropriate candidate through a range of ways of sorting out suitable candidates leading to interviews and other tests. Training involves providing a range of planned activities that enable an employee to develop the skills, attitudes and knowledge required by the organization.

# DIFFERENCE BETWEEN JOB EVALUATION AND MERIT RATING

- 1. Job evaluation evaluates the job, merit rating the job-holder.
- 2. Job evaluation determines the

relative worth of the job, whereas the merit rating determines the relative worth of the worker.

- 3. Job evaluation is made before selection procedure, whereas merit rating is done after placement.
- 4. Main objective of job evaluation is to establish equitable wage rate, whereas that of merit rating is the development of each work.

### **INCENTIVE SCHEMES**

Definition: The Incentive Schemes are the programs designed to encourage and motivate workmen for higher efficiency and greater output. The Incentives are the monetary rewards given to the workmen in recognition of their achievement of specific results during a specified time period.

According to International Labor Organization (ILO), the incentives are "payment by results" but however it is correct to call it as the "incentive system of payment" since it lays more emphasize on

motivation, i.e., incentives are imparted to the workers for their outstanding performances. Therefore, the workers are encouraged and motivated to earn more by increasing their productivity.

There are several incentive schemes that can be most successfully employed in larger firms where both the administrative and engineering staff is required to ensure an efficient production, quality and the measurement of work.

### TRADE UNIONS AND COLLECTIVE BARGAINING

A trade union, or labor union, is a group of workers who have formed to protect their professional rights and interests, e.g. negotiating higher wages, heath care, and pensions, and better working conditions, including workplace safety.

While union density—the share of workers who belong to unions—appears to be in retreat and not very high in most developed countries, many more workers are covered by collective bargaining agreements, especially in continental EU countries.

Theory differs on the economic impact of collective bargaining, although it clearly suggests that it raises pay per worker. But does it increase labor costs? It might increase worker productivity through collaboration with management and providing incentives. Or it might impose inefficient work rules, such us restrictions on laying off workers when technology changes, which reduce productivity and even affect workers who are not represented by trade unions.

Collective bargaining is a process of negotiation between employers and a group of employees aimed at agreements to regulate working salaries, working conditions, benefits, and other aspects of workers' compensation and rights for workers.

### INDIVIDUAL AND GROUP BEHAVIOUR

A simple definition of organisational behaviour is the study of people, individuals and groups in which it tells about their behaviour within the organization and it includes their understanding, communications, actions and attitude.

Authors like Laurie J.Mullins describe Organisational behaviour as "The study and understanding of individual and group behaviour and patterns of structure in order to help improve organisational performance and effectiveness."

Other authors like Leigh Thompson define Organisational behaviour "The study of how thoughts, feelings and behaviours of individuals and groups in organizations are influenced by the actual implied or imagined presence of others."

In order to understand people behaviour in depth, one has to realize the interrelationships among all the factors that comprise the entire organization which includes the understanding of management process, the organisational context, execution of work and interactions of external environment. The

dimensions of organisational behaviour can be known as the individual, group, organisation and the environment which influences the behaviour of a working organisation.

#### TRAINING PROCESS

Definition: The Training Process comprises of a series of steps that needs to be followed systematically to have an efficient training programme. The Training is a systematic activity performed to modify the skills, attitudes and the behavior of an employee to perform a particular job.

# Training Process steps:

1. Needs assessment: The first step in the training process is to assess the need for training the employees. The need for training could be identified through a diagnosis of present and future challenges and through a gap between the employee's actual performance and the standard performance.

The needs assessment can be studied from two perspectives: Individual and group. The individual training is designed to enhance the individual's efficiency when not performing adequately. And whereas the group training is intended to inculcate the new changes in the employees due to a change in the organization's strategy.

- 2. Deriving Instructional Objectives: Once the needs are identified, the objectives for which the training is to be conducted are established. The objectives could be based on the gaps seen in the training programmes conducted earlier and the skill sets developed by the employees.
- 3. Designing Training Programme: The next step is to design the training programme in line with the set objectives. Every training programme encompasses certain issues such as: Who are the trainees? Who are the trainers? What methods are to be used for the training? What will be the level of training? etc.Also, the comprehensive action plan is designed that includes the training content, material, learning theories, instructional design, and the other training requisites.
- 4. Implementation of the Training Programme: Once the designing of the training programme is completed, the next step is to put it into the action. The foremost decision that needs to be made is where the training will be conducted either in-house or outside the organization.

Once it is decided, the time for the training is set along with the trainer who will be conducting the training session. Also, the trainees are monitored continuously throughout the training programme to see if it's effective and is able to retain the employee's interest.

5. Evaluation of the Training Programme: After the training is done, the employees are asked to give their feedback on the training session and whether they felt useful or not. Through feedback, an organization can determine the weak spots if any, and can rectify it in the next session. The evaluation

of the training programme is a must because companies invest huge amounts in these sessions and must know it's effectiveness in terms of money.

Thus, every firm follows the series of steps to design an effective training programme that serves the purpose for which it was carried out.

### MOTIVATION AND MORALE

Motivation is an individual concept, morale is a group concept. Thus, motivation takes into consideration the individual differences among the employees, and morale of the employees can be increased by taking those factors into consideration which influence group scenario or total work settings

Motivation and Morale - Relationship and Differences

Morale can be defined as the total satisfaction derived by an individual from his job, his work-group, his superior, the organization he works for and the environment. It generally relates to the feeling of individual's comfort, happiness and satisfaction.

According to Davis, "Morale is a mental condition of groups and individuals which determines their attitude."

In short, morale is a fusion of employees' attitudes, behaviours, manifestation of views and opinions - all taken together in their work scenarios, exhibiting the employees' feelings towards work, working terms and relation with their employers. Morale includes employees' attitudes on and specific reaction to their job.

There are two states of morale:

High morale - High morale implies determination at work- an essential in achievement of management objectives. High morale results in:

A keen teamwork on part of the employees.

Organizational Commitment and a sense of belongingness in the employees mind.

Immediate conflict identification and resolution, Healthy and safe work environment, Effective communication in the organization, Increase in productivity and Greater motivation.

Low morale - Low morale has following features:

Greater grievances and conflicts in organization.

High rate of employee absenteeism and turnover, Dissatisfaction with the superiors and employers, Poor working conditions, employees frustration, Decrease in productivity and Lack of motivation.

### **RESOURCE MANAGEMENT**

Resource management is the process of pre-planning, scheduling, and allocating your resources to maximize efficiency.

A resource is anything that is needed to execute a task or project — this can be the skill sets of employees or the adoption of software. For example, if you're planning an event, a few resources include scheduling out staff for the event, planning what vendors to use for promotional materials, investing software that allows attendees to register, and budgeting for everything from giveaways to catering.

Why is effective resource management important?

Resource management as part of project management is all about doing more with less. Nobody likes waste, especially in business. Resource management is centered around optimization and efficiency. When you know what you need to make a project successful, you can effectively understand how to plan resources in an efficient way.

To some companies, optimum efficiency is so important that they hire someone solely devoted to resource management; also known as a resource manager. What does a resource manager do? While project managers are responsible for creating and assigning tasks to get the project done, resource managers are accountable for allocating the resources needed to make the project a success.

What are the advantages to resource management?

i. Avoids unforeseen hiccups: By understanding your resources upfront and planning how to use them, you can troubleshoot gaps or problems before they happen.

Prevents burnout: Effective resource management allows you to avoid "over allocation" or "dependency" of resources by gaining insight into your team's workload.

- ii. Provides a safety net: Let's say the project was not successful due to lack of resources (it happens). Resource planning and management establishes that you did everything you could with what you had.
- iii. Builds transparency: Other teams can gain visibility into your team's bandwidth, and plan accordingly if your team is at maximum capacity or available to take on new projects.
- iv. Measures efficiency: With a high-level understanding of what's needed to manage and execute an upcoming project, you can effectively plan and measure ROI.

#### MATERIALS MANAGEMNT

Materials Management is a method for planning, organizing and controlling the activities that are related to the flow of materials in a company. This can lead to the control of the location, movement and time of those materials from their introduction, production, manufacturing process and final delivery.

Materials management makes sure the materials available are aligned with the customer demands, thus giving a schedule of costs and resources that the company has or needs. Materials management controls the flow of materials with demand, prices, quality and delivery schedules.

The supply chain is linked to materials management as this method is used to plan and supply the organization. Inventory goes hand in hand with this in order to keep track of raw materials and specific products. This helps minimize costs to the organization and ensures maximum return on working capital.

It should be noted that materials are classified by direct materials or indirect materials. Direct materials are those that process and give a finished product, indirect materials are those that do not generate a final product.

#### Direct materials

Direct materials are those materials or raw materials in which value and importance are identified in order to make the product that is needed and they also represent the cost and benefit of the process. These direct materials are essential for the quality of the product because without them the product could lose value in the market. They are vital in the inventory and it is not possible to get out of them.

#### Indirect materials

These are those materials that are part of the production of the product but do not make a difference to the final product. These cannot be calculated or measured, so their presence is not of high relevance in the delivery of the final result.

### PURCHASING METHODS AND CONTRACTS:

There are five essential methods of purchasing:

**Bulk Purchasing** 

Hand to Mouth Purchasing

Speculative Purchasing

### **Blanket Purchasing**

# **Reciprocate Purchasing**

Bulk Purchasing – Bulk Purchasing is the most economical form of purchasing. But at the same time, it involves more capital investment of overstocking and high storage costs owing to likely damages. Bulk purchasing is an ideal option for making large quantity of purchase for the future.

Hand to Mouth Purchasing – This purchasing is also widely known as Zero Stock Buying, which means that there are no purchase transactions done until a demand arises, and accordingly the purchase of quantities is decided. This method is mostly used in case of emergencies, or to the goods used occasionally and not taken into stock. Further, using the method avoids any blockage of capital investment in materials, carrying costs, obsolescence and wastage of materials. However, the only drawback in this method is that there is fear of production halts due to paucity of materials, or the materials then need to be procured at higher costs.

Speculative Purchasing – In cases when the manufacturers prefer to purchase materials in large quantities than required in manufacturing process, it is planned such that the surplus can then be sold off at higher prices for earning profits. Speculative purchasing is popular in cases of extremely low prices when it is expected that these materials will fetch better prices in the upcoming period. While one can benefit from speculative purchasing method that it can give you huge speculative profits, it also blocks large amount of capital and you need large storage space and as such, there are risks of obsolescence, etc.

Blanket Purchasing – The method involves ordering items of same group under one category; the blanket purchase orders can be utilized for purchasing frequently purchasing items or services, and have been designed such to effectuate the procurement processes.

Reciprocate Purchasing – In this form of purchasing, an arrangement is entered into between two or more organizations that purchase each other's goods and services.

# CONTRACT.

Contracts are legally enforceable written or oral agreements that define a job or service to be performed. . Contracts are used when the issues involved are more complex and/or when the time frame of the agreement exceeds one year.