# TEST FOR PREVIOUS LEARNING MATERIALS UNDERSTANDING Answer the questions about working capital:

- 1. The main difference between working capital and other types of capital is that working capital, by definition, circulates through the business, unavailable for other uses (TRUE/FALSE)
- 2. Working capital includes property, plant and equipment (PPE) (TRUE/FALSE)
- 3. Current liabilities include all the debts and expenses the firm expects to pay within a year or one business cycle, whichever is less (TRUE/FALSE)
- In 5 minutes in one message write your name and answer to the test in Zoom chat personally to the teacher (NOT IN COMMON CHAT!!!), and your attendance would be assessed at 0,5 point

# ORGANIZATIONAL (CORPORATE) STRUCTURE OF THE ENTERPRISE



# Organizational structure definition

The typically hierarchical arrangement of lines of authority, communications, rights and duties of an organization. Organizational structure determines how the roles, power and responsibilities are assigned, controlled, and coordinated, and how information flows between the different levels of management.

A structure depends on the organization's objectives and strategy. In a centralized structure, the top layer of management has most of the decision-making power and has tight control over departments and divisions. In a decentralized structure, the decision-making power is distributed and the departments and divisions may have different degrees of independence.

Having a good organizational structure will lead to much better decisions by your business for its long term investment goals

The board and senior leadership should be the group who determines the type of organizational structure that would best support the internal operations, how work is carried out and the chain-of-command.

Determining the best structure is done by answering the questions:

- What are the functional groupings of work processes?
- Are there natural groupings of teams, work groups or units?

Senior leadership looks at all functions and determines how they would like work activities to be organized and carried out. This process also identifies natural reporting relationships and chain-of-command. Reporting relationships can be both vertical as well as horizontal.



Corporate structure refers to the organization of different departments or business units within a company.

Depending on a company's goals and the industry in which it operates, corporate structure can differ significantly between companies. Each of the departments usually performs a specialized function while constantly collaborating with each other to achieve corporate goals and values.

Departments in a company include Human Resource, IT, Accounting and Finance, Marketing, Research and Development (R&D), and Production. Some productbased or project-based companies may divide up business units by addressing a single product or project as a department.

There are many different ways in which a company or organization may be structured, depending on why it exists and what its objectives are.

In a small company, face-to-face communication is common, and a formal structure is probably not required. However, in larger corporations, decisions need to be made regarding the delegations of several tasks. So, procedures are set up that assign tasks and responsibilities for a number of functions. These decisions determine the company's organizational structure.

In any medium- or large-sized businesses, employees' job descriptions are typically defined by what they do, their immediate supervisors (who they report to), and who reports to them if they are managers or directors. Eventually, these descriptions are assigned to the post within the company rather than specific people.

# The features of any organizational structure depend on many factors including:

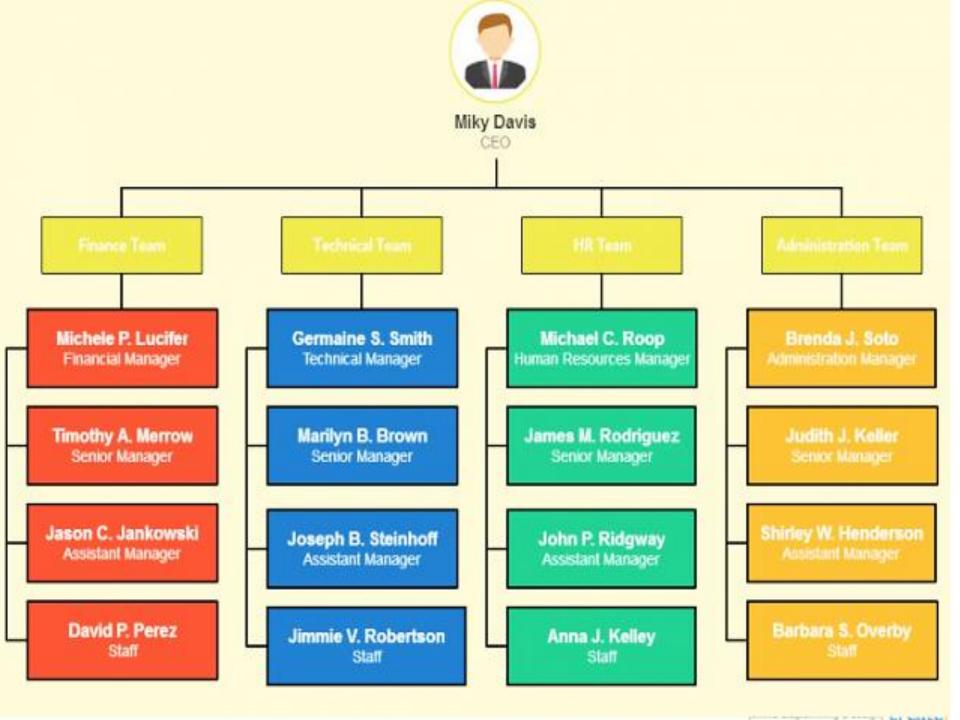
- how big it is
- how many people work in it
- its revenue
- where it is located (could be in several locations)
- what it sells and how many different markets it is active in.

1) <u>Hierarchical Structure</u> is the most popular organizational chart type. There are a few models that are derived from this model.

In a hierarchical organization structure, **employees are grouped with every employee having one clear supervisor**. The grouping is done based on a few factors, hence many models derived from this. Below are few of those factors

- Function employees are grouped according to the function they provide. The below image shows a functional org chart with finance, technical, HR and admin groups.
- Geography employees are grouped based on their region. For example, in USA employees might be grouped according to the state. If it's a global company the grouping could be done according to countries.
- Product If a company is producing multiple products or offering different services it can be grouped according to the product or service.

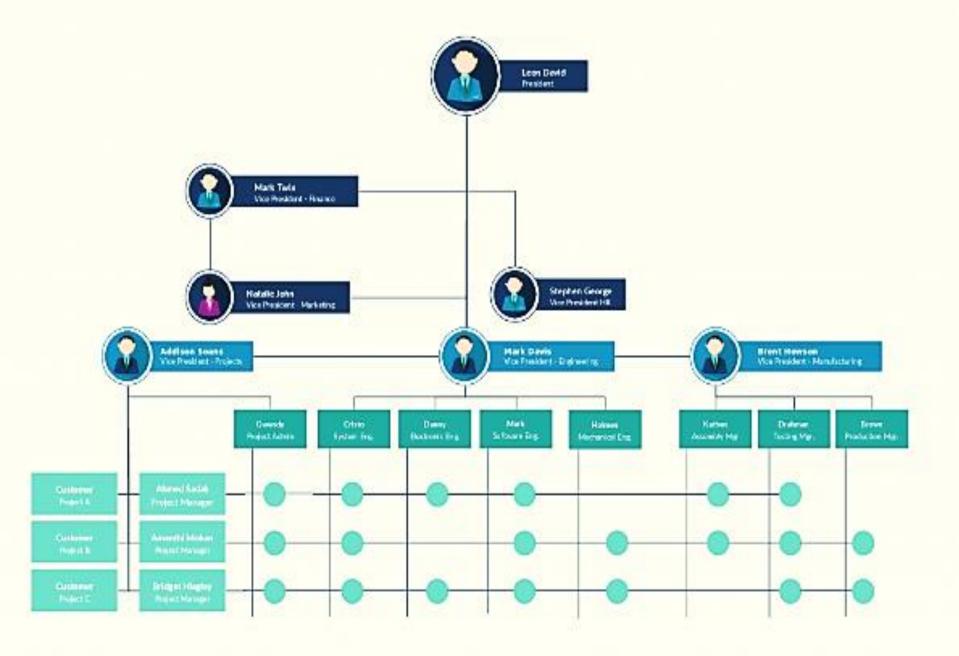
These are some of the most common factors, but there are many more factors.



# 2) Matrix Structure

In a Matrix organizational structure, the reporting relationships are set up as a grid, or matrix, rather than in the traditional hierarchy. It is a type of organizational management in which people with similar skills are pooled for work assignments, resulting in more than one manager to report to (sometimes referred to as solid line and dotted line reports, in reference to traditional business organization charts).

For example, all engineers may be in one engineering department and report to an engineering manager. But these same engineers may be assigned to different projects and might be reporting to those project managers as well. Therefore, some engineers might have to work with multiple managers in their job role.

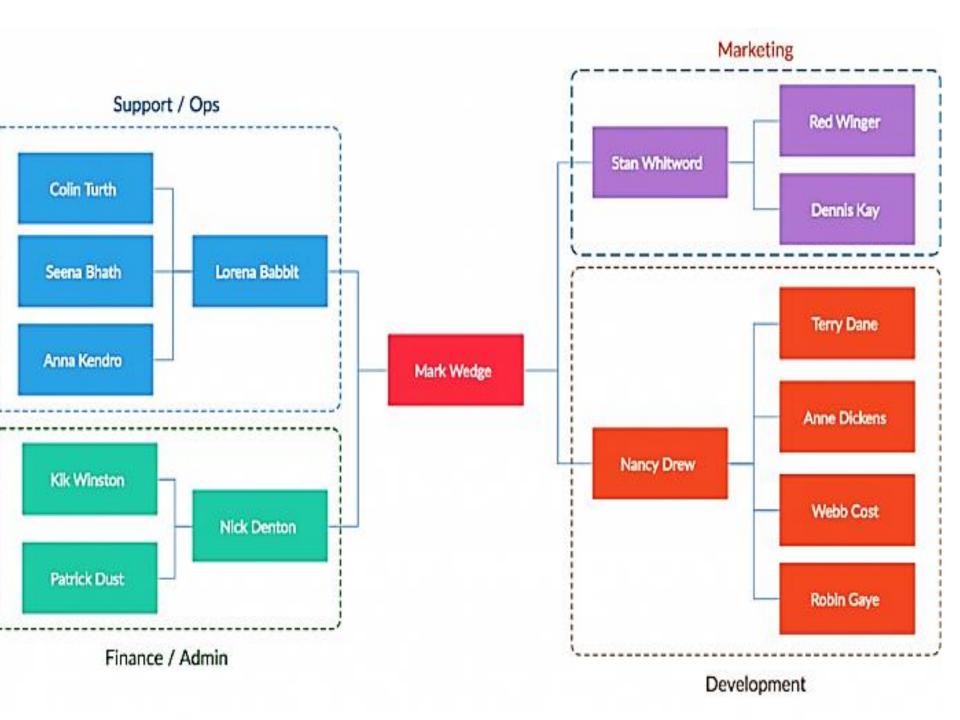


# 3) Horizontal/Flat Structure

This is an organizational chart type mostly adopted by small companies and start-ups in their early stage. It's almost impossible to use this model for larger companies with many projects and employees.

The most important thing about this structure is that many levels of middle management are eliminated. This enables employees to make decisions quickly and independently. Thus a well-trained workforce can be more productive by directly getting involved in the decision-making process.

This works well for small companies because work and effort in a small company are relatively transparent. This does not mean that employees don't have superiors and people to report. Just that decision making power is shared and employees are held accountable for their decisions.

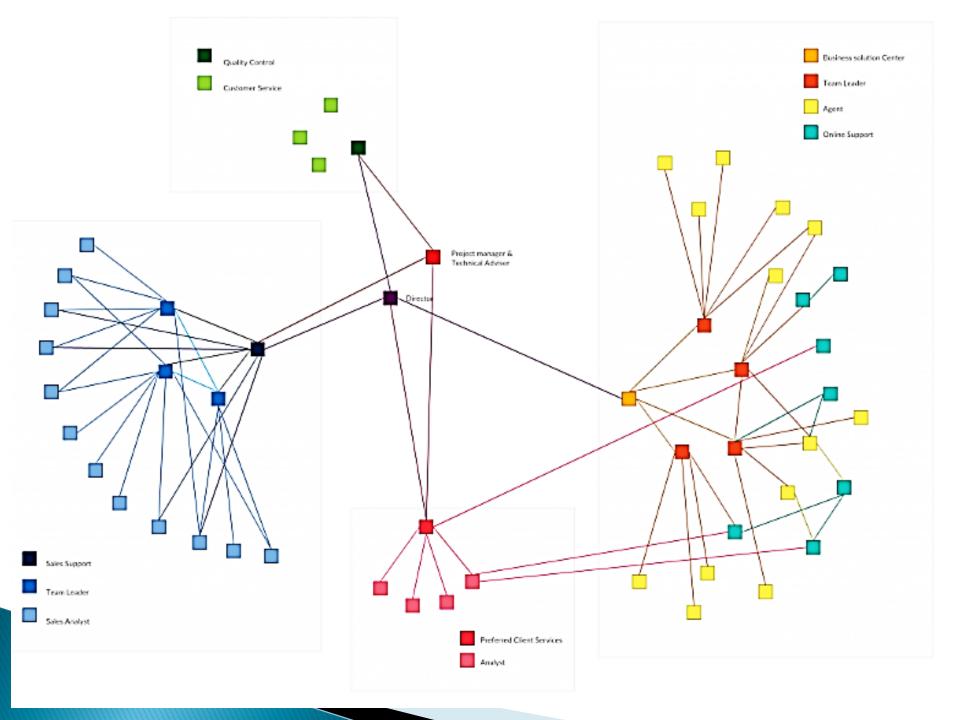


# 4) Network Structure

Network organizational structure helps visualize both internal and external relationships between managers and top-level management. They are not only less hierarchical but are also more decentralized and more flexible than other structures.

The idea behind the network structure is based on social networks. Its structure relies on open communication and reliable partners; both internal and external. The network structure is viewed as agiler than other structures because it has few tires, more control and bottom flow of decision making.

Using a Network organizational structure is sometimes a disadvantage because of its complexity. The below example of network org chart shows the rapid communication between entities.



# 5) <u>Divisional Structure</u>

Within a divisional structure, each organizational function has its own division which corresponds to either products or geographies. Each division contains the necessary resources and functions needed to support the product line and geography.

Another form of divisional org chart structure is **the multi-divisional structure** (known as M-form). It's a legit structure in which one parent company owns several subsidiary companies, each of which uses the parent company's brand and name.

The main advantage of the divisional structure is the independent operational flow, that failure of one company does not threaten the existence of the others.

It's not perfect either. There can be operational inefficiencies from separating specialized functions. Increase in accounting taxes can be seen as another disadvantage.





James Kirsch Vice President Administrative Services



Anna Davis Vice President Operation Support

**Division A** General Manager

Nathan Lewis HR Manager

**Jessie Captain** Finance Manager

**Lesley James** Research & Development Manager

> David Fernandez Sales & Marketing Manager

Rodger Nick Productions & Operations Manager **Division B** General Manager

Personnel

Accounting

Division Planning

Marketing

Production & Operation **Division C** General Manager

Personnel

Accounting

**Division Planning** 

Marketing

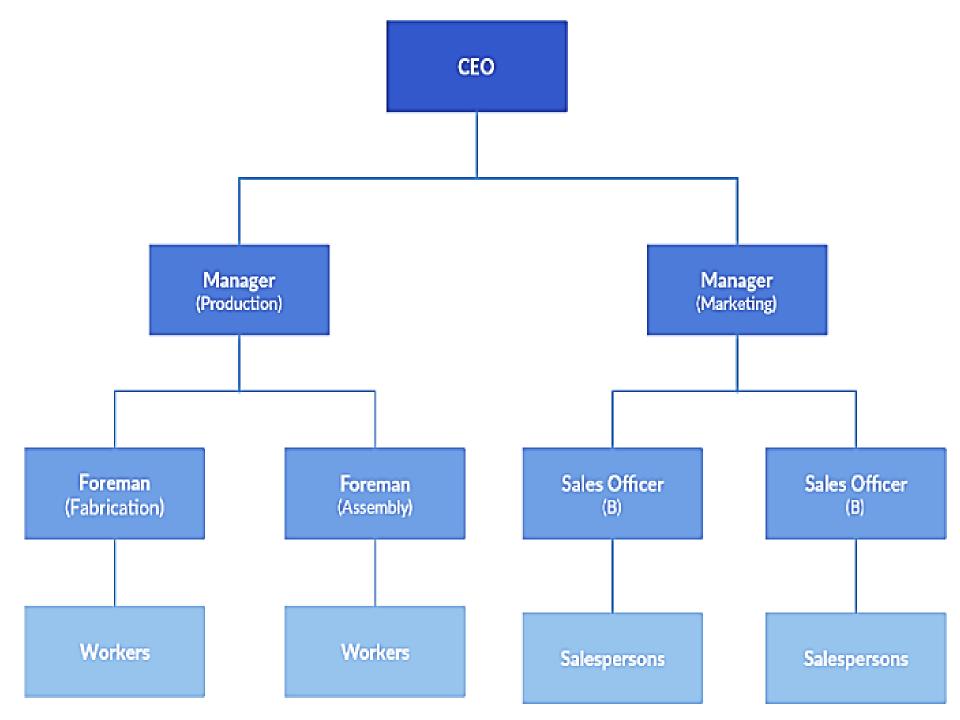
Production & Operation

# 6) Line Organizational Structure

Line organizational structure is one of the simplest types of organizational structures. Its authority flows from top to bottom. Unlike other structures, specialized and supportive services do not take place in these organizations.

The chain of command and each department head has control over their departments. The self-contained department structure can be seen as its main characteristic. Independent decisions can be taken by line officers because of its unified structure.

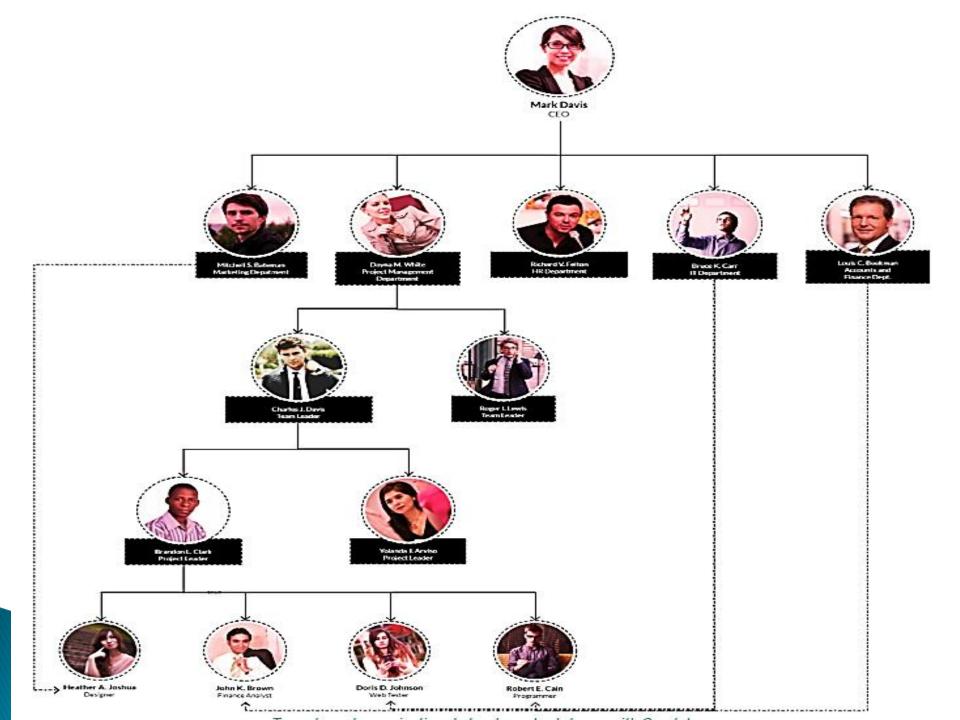
The main advantage of a line organizational structure can be identified as the effective communication that brings stability to the organization.



# 7) Team-based Organizational Structure

Team-based organizational structures are made of teams working towards a common goal while working on their individual tasks. They are less hierarchical, and they have flexible structures that reinforce problem-solving, decision-making and teamwork.

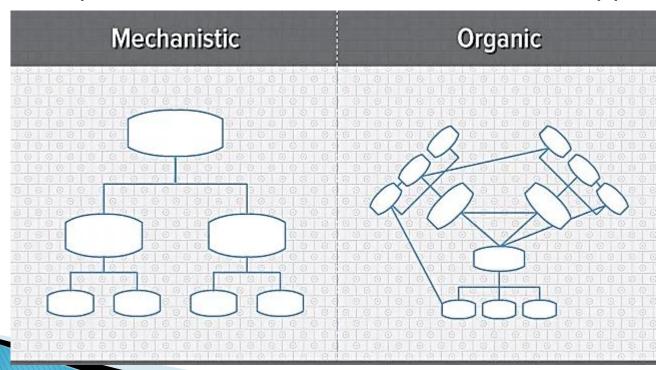
Team organization structures have changed the way many industries work. Globalization has allowed people in all industries around the world to produce goods and services cooperatively. Especially, manufacturing companies must work together with the suppliers around the globe while keeping the cost to a minimum while producing high-quality products.



# ORGANIZATIONAL STRUCTURE TYPES (ADDITIONAL CLASSIFICATION)

Organizational structures fall on a spectrum, with "mechanistic" at one end and "organic" at the other.

The mechanistic structure represents the traditional, top-down approach to organizational structure, whereas the organic structure represents a more collaborative, flexible approach.



Mechanistic Structures, also called bureaucratic structures, are known for having narrow spans of control, as well as high centralization, specialization, and formalization. They're also quite rigid in what specific departments are designed and permitted to do for the company.

It is much more formal than organic structure, using specific standards and practices to govern every decision the business makes. And while this model does hold staff more accountable for their work, it can become a hindrance to the creativity and agility the organization needs to keep up with random changes in its market. As daunting and inflexible as mechanistic structure sounds, the chain of command, whether long or short, is always clear under this model. As a company grows, it needs to make sure everyone (and every team) knows what's expected of them. Teams collaborating with other teams as needed might help get a business off the ground in its early stages but sustaining that growth - with more people and projects to keep track of - will eventually require some policymaking. In other words, keep mechanistic structure in your back pocket ... you never know when you'll need it.

Organic Structures (also known as "flat" structures) are known for their wide spans of control, decentralization, low specialization, and loose departmentalization. What's that all mean? This model might have multiple teams answering to one person and taking on projects based on their importance and what the team is capable of — rather than what the team is designed to do.

It is much less formal than mechanistic and takes a bit of an ad-hoc approach to business needs. This can sometimes make the chain of command, whether long or short, difficult to decipher. And as a result, leaders might give certain projects the green light more quickly but cause confusion in a project's division of labor.

Nonetheless, the flexibility that an organic structure allows for can be extremely helpful to a business that's navigating a fast-moving industry, or simply trying to stabilize itself after a rough quarter. It also empowers employees to try new things and develop as professionals, making the organization's workforce more powerful in the long run. Bottom line? Startups are often perfect for organic structure, since they're simply trying to gain brand recognition and get their wheels off the ground.

Now, let's uncover more specific types of organizational structures, most of which fall on the more traditional, **mechanistic** side of the spectrum.



# Types of Organizational Structure

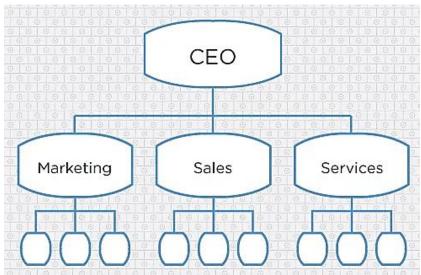
- 1. Functional Organizational Structure
- 2. Product-Based Divisional Structure
- Market-Based Divisional Structure
- 4. Geographical Divisional Structure
- 5. Process-Based Structure
- Matrix Structure
- 7. Circular Structure
- 8. Flat Structure
- 9. Network Structure

<u>Functional Organizational Structure</u> departmentalizes an organization based on common job functions.

An organization with a functional org structure, for instance, would group all of the marketers together in one department, group all of the salespeople together in a separate department, and group all of the customer service people together in a third department.

### Disadvantages:

Functional structure also has the potential to create barriers between different functions and it can be inefficient if the organization has a variety of different products or target markets. The barriers created between departments can also limit peoples' knowledge of and communication with other departments, especially those that depend on other departments to succeed.

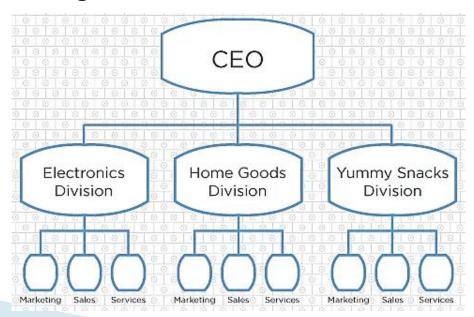


<u>Product-Based Divisional Structure</u> is comprised of multiple, smaller functional structures (i.e. each division within a divisional structure can have its own marketing team, its own sales team, and so on). In this case each division within the organization is dedicated to a particular product line.

Is ideal for organizations with multiple products and can help shorten product development cycles. This allows small businesses to go to market with new offerings fast.

### Disadvantages:

It can be difficult to scale under a product-based divisional structure, and the organization could end up with duplicate resources as different divisions strive to develop new offerings.



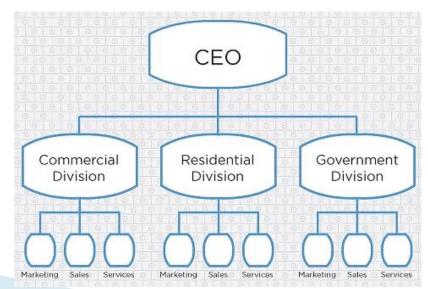
<u>Market-Based Divisional Structure</u> is the market-based structure, wherein the divisions of an organization are based around markets, industries, or customer types.

Is ideal for an organization that has products or services that are unique to specific market segments and is particularly effective if that organization has advanced knowledge of those segments. This organizational structure also keeps the business constantly aware of demand changes among its different audience segments.

### Disadvantages:

Too much autonomy within each market-based team can lead to divisions developing systems that are incompatible with one another. Divisions might also end up inadvertently duplicating activities that other divisions

are already handling.

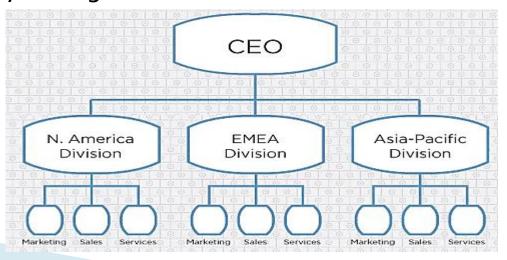


<u>Geographical Divisional Structure</u> establishes its divisions based on geography. More specifically, the divisions of a geographical structure can include territories, regions, or districts.

Is best-suited to organizations that need to be near sources of supply and/or customers (e.g. for deliveries or for on-site support). It also brings together many forms of business expertise, allowing each geographical division to make decisions from more diverse points of view.

### Disadvantages:

It can be easy for decision-making to become decentralized, as geographic divisions (which can be hundreds, if not thousands of miles away from corporate headquarters) often have a great deal of autonomy. And when you have more than one marketing department (one for each region) you run the risk of creating campaigns that compete with (and weaken) other divisions across your digital channels.



<u>Process-Based Structure</u> is designed around the end-to-end flow of different processes. Unlike a strictly functional structure, a process-based structure considers not only the activities employees perform, but also how those different activities interact with one another.

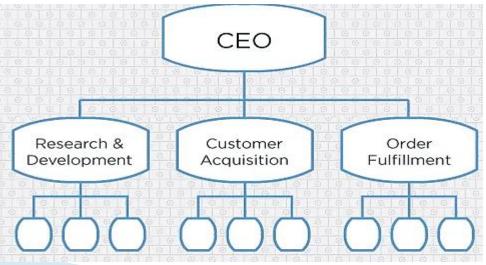
Example: The customer acquisition process can't start until you have a fully developed product to sell. By the same token, the order fulfillment process can't start until customers have been acquired and there are product orders to fill.

Is ideal for improving the speed and efficiency of a business, and is best-suited for those in rapidly changing industries, as it is easily adaptable.

## Disadvantages:

Can erect barriers between the different process groups. This leads to problems communicating and handing off work to other teams and

employees.



Matrix Structure doesn't follow the traditional, hierarchical model. Instead, all employees have dual reporting relationships. Typically, there is a functional reporting line as well as a product – based reporting line.

When looking at a matrix structure org chart, solid lines represent strong, direct-reporting relationships, whereas dotted lines indicate that the relationship is secondary, or not as strong. In our example below, it's clear that functional reporting takes precedence over product-based reporting.

It can provide both flexibility and more balanced decision-making (as there are two chains of command instead of just one). Having a single project overseen by more than one business line also creates opportunities for these business lines to share resources and communicate more openly with each other things they might not otherwise be able to do regularly.

#### Disadvantages:

Complexity. The more layers of approval employees have to go through, the more confused they can be about who they're supposed to answer to. This confusion can ultimately cause frustration over who has authority over which decisions and products — and who's responsible for those decisions when things go wrong.

# Matrix CEO Marketing Sales Services Electronics Division Home Goods Division Yummy Snacks Division

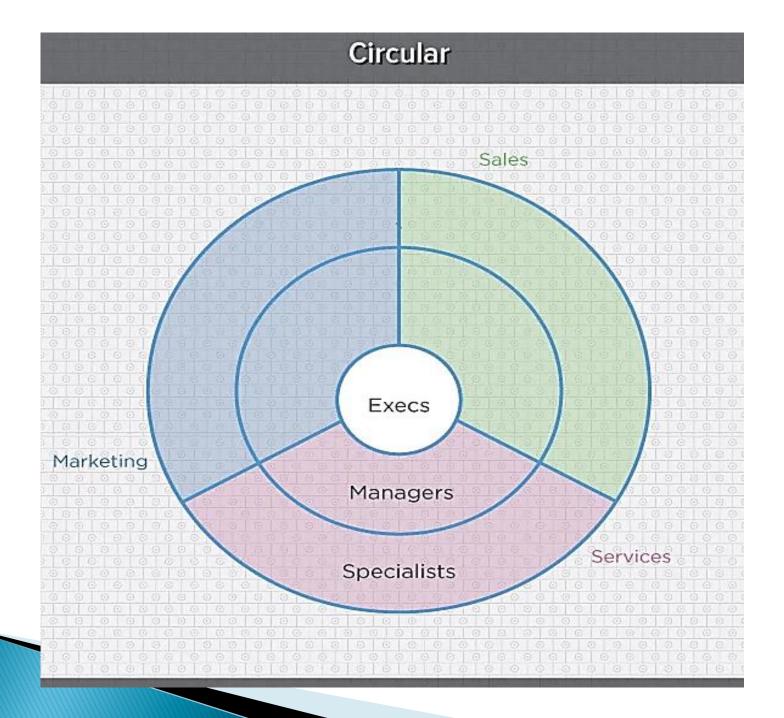
<u>Circular Structure</u> still relies on hierarchy, with higher-level employees occupying the inner rings of the circle and lower-level employees occupying the outer rings.

The leaders or executives in a circular organization aren't seen as sitting atop the organization, sending directives down the chain of command. Instead, they're at the center of the organization, spreading their vision outward.

Is meant to promote communication and the free flow of information between different parts of the organization. Whereas a traditional structure shows different departments or divisions as occupying individual, semi-autonomous branches, the circular structure depicts all divisions as being part of the same whole.

## Disadvantages:

From a practical perspective, the circular structure can be confusing, especially for new employees. Unlike with a more traditional, top-down structure, a circular structure can make it difficult for employees to figure out who they report to and how they're meant to fit into the organization.



# WAGES CALCULATION FOR EFFICIENT DEVELOPMENT



# WHAT IS WAGE

Monetary remuneration computed on hourly, daily, weekly, or piece work basis. A fixed weekly or monthly wage is usually called a **salary**.

For economists, wage is a price for useful labor as a source of production. It is monetary compensation (or personnel expenses, labor) paid by an employer to an employee in exchange for work done.

## Wages functions in economic systems:

- The stimulating (motivational) function tries to increase the employees' interest in higher productivity.
- Social function contributes to the implementation of the principle of social justice.
- The accounting function describes the labor ratio in the price of finished good, its share in total production costs.

## Wages take the major part in household's income. Employee benefits may include

- material incentives (salaries, bonuses, additional salaries, allowances, discounts for services, the provision of additional rights, benefits, etc.);
- material restriction (reduction and / or deprivation of bonuses, reduction of wages, fines, partial, full or increased compensation for damage caused to the enterprise, etc.);
- moral encouragement of employees (by expressing gratitude, rewarding with insignia, promotion to new, prestigious positions at work, including in informal groups outside work (circles, creative, public associations), the provision of additional rights (free working hours), involvement in management enterprise, etc.);
- moral restriction for omissions and deficiencies in the work (by negative comments, reprimands, deprivation of benefits and advantages, removal from prestigious posts, deprivation of honorary titles and at last resort – dismissal from work).

Depending on the structure and traditions of different economies around the world, wage rates will be influenced by market forces (supply and demand), legislation, and tradition.

Market forces are perhaps more dominant in the United States, while tradition, social structure and seniority, perhaps play a greater role in Japan.

# Method or system of wages payment must possess the following characteristics:

- Should be simple to operate and easy to understand.
- Should guarantee a minimum wage to every worker.
- Should be acceptable to the employer and the employee.
- Should be flexible enough so the changes may be made according to the requirements.
- · Should ensure the establishment of industrial peace.

### WAGE PAYMENTS SYSTEMS

There are different methods of wage payments. Wages are paid for work done and this is sometimes measured by the time worked i.e. according to the period of time the worker is employed, and sometimes by output. The former is called "piece wages" and the latter

"time wages".



#### 1. Time Rate System:

Time rate system is the simplest and oldest method of wage payment. According to this system, the workers are paid in accordance with the time spent on the job. The time may be on hourly, daily, weekly, fortnightly or monthly basis. The work or production done by an employee is not taken into consideration.

For example, If the worker is paid at the rate of Rs.20 per hour and he spends 50 hours during a week, the weekly payment is:

Weekly wages = (Number of hours worked during the week) x (Rate per hours) =  $50 \times 20 = Rs.1000$  per week.

### This method is suitable to be applied in the following circumstances:

- Where the quality of work is more important than production.
- Where the volume of production is not within the control of labor.
- Where it is difficult to fix the unit of output.
- When it is volume of production is not within the control of labor.
- The nature of work is such that there is no basis for incentive plan.
- Where the amount of output cannot be accurately measured, counted and standardized.

#### Advantages:

- a. This method of wage payment is very simple. The workers will not find any difficulty in calculating the wages.
- b. This method is acceptable to trade unions because it does not distinguish between workers on the basis of their performance.
- c. The quality of goods will be better as workers are assured of wages on time basis.
- d. This system is good for the beginners because they may not be able to reach a particular level of production in the beginning.
- e. There will be less wastage, as workers will not be in a hurry to push through production.

#### Disadvantages:

- a. This method does not distinguish between efficient and inefficient workers. The payment of wages is related to time and not output. Thus, the method gives no incentive for producing more.
- b. There will be wastage of time, as the workers are not following a target of production.
- c. Because wages are not related to output, employees find it difficult in determining labor cost per unit.
- Work needs supervision. Thus, cost of supervision increases.

### 2. Piece Rate System:

Piece rate system is a system in which wages are paid in accordance with the number of units of work produced. This is independent of time spent on the job. A fixed rate of wage is paid for each piece of unit produced.

For example, If a worker produces 100 pieces per day and he is paid at the rate of Rs.1.2 per piece, the daily wage is  $100 \times 1.2 = Rs.120$ .

### This system is suitable in the following cases:

- Where a work is of a repetitive natures.
- Where the measurement of work is simple.
- Where the quality and accuracy of output is not very important.
- Where strict supervision is not possible.

### Advantages:

- a. This system is simple in working and the workers can easily calculate their wages.
- b. This system helps in distinguishing efficient and inefficient workers.
- Strict supervision is not required in this system.
- d. This system is fair to employee and employer both.
- e. There will be no dispute for wages, as workers will be rewarded satisfactory for their work.

#### Disadvantages:

- a. This system does not guarantee a fixed minimum wage to a worker.
- b. The quality of goods will be poor as workers try to speed up their work in order to produce more.
- c. There will be increase in wastage of materials.
- d. Workers intentionally ignore safety rules, inviting accidents.
- Workers neglect their health in order to put their maximum efforts.
- f. The wages of beginners will be less, as their output cannot be equal to the experienced workers.

Based of differences	Time rate	Piece rate	
1. Basis of wages	Wages is calculated on the basis of time spent by the worker on the jobs.	Wages is calculated on the basis of output or production.	
2. Idle time	There is a possible of excessive idle time in this system.	There is a less chance of idle time in this system.	
3. Quality of work	The quality of work is good as there is no pressure to produce more goods.	The quality of work may not be good because of pressure to produce more goods.	
4. incentive	There is a lack of incentive for the efficient and honest workers.	It encourages motivated workers to produce more and earn more.	
5. Control and supervision	Control and supervision are needed as the workers may not work properly.	It encourages motivate workers to produce more and earn more.	
6. suitability	If the quality is more concerned than quantity, this method is suitable.	If the quantity is more concerned than quality, this method is appropriate.	
7. equality	All the workers get equal wages under this method irrespective of the output.	The works with high output get higher wages and vice versa.	

#### INCENTIVE WAGES PAYMENT PLAN

To remove the defects of both time rate and piece rate systems of wages payment, incentive plans have been developed. Under these plans, the advantages of time and piece-wages system are combined, and incentives provide to workers to work hard.

The characteristics of these plans are as follows:

- i. Incentives by way of bonus and other are given to efficient works for time saved.
- ii. A standard time is fixed, and the worker is to perform the given work within the standard time. The standard time is set after making time studies for the performance of specific job.

The incentive is compromise between the two extremities, on the one, if the workers are paid according to time, hey a nothing if time is saved and on the other hand, if they are paid on the basis of piece rate, employers get nothing, if time is saved. Under incentive plans, the employer as well as the workers shares the benefit of time saved, and both labor and overtime costs are reduced.

The incentive plans should be selected according to the nature of work and other circumstances. It should be accepted by the management as well as labor otherwise it does not function successfully. The payment of wages may be made according to any of the following plans:

A. Individual bonus plan	B. Group bonus plan
Harleys premium plan	2. Priestmans's plan
3. Rowan premium plan	4. Scranton plan
5. Taylor's differential piece rate system	
6. Gantt's task and bonus plan	

#### **Individual bonus plan**

According to individual bonus plan, the bonus of each worker is calculated separately. Some methods of calculating wages under individual bonus plan are discussed below:

#### a. Halsey premium plan

This plan was originated by F.A. Halsey. Under this scheme, an hourly rate is guaranteed to all workers. A standard time is fixed unit, job or operation on the basis of time and mention studies and the worker is paid the agreed hourly rate of wages for the actual time taken plus a fixed percentages of bonus on the time saved. The amount of bonus or premium payable to the workers in one-half of the wages of the time saved.

Requirements for calculating total wages or total earning of the worker under. Halsey premium plan are:

ST = standard time or normal time allowed

TT = time taken

SR = standard time rate of wages

Time saved TS = ST -TT

### **Advantages of Halsey premium plan**

- i. It is simple to understand and operate.
- ii. Every worker is guaranteed minimum wages and even the inefficient worker feel secured.
- iii. It encourages efficiency among worker by inducing them to finish their job before the standard time.
- iv. The benefit from the time saved is shared equally by have employer and the workman.
- v. Generally workers do not oppose this method of wages, payment as it rewarded time saved rather than increase output.

### Disadvantages of Halsey premium plan

- i. Workers are paid only half of the wages on the time saved. So, the worker may oppose this method.
- ii. The worker may perform to work in hurry by neglecting the quality of output to save time and earn higher bonus.
- iii. The standard time fixed for finished a job may not be scientific.

### b. Rowan premium plan

This plan was originated by David Rowan. This plan guarantees an hourly rate to all workers. A worker is paid the fixed rate per hour for the actual time spent on the job plus a premium or bonus based on the time saved. The amount of premium or bonus is not a fixed percentage of the wages of time saved but it various according to the extent of the time saved. The amount of bonus or premium payable under this plan depends on the percentage of time saved by the workers. The bonus is calculated the such percentage out of the basis wages.

Formula for to calculated total wages or total earning of the worker under, Rowan premium plan:

Basis wages = time taken x standard time rate = TT x SR
Bonus = time saved/ standard time
Total wages under Rowan plan = basis wages = bonus = TT
x SR = TS/SR

Effective wages rate under Rowan plan = total wages/TT

#### Advantages of Rowan premium plan

- i. This plan guarantees minimum wages and provides incentive for efficiency.
- ii. It does not induce to rush through work for increase bonus earning because the bonus increase at a decreasing rate with higher levels of efficiency. Thus, an automate check for limiting production of inferior quaintly of goods is ensured.
- iii. The per unit fixed cost decrease with the increase in production
- iv. The per unit fixed cost decrease with increase in production
- v. Under this method, the per unit cost decrease due to decrease in per unit labor cost.

#### Disadvantages of Rowan premium plan

- i. As the bonus is to be shared by employees and employees, it is not welcomed by employees. They expect full benefit for their extra efficiency.
- ii. The calculation earnings under this method is comparatively complicated and time consuming.
- iii. The preparation of budget and estimated product labor cost are made difficult by the varying labor costs under this plan.
- iv. Payment under this plan is much less than that under the Halsey plan by way of bonus below 50% of the time saved.

### Why Rowan plan is better than Halsey plan?

- In the Halsey plan, bonus is usually set at 50% of the time saved. It does not serve as a strong incentive. On the other hand, under the Rowan plan, bonus is that proportion of the wages of the time taken which the time save bears to the standard time; it serves as a strong incentive for increasing the efficiency.
- In the Rowan plan, the quality of work is not affected much. The worker is not induced to rush through the work because bonus increases at a decreasing rate at higher levels of efficiency. In the Halsey plan. A worker is induced to rush through the because he get extra wages for every 50% of the time saved.
- The effective labor rate per hour in the Rowan plan is higher up to 50% of the time saved and falls there after whereas in the Halsey plan, the effective labor rate per hour up to 50% of the time saved and can be double thereafter. Usually, worker are not able to save more than 50% of the time allowed, so worker prefer the Rowan plan for earning more wages

#### c. Taylor's differential piece rate system

This scheme was originated by F.W. Taylor, who knows a the "father of science management". Taylor suggests that the worker producing the below standard level be paid according to the low piece rate. Similarly, the worker producing at or above standard should be paid according to high piece rate.

For this, a standard time is fixed and the worker who finished the assigned work before the standard time or at standard are paid at a higher rate and the worker who cannot complete the task within the standard time are paid at a lower rate. This standard should be set up very accurately with the help of time and motion studies because it is the demarcating line for higher and lower and lower rates of wages. Thus, two piece-rates are fixed, one for those who perform the standard task in standard time (may be termed as efficient workers) and the other for those who perform less than the standard task in the standard rate time (may be termed as inefficient worker). Usually rates are 120% and 80% of the piecework rate for efficient and inefficient workers respectively.

Requirements for calculating total wages or earnings of the worker under Taylor's differential piece rate system:

Standard output/ standard yield:

Standard rate per unit/ normal piece rate = standard wage rate for a period/ standard yield for the period

### Advantages of Taylor's Differential piece-rate system

- i. This system provides a great incentive to workers to achieve the standard output and the slow workers always try to achieve greater efficiency.
- ii. The system is beneficial to workers as well as employers, since the workers get wages at an increased rate according to units produced and the employer get increased output at lower cost of production.

### Disadvantages of Taylor's differential piece-rate system

- i. This system is different to apply due to the fixation of different rates.
- ii. The standard output cannot be justified because if a worker just fails to reach the standard output, the low rate of wages will be given to him. However, if the just reaches the standard, higher rate of wages will be payable to him.
- iii. There is a great difference of wages between the higher and lower rates. It creates a large variation in the earnings of the workers and confection may emerge among them.
- iv. Moreover, employer employees' relations may also be stained; tankard is put at a very high level.

#### d. Gantt's task and Bonus Scheme

This scheme was originated by Mr. Gantt. This scheme is a combination of time rate, differential piece-rate and bonus system and guarantees a minimum time rate.

Under this system, minimum wages are guaranteed to workers who fail to reach the standard. If the output of the worker is below standard, the worker is paid guaranteed time rate or equal to standard output. In this system, low rate is not necessary to determine total wages for below standard and if a worker's output is at or above standard, he is paid a high piece rate (output 120% of normal rate) for the actual output. The remuneration under this method is computed as follows:

Requirements for calculating total wages/earnings of the worker under Gantt's task bonus plan:

Standard output/standard yield

Standard rate per units/normal piece rate/guaranteed piece rate High piece rate for at or above standard, generally=120% of normal piece rate

### Advantages of Gantt's Task and bonus scheme

- i. This system encourages the worker to improve the level of performance.
- ii. The workers feel that they are getting the reward, which they are entitled to. Thus, it promotes satisfactions among the employees.
- iii. This method is very useful in jobs involving engineering activities.

### Disadvantages of Gantt's Task and Bonus Scheme

- i. Extreme care is to be exercised in fixing the guaranteed time rate and determination of standard output. Any error caused due to lack of experience will lead to unfavorable consequences.
- ii. If the guaranteed time rate is fixed high, the incentive effect of the plan will deteriorate.

### Group Bonus Schemes/What is a Group Bonus Schemes?

In the premium plans discussed so far, the bonus payable to an individual was ascertained. Sometimes it is not possible to apply an incentive plan to an individual employees and it may be possible to apply such a plan to the group of employees only. The group bonus system is especial applicable when the worker act in a group as a term. The group incentive plans can be successfully implemented where:

- i. Output depends on teamwork and joint efforts of group of workers.
- ii. It is difficult to measure the individual result rather than group's result.
- iii. It is necessary to work as a member of a team rather than on individual basis, e.g. in chemical process industry, an individual worker cannot influence the production of the plant.
- iv. Both direct and indirect workers need to be compensated equally.
- v. Skills of the workers in the group do not vary widely.

#### **Advantages of Group Bonus Scheme**

- i. Increase in production and saving in cost of production can be achieved.
- ii. Supervision cost will be reduced substantially.
- iii. The quality of work is improved.
- iv. Absenteeism is reduced to minimum and creates interest in work among the workers.
- v. Routing and scheduling problems are eliminated.
- vi. It creates team spirit and reduces cost per unit.
- vii. Minimizes waste and reduces cost per unit.
- viii. Clerical work in calculation of bonus is reduced.

#### Disadvantages of Group Bonus Scheme

- i. Individual skill and efficiency are not considered in these systems.
- ii. Difficult may arise in calculated of bonus and method of its distribution to all workers in the group.
- iii. The bonus is paid on group efforts an individual worker may not put his maximum effort in view of equal sharing of bonus to inefficient workers.
- iv. An inefficient leader may cause the entire group to suffer.

### a. Priest man's plan

Under this system, standard output and standard time for each department is predetermined is consultation with the workers. Bonus is payable to the department when the actual production exceeds the standard production. When the production does not exceed standard, no bonus is paid but times rates are guaranteed. The bonus is calculated as a percentages on such excess production and distributed to all employees in that particular department by increasing their normal wages by the same percentages the actual production increased over the standard.

In this system, the time wages are guaranteed if actual production of the particular division, department, and group is less than the standard output. This method is not only applicable for excess of actual production over the standard but also saving in material and labor costs is also considered for payment of bonus. The main drawback in this system is the efficiency of individual worker is not considered and incident workers can also claim for-bonus.

### 1. What is the meaning of labor cost.

Labor cost refers to any remuneration paid to the employees by the organization in the form of wages, salary, bonus, allowances etc. for their time and effort used in payable goods or services. In other words, mantel and physical sacrifice is called the labor cost.

The labor cost can be analyses into the following:

Monetary benefits: salaries and wages, dearness or other allowances, production incentive or bonus, overtime allowances, pension fund, payment for insurance scheme, old age pension, retirement gratuity, salary in lien of leave, profit linked bonus etc. are the benefit that are provided to the workers in monetary forms.

Non-monetary benefit or fringe benefits: subsidized food and housing, subsidized or free transportation, clothing, education to employee's c hidden, medical and recreational facilities etc. are the benefit that are provided to the workers in non-monetary forms.

#### 2. What are direct and indirect labor cost.

- a. <u>Direct labor cost</u>: direct labor cost is that portion of wages and salary, which can be identified and charged to a single costing unit. It is remuneration of the employees who are direct unit. It is the remuneration of the employees who are directly connected with the manufacturing operations or the conversion of raw materials into finished products. The example of direct labor cost is wages paid to workmen put on definite jobs or products in the factory.
- b. <u>Indirect labor cost</u>: indirect labor cost is the remuneration of the employees who are not directly connected with manufacturing with the conversion process but assist in the process by way of supervision, maintenance, transportation of materials, materials handling etc. their work benefits all the items being produced and cannot be specifically identified with the individual product. These costs are accumulated and apportioned to different cost centers are accumulated and apportioned to different cost center on equitable basis and assorted into product cost by applying the overhead absorption rate. Wages or salaries paid to the supervision, foremen, storekeeper, clerical staff, etc, are the example of indirect labour costs.

- 3. Differences between direct and indirect labor cost.
- a. <u>Meaning</u>: direct Balfour cost is directly involved in the production, but indirect cost is not directly involved in the production.
- b. <u>Volume of production</u>: direct labor cost depends on the volume of production whereas indirect labor cost is separated.
- c. <u>Separation</u>: direct labor cost can be separated in cost, cost center, or unit cost but indirect labor cost cannot is a direct expenditure.
- d. <u>Used</u>: direct labor cost is used to convert raw materials into finished goods, but indirect labor cost is used in the production process.
- e. <u>Payment</u>: payment of direct labor cost is a direct expenditure and, payment of indirect labor is an indirect expenditure.

#### 4. What is labor cost control?

Labor cost may be very high due to inefficiency of labor, wastage of materials, idle time and unusual overtime, inclusive of dummy names in the pay rolls and other related factors. Inefficient uses of labor not only increase the cost of production but also adversely affected the quality of products. The primary objective of the management, therefore, is to utilize the labor as economically as possible. It is therefore necessary for the management to device a proper system of labor cost control.

Control over labor costs requires proper employment and efficient utilization of labor force. These factors affect the cost and quality of the products of any individual undertaking and ultimately its profitability. Labor cost control involves employment of efficient workers, proper training of workers, proper time keeping and time booking and proper accounting for the wages paid to them.

### LABOR EFFICIENCY

Labor efficiency is a measure of how efficiently a given workforce accomplishes a task, when compared to the standard in that industry or setting. There are several different ways to measure labor efficiency, depending on the type of products and services being produced, and the end goal. Companies periodically assess efficiency along with other characteristics to identify weak points in the labor force and determine where they have room for improvement, with the goal of improving the overall quality of goods and services while keeping costs down.

# Measuring Efficiency

Divide the standard **labor** hours by the actual amount of time worked and multiply by 100. The closer the final number is to 100, the more effective your employees are. For example, let's say the standard **labor** hours for a certain project is 80 and the actual amount of time worked is 92.