

# STRATEGIC MANAGEMENT ACCOUNTING MBA-III SEMESTER IARE-R18

Prepared by

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# **UNIT-I**



# WANAGEMENT ACCOUNTING VS. COST ACCOUNTING

#### **DEFINITIONS MANAGEMENT ACCOUNTING**



#### According to Robert N.Anthony,

"Management Accounting is concerned with accounting information that is useful to management."

#### According to Brown and Howard,

"The essential aim of management accounting should be to assist management in decision making and control."

#### FINANCIAL ACCOUNTING



- American Accounting Association defines accounting as "the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by users of the information"
- According to Smith and Ashburne,

  "Accounting is the science of recording and classifying business transactions and events, primarily of financial character and art of making significant summaries, analysis and interpretations of those transactions and events and communicating the results to persons who must make decisions or form judgements".

#### **OBJECTIVES OF COST ACCOUNTING**



- To ascertain the cost of production on per unit basis, for example, cost per kg, cost per meter, cost per liter, cost per ton etc.
- Cost accounting helps in the determination of selling price. Cost accounting enables to determine the cost of production on a scientific basis and it helps to fi x the selling price.
- Cost accounting helps in cost control and cost reduction.
- Ascertainment of division wise, activity wise and unit wise profitability becomes possible through cost accounting.
- Cost accounting also helps in locating wastages, inefficiencies and other loopholes in the production processes/services offered.



- Financial Planning: Financial planning is the act of deciding in advance about the financial activities necessary for the concern to achieve its primary objectives. It includes determining both long term and short term financial objectives of the enterprise, formulating financial policies and developing the financial procedure to achieve the objectives.
- Analysis of Financial Statements: The analysis is an attempt to determine the significance and meaning of the financial statement data so that a forecast may be made of the prospects for future earnings, ability to pay interest and debt maturities and profitability of a sound dividend policy.



- Statistical and Graphical Techniques: The management accountant uses various statistical and graphical techniques in order to make the information more meaningful and presentation of the same in such form so that it may help the management in decision-making.
- Cash Flow Statement: A funds flow statement based on increase or decrease in working capital is very useful in long-range financial planning. It is quite possible that there may be sufficient working capital as revealed by the funds flow statement and still the company may be unable to meet its current liabilities as and when they fall due.



Marginal Costing: The management accountant uses the technique of marginal costing, differential costing and break even analysis for cost control, decision-making and profit maximisation.

Funds Flow Statement: The management accountant uses the technique of funds flow statement in order to analyse the changes in the financial position of a business enterprise between two dates. It tells wherefrom the funds are coming in the business and how these are being used in the business. It helps a lot in financial analysis and control, future guidance and comparative studies.



#### Statistical and Graphical Techniques:

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#### **ADVANTAGES**



- Increase Efficiency: Management accounting increases the efficiency of operation of company. Everything is done in management accounting with a scientific system for evaluating and comparing the performance.
- Maximizing the Profitability: Using of management accounting's budgetary control and capital budgeting tool, company can easily succeed to reduce both operating and capital expenditures. After this, company can reduce its price and then company will receive super profits.



- Control of Business's Cash Flow: It is one of important advantage of management accounting that it can be used for controlling of business's cash flow. We all know that cash in hand is better than in fixed properties if there is emergency to pay our loan or debt.
- Business-critical Decisions: To take business critical decisions, now management accounting will become more powerful. Global management accountants are coming for join on one plate-form for taking all business critical decisions.

#### **DIFFERENCES OF ACCOUNTING**



# Differences Between Financial and Managerial Accounting

Financial
Accounting

Managerial Accounting

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- 2. Time focus
- Verifiability versus relevance
- 4. Precision versus timeliness
- 5. Subject
- 6. Requirements

External persons who make financial decisions	Managers who plan for and control an organization
Historical perspective	Future emphasis
Emphasis on verifiability	Emphasis on relevance for planning and control
Emphasis on precision	Emphasis on timeliness
Primary focus is on the whole organization	Focuses on segments of an organization
Must follow GAAP and prescribed formats	Need not follow GAAP or any prescribed format

# **ACTIVITY BASED COSTING(ABC)**



Activity based costing(ABC) is a technique of apportionment of overhead incurred for production produce to the cost centre using suitable basis. This system allocates the overhead cost at a uniform rate on the basis of labor hour or machine hour worked. It doesn't consider those activities which are involved in the production process. It focuses on analysis, recording, controlling and reporting on the cost and wider performance of activities rather than the traditional system.

# **ACTIVITY BASED COSTING(ABC)**



- ➤ ABC can be defined as a method of charging overhead to cost centers or cost units on the basis of benefits received from the particular indirect activity.
- Under ABC, overhead are attributed to products on an activity base. It also attempts to show relationship between overhead costs and the activity that cause the costs.

#### **OBJECTIVES OF ACTIVITY BASED COSTING**



- To identify value added activities in transactions.
- To focus high cost activities.
- > To distribute overheads on the basis of activities.
- To identify the opportunities for improvements and reduction of costs.
- To validate the success of the quality drive with ABC.
- To ensure accurate product costing fordecision making.
- To use information to improve product mix and pricing decisions.

# LEVELS OF ACTIVITY BASED COSTING



- Unit level activity
- Batch level activity
- Product level activity
- Facility level activity

#### STEPS IN ABC SYSTEM



#### The major steps in ABC system are;

- 1. STEP 1----- Process specification
- 2. STEP 2----- Identify main activities
- 3. STEP 3----- Identify non value adding activity
- 4. STEP 4----- Identification of activity cost pools.
- 5. STEP 5----- Selection of activity cost drivers
- 6. STEP 6----- Tracing of cost with cost objects
- 7. STEP 7----- Staff training
- 8. STEP 8----- Review and follow up

#### **ADVANTAGES OF ABC SYSTEM**



- Accurate Product Cost
- Information about Cost Behavior
- Tracing of Activities for the Cost Object
- Tracing of Overhead Costs
- Better Decision Making
- Cost Management
- Use of Excess Capacity and Cost Reduction
- Benefit to Service Industry

#### **LIMITATIONS OF ABC SYSTEM**



- 1. It is a complex system which consists of various cost pools and cost driver rates
- 2. It is difficult to attribute cost to single activities, some cost support several activities.
- 3. ABC requires total commitment and support from top level management.
- 4. Implementation of ABC requires bulk amount of time and money.
- 5. ABC requires positive attitudes and employees support for successful implementation.

#### LIFE CYCLE COSTING



In other words the process of identifying and documenting all the costs involved over the life of an assets is known as life cycle costing.

- The cost under life cycle cost are:
  - 1. Acquisition cost
  - 2. Operating cost

# **VALUE CHAIN ANALYSIS(VCA)**



➤ Value chain analysis is a strategic managerial tools to assess and review the various business functions in which utility is added to the products or services. The various business functions include research.

The chain of activities that is performed to add value to inputs in order to arrive at the final outputs is referred to as value Chain. The value chain is a tool developed by DR. MICHEAL PORTER.

## ADVANTAGES OF VALUE CHAIN ANALYSIS TARE



- Helps to stay out of the "No profit zone"
- Presents opportunities for integration
- Aligns spending with value process
- Helps to examine the activities of a firm's and how they interact with one another and affect each other's cost and performance.

#### LIMITATION OF VALUE CHAIN ANALYSIS



- 1. Finding the costs, revenues and assets for each value chain activity gives rise to serious difficulties.
- 2. Value chain analysis is very difficult to understand by all the employees and hence may face resistance from employees as well as managers.
- 3. For a long term strategic decision making in cost structure, market price and capital investment may not be available because data of company provided is of a single period financial information.

# UNIT-2



# **COST ACCOUNTING TO INDUSTRIES**

#### **TARGET COSTING**



Target costing is the cost that can be incurred while still earning the desired profit.

Target cost = Selling price – desired profit

"The Target costing is a disciplined process for determining and achieving a full stream cost at which a proposed product with specified functionality, performance and quality must be produced in order to generate the desired profitability at the products anticipated selling price over a specified period of time in the future."

#### METHODS IN OF TARGET COST



- Subtraction methods
- Addition methods
- Integrated methods
- Proactive approach to the management
- Break down barriers between departments
- Minimize non value added activities
- Reduced time to market
- Foster partnerships with suppliers

#### **DISADVANTAGES OF TARGET COSTING**



- 1. Target costing requires many meeting for coordination.
- 2. It's implementation requires willingness to cooperate
- May reduce the quality of products due to use cheap components which may be inferior quality.
- 4. Effective implementation and use requires detailed data.

#### IMPORTANCE OF LIFE CYCLE COSTING



- 1. Helps to make decisions for capital and investment based on least life cycle costs.
- 2. Rank each of the projects based on total costs of ownership
- 3. Makes more informed decisions.
- 4. Allow better reporting to key stakeholders.
- 5. Higher level of yields from the project.

#### **LIFE CYCLE OF AN ASSETS**



- 1. Plan
- 2. Acquire
- 3. Operate
- 4. Maintain
- 5. Renew
- 6. Dispose

#### DISADVANTAGES OF LIFE CYCLE COSTING



#### Cost of failures

- Cost of repairs
- Cost of spares
- Loss of production

#### II. Maintenance costs

- Cost of corrective maintenance
- Cost of preventive maintenance
- Cost of predictive maintenance

#### **ADVANTAGES OF LIFE CYCLE COSTING**



- 1. Improved forecasting
- 2. Improved awareness
- 3. Performance trade off against cost
- 4. Time consuming
- 5. Costly
- 6. Technology

#### **COST SYSTEMS**



There are two basic systems used by manufacturers to assign costs to their products:

Job order costing

**Process costing** 

#### **LABOR COSTS**



- Labor costs are accumulated using the payroll register and time records.
- Labor time records identify the employee, the amount of time spent, and the cost charged to each job.



#### **COST ACCOUNTING**



Chartered Institute Of Management Accountants (CIMA London)

"Costing is the technique and process of ascertaining cost"

# **Cost Accounting**



- It provides information for both management accounting and financial accounting.
- It measures and reports from financial and non financial data.

#### **Definition**



- Cost accounting measures and reports information relating to the cost of acquiring and utilizing resources
- Cost accounting provides information for management and financial accounting
- Cost management describes the approaches and activities of managers in short-run and long-run planning and control decisions
- These decisions increase value of customers and lower costs of products and services
- Cost management is an integral part of a company's strategy

# **Financial Accounting**



- Financial accounting measures and records business transactions and provides financial statements that are based on generally accepted accounting principles (GAAP)
- Managers are responsible for the financial statements issued to investors, government regulators, and other parties outside the organization
- Financial accounting focuses on external parties
- Financial accounting reports on what happened in the past

# **Costs and Cost Objects**



#### 1. Cost

a resource sacrificed or foregone to achieve a specific objective

## 2. Cost Object

product, machine, service or process for which cost information is accumulated.

- cost objects can vary in size from an entire company,
- to a division or program within the company, or down to a single product or service

# **Direct and Indirect Costs**

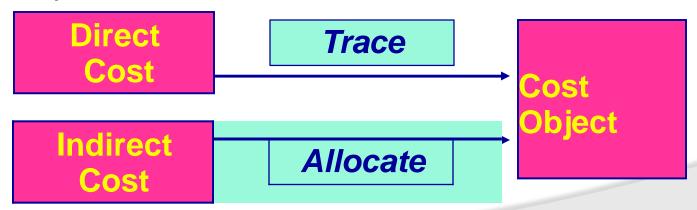


#### **Direct Cost**

 a cost which is related to a particular cost objective and can be traced to it in an economically feasible way

#### **Indirect Cost**

 a cost which is related a particular cost objective but cannot be traced to it in an economically feasible way



# **Cost Drivers and Cost Management**



## **Cost driver (cost generator or cost determinant)**

1.a factor which causes the amount of cost incurred to change

2.production costs are driven by the number of products produced, labour costs, number of setups required, and the number of change orders

# **Types of Inventory**



- Direct material inventory (stock awaiting use in the manufacturing process)
- Work-in process inventory (partially completed goods on the shop floor)
- Finished goods inventory (goods completed but not yet sold)

# **Period and Product Costs**



#### **Period Costs**

- are expensed on the income statement as they are incurred
- also called operating costs (excluding cost of goods sold)
- examples: selling, general and administrative costs

#### **Product Costs**

- are inventoried on the balance sheet and expensed only when the product or service is sold
- also called inventorial costs
- Examples: materials and labor (manufacturing)

## **COSTING SYSTEM TERMINOLOGY**



## **Cost Object**

anything for which a separate measurement of costs is desired

#### **Cost Pool**

> a grouping of individual cost items

#### **Cost Allocation Base**

➤a factor that is the common denominator for systematically linking an indirect cost or group of indirect costs to a cost object

# **UNIT-III**



## **MAKE OR BUY DECISIONS**

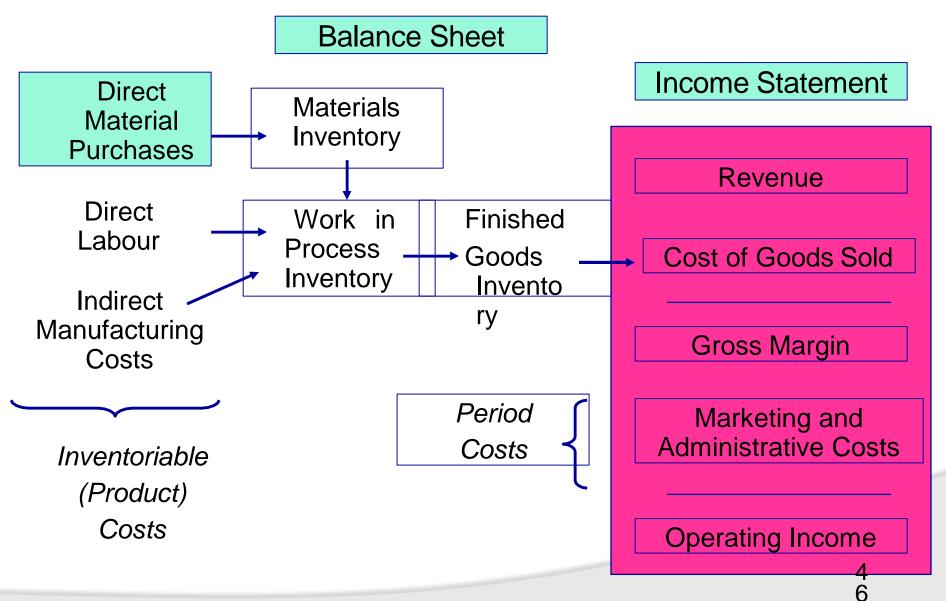
## **CLASSIFICATIONS OF COSTS**



- 1. Business function
  - a. R&D
  - b. Design
  - c. Production
  - d. Marketing
  - e. Distribution
  - f. Customer service
- 2. Assignment to a cost object
  - a. Direct costs
  - b. Indirect costs

# **COSTS IN A MANUFACTURING COMPANY**

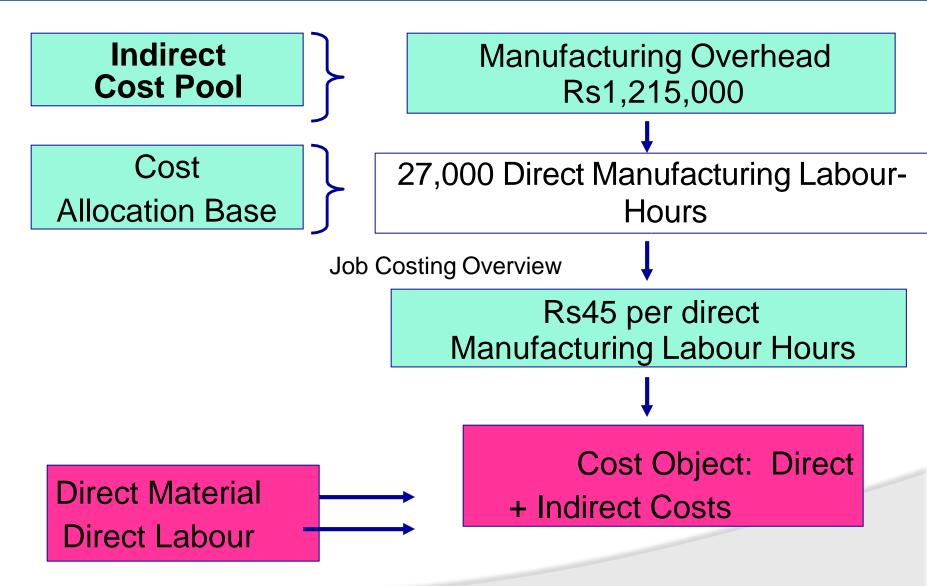




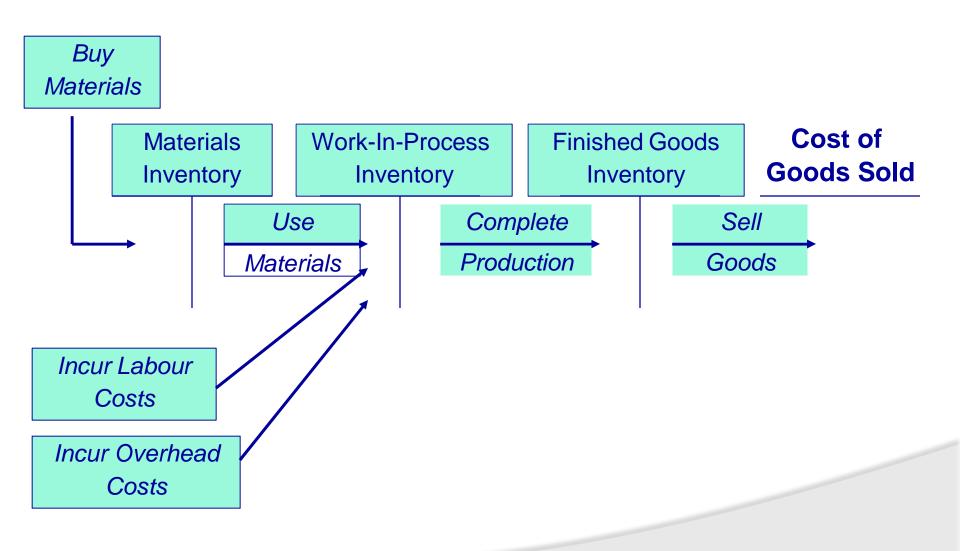


- Identify the cost object(s)
- Identify the direct costs for the cost object(s)
- Select cost-allocation bases to use in allocating the indirect costs to the cost object(s)
- Identify the indirect costs associated with each costallocation base
- 5. Compute the rate per unit of each cost-allocation base to allocate indirect costs to the cost object(s)
- 6. Compute the indirect costs allocated to the cost object(s)
- 7. Determine the cost of the cost object(s) by adding the direct and indirect costs









## JOB COSTING IN A MANUFACTURING COMPANY



- How is direct labor traced to individual jobs in a nonmanufacturing company?
- Employees complete a weekly time record.
- Jim, Abby, and Associates is a firm specializing in composing and arranging music parts for different clients.
- Musician Judy Lopez's salary is \$80,000 per year.

## JOB COSTING IN A NONMANUFACTURING COMPANY



- How is direct labor traced to individual jobs in a nonmanufacturing company?
- Employees complete a weekly time record.
- ➤ Jim, Abby, and Associates is a firm specializing in composing and arranging music parts for different clients.
- Musician Judy Lopez's salary is \$80,000 per year.



- 1. Identify the direct costs for the cost object(s)
- Select cost-allocation bases to use in allocating the indirect costs to the cost object(s)
- Identify the indirect costs associated with each costallocation base
- 4. Compute the rate per unit of each cost-allocation base to allocate indirect costs to the cost object(s)
- Compute the indirect costs allocated to the cost object(s)
- Determine the cost of the cost object(s) by adding the direct and indirect costs

### **COST SHEET**



It is a statement designed to show the output of a particular accounting period along with breakup of cost.

- It is a memorandum statement
- ➤ It does not form part of double entry cost accounting records.
- > It discloses the total cost and cost per unit.
- > It helps
  - To fix Selling Price.
  - To submit quotation price. To Control cost.

# COST SHEET



PARTICULARS	TOTAL COST(Rs.)	COST PER UNIT(Rs.)
OPENING STOCK OF RAW MATERIAL ADD:- PURCHASE OF RAW MATERIAL PURCHASE EXPENSES CARRIAG INWARDS OCTROI & CUSTOM DUTY FRIEGHT ON PURCHASE OF MATERIAL LESS:- PURCHASE RETURNS ABNORMAL LOSS OF RAW MATERIAL CLOSING STOCK OF RAW MATERIAL COST OF DIRCT MATRIAL CONSUMED ADD:- DIRECT WAGES/LABOUR DIRECT EXPENSES ROYALTY DIRECT COST/PRIME COST ADD:- WORK OF FACTORY OVERHEADS INDIRECT MATERIAL INDIRECT WAGES LEAVE WAGS BONUS TO WORKERS OVERTIME WAGES FUEL AND POWER RENT AND TAXES	XXXXXXXXXX	XXXXXXXXXX

# **Standard Costing**



A *standard* is a pre established benchmark for desirable performance.

A standard cost system is one in which a company sets cost standards and then uses them to evaluate actual performance.

A *variance* is the difference between actual performance and the standard.

### Favorable versus Unfavorable



A *standard* is a pre established benchmark for desirable performance.

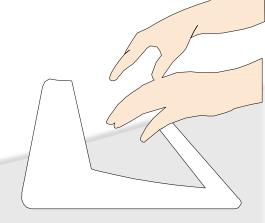
An *unfavorable* variance occurs when actual performance falls below the standard.

# **QUANTITY AND PRICE STANDARDS**



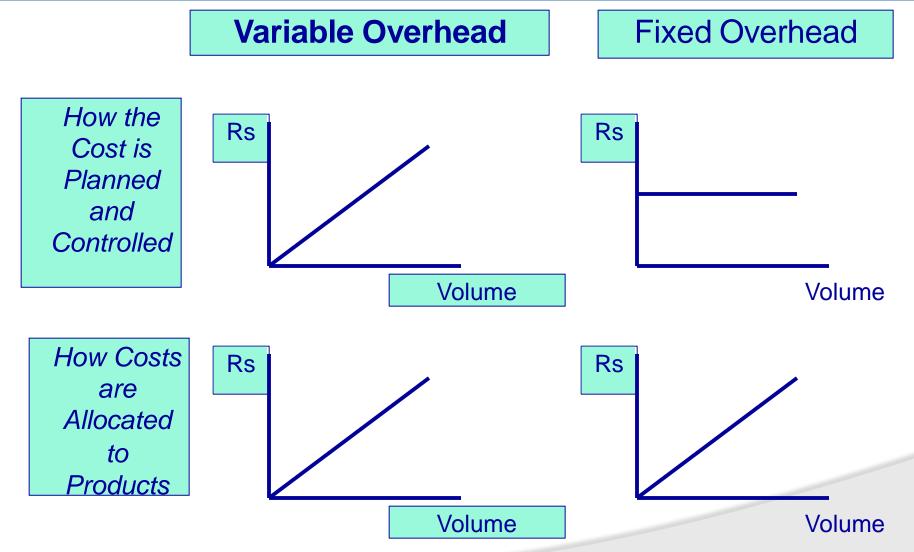
A standard that allows for no inefficiencies of any kind is an ideal standard.

A standard that allows for the normal inefficiencies of production is called a practical standard.



# **OVERHEAD COST**





# **MARGINAL COSTING**



# Chartered Institute of Management Accountant, England-

"Marginal costing is the ascertainment of marginal cost and of the effect on profit of changes in volume or type of output by differentiating between fixed cost and variable costs".

## MARGINAL COSTING



#### Cost is classified into: Fixed Cost Variable Cost

- Variable cost is only charged to production
- Fixed cost is recovered from contribution
- Valuation of stock of WIP and F.G. is done on the basis of marginal cost.
- Selling price is based on marginal cost and contribution
- It is technique used to ascertain the marginal cost & to know the impact of V.C. on volume of output
- Profit is calculated by deducting marginal cost and fixed cost from sales
- C-V-P analysis is one of integral part of marginal costing

### **COSTING**



- ➤ Fixed (Indirect/Overheads) are not influenced by the quantity produced but can change in the long run e.g., insurance costs, administration, rent, some types of labor costs (salaries), some types of energy costs, equipment and machinery, buildings, advertising and promotion costs.
- ➤ Variable (Direct) vary directly with the quantity produced, e.g., raw material costs, some direct labour costs, some direct energy costs.
- ➤ Semi-fixed Where costs not directly attributable to either of the above, for example some types of energy and labour costs.

### **COSTING**



- Total Costs (TC)
  - = Fixed Costs (FC)+ Variable Costs (VC)
- Average Costs

= TC/Output (Q)

AC (unit costs) show the amount it costs to produce one unit of output on average

 Marginal Costs (MC) – the cost of producing one extra or one fewer units of production

$$MC = TC_n - TC_{n-1}$$

### **REVENUE**



## **≻** Total Revenue –

Also known as turnover, sales revenue or

'sales' = Price x Quantity Sold

$$TR = P \times Q$$

## Price -

May be a variety of different prices for different products in the portfolio

Quantity – Units sold

#### **PROFIT**



#### Profit = TR - TC

 Normal Profit – the minimum amount required to keep a business in a particular line of production

 Abnormal/Supernormal Profit – the amount over and above the amount needed to keep a business in its current line of production

# MARGINAL COST EQUATION



- Sales = Variable Cost + Fixed Cost + Profit/Loss
- Sales Variable Cost

- Sales Variable Cost = Contribution
   Therefore,
- Contribution = S.P. V.C. or
- Contribution = Fixed Cost + Profit

### **COST VOLUME PROFIT ANALYSIS**



Cost volume Profit Analysis is a logical extension of marginal costing

- C.V.P. analysis examines the relationship of cost & profit to the volume of business to maximize profits
- Indicates direct relationship between volume & profit
- Indicates Indirect relationship between volume & cost per unit (Inverse)

### **CVP ANALYSIS ASSUMPTIONS**



- 1. Changes in the level of revenues and costs arise only because of changes in the number of product (or service) units produced and sold.
- Total costs can be divided into a fixed component and a component that is variable with respect to the level of output.

### **CVP TERMINOLOGY**

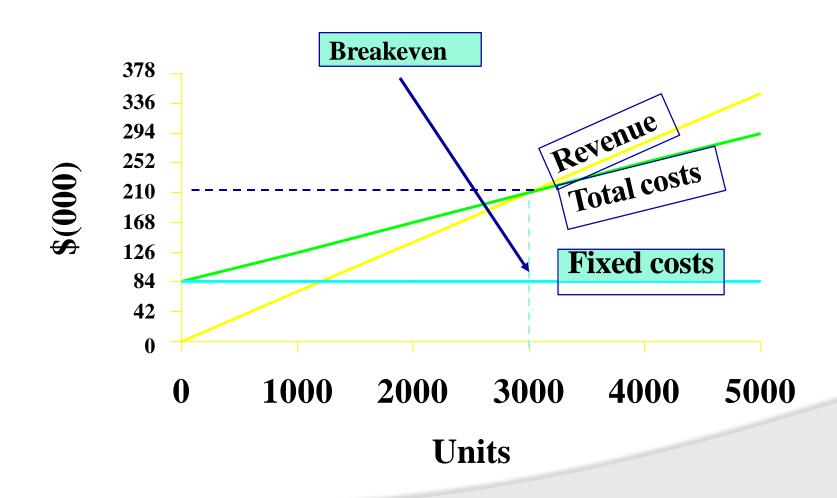


When graphed, the behavior of total revenues and total costs is linear (straight-line) in relation to output units within the relevant range(and time period).

The unit selling price, unit variable costs, and fixed costs are known and constant.

## **COST-VOLUME-PROFIT**





# **UNIT-IV**



## **BUDGETARY CONTROL**

# BUDGETARY CONTROL AS A CONTROL TOOL STATE



# **Definition Budget**

"A financial and quantitative statement prepared and approved prior to a defined period of time"

## **CHARACTERISTICS OF BUDGET:**



- 1. It estimates a **profit potentials** of the business unit
- 2. It is stated in monetary terms
- 3. It generally covers a period of one year
- 4. It is Management's commitment
- Budget proposals are reviewed & approved by an higher authority
- Periodically actual financial performance is compared with standard budget & variance is calculated

# DIFFERENCE BETWEEN BUDGETING & STRATEGIC PLANNING

Distinguishing Points	Budgeting	Strategic Planning
Period	Prepared for Single year	Focuses on activities that extended over a period of several years
Structure	Structured by responsibility centers	Structured by product lines
Use	Used to influence a managers performance before the fact & to appraise performance	Strategic plans are long term it is Middle level management's activity
Concern with	Coordination of Activities of various Dept.	concerned to efficient use of resources
Focus	Assignment of Responsibility	formal statement of specific plan i.e. how to reach a given destination

## **BUDGETING PROCESS:**



## Steps:

- Call for expenditure proposals from various dept.
- Develop revenue projections based on projected base activity
- 3. Evaluate the proposals
- 4. Discuss preliminary with senior Manager
- 5. Finalize the budget
- 6. Provide regular reports
- Conduct the annual review

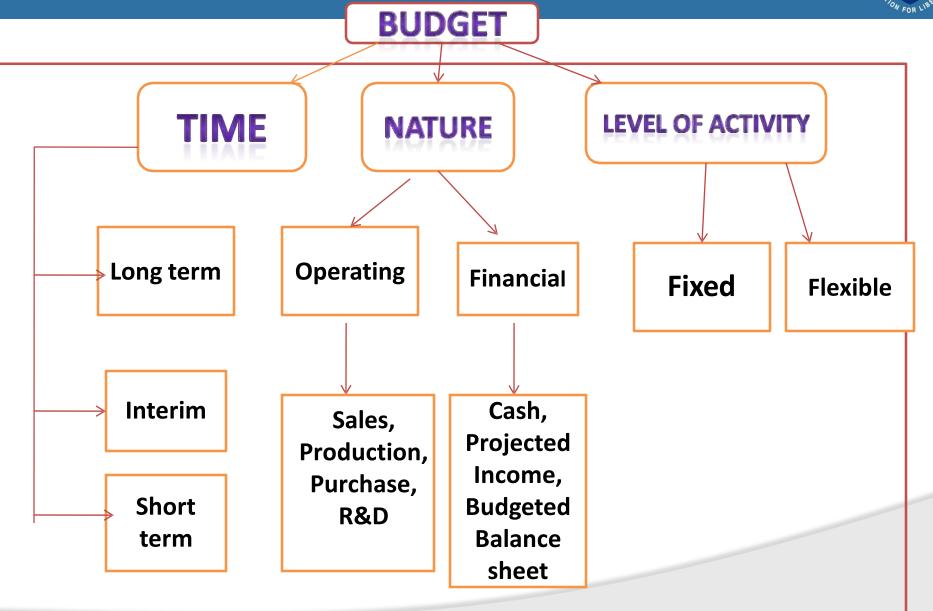
## **ESSENTIAL ELEMENT OF BUDGET**



- 1. Objective: Have to set the objective first
- 2. Understanding of Cost Behavior : Need to understand different elements of costs attached with
- **3. Forecasting:** Of market, customer preference, competitor, Govt policies
- **4. Coordination:** Between each department, different level of Mgt
- 5. Communication & Reporting: Between divisional and functional Manager
- **6. Flexibility:** Must have a scope for Adjustment based on actual situation
- 7. Accounting data support: Past data if available.

## **TYPES OF BUDGET**





## **USE OF BUDGET**



- 1. Fine tuning the Strategic plan:
- 2. Coordination of the Activities of the several parts of the organization:.
- 3. Assigning responsibility:
- 4. Basis for performance evaluation:
- 5. It leads to execution of task within the given means.
- 6. It enables to manager to **think** & **to prepare** for changing conditions

## **BUDGETARY CONTROL:**



## **Fundamental principles of Budgetary control:**

- Establishing plan & Target performance to coordinate all activities of the business
- Recording the Actual performance
- Continuous Comparison of Actual performance with planned
- Ascertainment of variances & analysis of reasons
- Taking remedial action

## **BENEFITS OF BUDGETARY CONTROL:**



- Establish coordination among Budget centers: (in consultation with all functional managers)
- Points specific responsibilities: (Divisional targets are setup)
- Ensures optimum utilization of resources: (In productive & Profitable way)
- Base for installation of standard costing: (comparison of budget figure with standard is made)
- Continuous evaluation of performance:
- Forces management to plan ahead

## REQUIREMENTS FOR EFFECTIVE BUDGETARY CONTROL SYSTEM



- Top management's support: (Hearted support & Approval)
- Specific &Realistic Targets: (Achievable targets)
- In consideration of Organizational structure:
- Creation of responsibility centers: (identification of divisional goals)
- Participation by supervisors & employees:
- Continuous budget education: (organizing seminars, meetings, conferences)
- Effective communication & feedback system
- Flexibility: (Level of Activity)
- Review of Budget estimates: (By Management)

## **BUDGET REVISION**



**Budget Revision:** Means the procedure for revising a budget, after it has been approved.

Types of budget revisions.

- A systematic updating of the budget.
- Procedures that allow revisions under special circumstances.
- Budget revisions must be justified on the basis of significantly changed conditions from those existing when the original budget was approved.

#### **ZERO BASE BUDGETING**



- A method of budgeting where all activities are revalued from
- Manager of responsibility center has to justify that the activity is essential and amount asked is reasonable
- > Technique is first used by US Dept. of Agriculture in 1962
- In conventional budgeting
- Current years budget = Past figures + some percentage
- ➤ There was no relationship between the expenditures made and the result obtained
- > There is no control over the inputs to the system and the outputs obtained.

## PROCEDURE FOR ZBB



- 1. Identification of Responsible centre.
- Analysis of Responsible centre in terms of decisions package .
  - A description of the function or activity.
  - The goals or objectives of function or activity.
  - Specific measures of performance. (To Set standards)
  - Benefits to be derived from financing the activity.
  - The projected costs of the package. f)Alternative ways of performing the same activity.
- 3. Evaluation & ranking of the decision packages
- 4. Preparation of detailed operating budgets which reflects decision packages approved in budget preparation

## **ADVANTAGES OF ZBB**



- Enables to allocate resources According to priority
- Ensures every activity is as per requirements
- It links budget with organizational goals
- Drives managers for innovation
- It seeks cost effective & economical alternatives
- Helps into identification of wasteful areas

## **COMMITTED COST & BUDGET:**



- ➤ The costs over which manager do not have much influence during budget preparation
- > Such costs can be revised under special conditions
- Once committed they have little scope to control/change for a year
- > Ex Depreciation, Long term lease
- ➤ Committed costs remain beyond control of responsibility manager
- > They represent fixed cost burden
- > They won't change so budget reflects the cost as it is

## **ENGINEERED COST & BUDGET:**



- It follows certain framework i. e- cost of production (Material cost, labor cost & overheads)
- Budgeting becomes easy in such costs
- Process of finding standard cost & multiplying by number of units it gives total engineered cost of product
- Engineered expenses follow direct relationship between input &output
- Easy to Control
- Performance evaluation is made by comparing actual cost with standard cost

## **Discretionary Costs:**

Advertisement Campaign, Market testing & Product development.

- These costs do not follow any relationship in the inputs required and amount of output it will give
- While formulating budget for such expenses management has to analyze its Magnitude first
- Based on this magnitude resources can be allocated and budget is set
- Secondly Revenue is taken as a base for allocation of expenses

#### **APPLICATION OF MARGINAL COSTING**



- Cost control
- Profit planning
- Evaluation of performance
- Decision making
  - Fixation of selling price
  - Key or limiting factors
  - Make or buy decision

## **APPLICATION OF MARGINAL COSTING**



- Selection of suitable product mix
- Effect of change in price
- Maintained a desired level of Profit
- Alternative methods of Production
- Diversification of Products
- Closing down of activities
- Alternative course of action
- Level of activity planning

## TYPICAL RELEVANT COSTING DECISIONS



- One-Time-Only Special Order (Pricing)
- Make or Buy Decisions (Outsourcing)
- Opportunity Costs
- Product Mix Decisions under Capacity Constraints
- Add or Drop a Product Line or Customer
- Equipment Replacement Decisions

#### **ALLOCATING MANUFACTURING OVERHEAD COST**



- 1. Estimate total overhead for the period.
- 2. Select an overhead allocation base.
- 3. Estimate total quantity of the overhead allocation base.
- 4. Compute the predetermined overhead rate
- 5. Obtain actual quantities of the overhead allocation base.
- 6. Allocate manufacturing overhead by multiplying the predetermined manufacturing overhead rate by the actual quantity of the allocation base that pertains to each job.

## **UNIT-5**



## STANDARD COSTING

## STANDARD COST



Standard cost: An estimated or predetermined cost of performing an operation or producing a good or service, under normal conditions. Standard costs are used as target costs (or basis for comparison with the actual costs), and are developed from historical data analysis or from time and motion studies.

## **STANDARD COSTING**



Standard Costing is a method used to compare revenue and the standard cost with the actual result, to check the variance and its causes. It informs the management of the deflection and initiates correct measures for improvement.

- Direct Material Cost
- Direct Labour Coat
- Overheads

## STANDARD COSTING VS. BUDGETARY CONTROL

- Standard costing is a system of accounting where predetermined costs are used for analysis of variances and control of the entire organization.
- Standard costs are scientifically predetermined in respect of materials, labor, overheads. It is based on engineering and technical data. Standard costs are fixed for each unit i.e., standard hour, standard unit, standard labor mix, standard material mix etc.

## STANDARD COSTING VS. BUDGETARY CONTROL

- TARE NO. FOR LIBERT
- Standard may be expressed both in quantitative and monetary measures.
- Standard costing is concerned with ascertainment and control of costs.
- Any variance-adverse or favorable, is investigated.
- Standard costing emphasis is on what should be the cost.
- Standard cost is a projection of cost accounts.
- Standard costs are used in tactical decisions like, price fixation, computation of product cost, valuation of inventory etc.

# STANDARD COSTING VS. BUDGETARY CONTROL



- Standard costing is determined for each element of cost.
- > Standard costing is related with the control of costs and it is more intensive in scope.
- > Standard costing is introduced primarily to ascertain the efficiency and effectiveness of cost performance.
- Standards are usually limited to manufacturing activities only.

## **BUDGETARY CONTROL**



- Budgetary control is a planning exercise made by the management in setting budgets for the forthcoming period and analysis of actual with the budgeted figures.
- Budgets are based on past performance adjusted to the anticipated changes in the future. It is a written plan covering projected activities of a firm for a definite time period. It is a financial measure of target and achievement.
- Budgets are mainly expressed in monetary terms.
- Budgetary control is concerned with the overall profitability and financial position of the concern.

## **BUDGETARY CONTROL**



- Budgetary control puts emphasis more on excess over the budget.
- Budgetary control emphasis is on the level of costs not to be exceeded.
- Budgetary control is determined for a specified period.
- Budgetary control is concerned with the operation of business as a whole and it is more extensive.

## **BUDGETARY CONTROL**



- Budgetary control is introduced to state in figures as approved plan of action relating to a particular period.
- Budgets are set for all departments in an organization.
- Budget is a projection of financial accounts.
- Budgetary control emphasis on policy determination, achievement of goals, co-ordination of different departments and activities, delegation of authority and responsibility.

## **OBJECTIVES OF STANDARD COSTING**



- To establish control
- 2. To set standards for various elements of cost
- 3. To fix responsibility
- 4. To make budgetary control more effective

## **FUNCTIONS OF STANDARD COSTING**



- Valuation : Assigning the standard cost to the actual output
- 2. **Planning:** Use the current standards to estimate future sales volume and future costs
- **3. Controlling:** Evaluating performance by determining how efficiently the current operations are being carried out

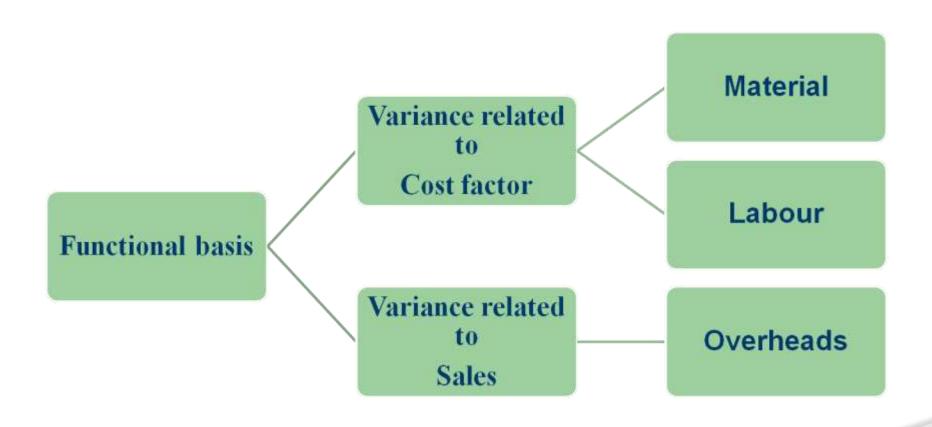
## **VARIANCE ANALYSIS**



- > A variance is the difference between the standards and the actual performance
- When the actual results are better than the expected results, there will be a favorable variance (F)
  - If the actual results are worse than the expected results, there will be an adverse variance (A)

## **FUNCTIONAL BASIS**





## **MATERIAL PRICE VARIANCE**



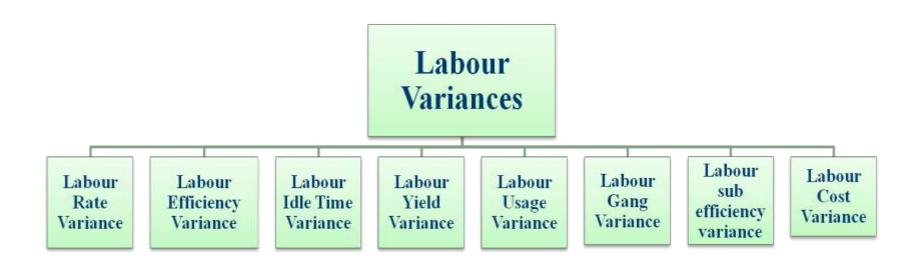
- This is that portion of the material cost variance which is due to the difference between the standard price specified and the actual price paid.
- If the actual price is higher than the standard price, it would result in adverse price variance and if the actual price is lower than standard price, the result is favorable price variance.
- Material price variance = (standard price actual price) x actual quantity of materials

## **MATERIAL YIELD VARIANCE**



- This variance arises due to the difference between the standard yield specified and actual yield obtained.
- Material yield variance = [(Standard loss in terms of actual input) (Actual loss on actual input)] × (Average standard price)
- Material yield variance = Material usage variance
  - Material mix variance

## LABOUR VARIANCES

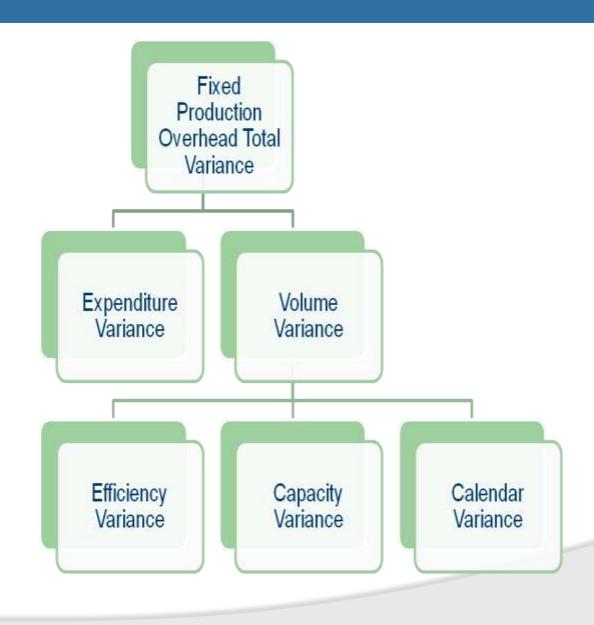


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# **FIXED PRODUCTION OVERHEAD**



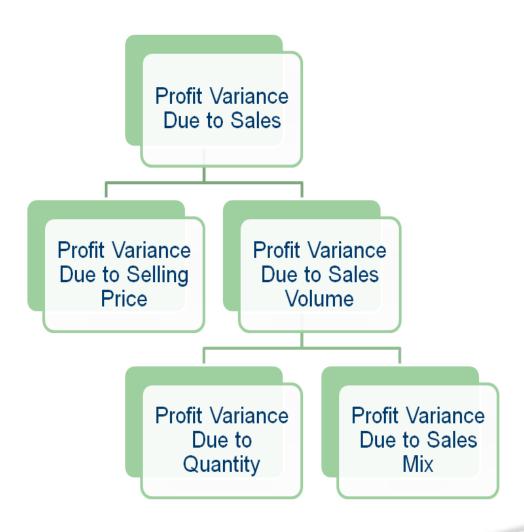
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## **PROFIT METHOD**





#### **APPLICATION OF STANDARD COSTING**



- 1. Process industries
- 2. Service industries
- 3. Engineering industries
- 4. Textile industries
- 5. Extraction industries

### LIMITATIONS OF STANDARD COSTING



- High degree of technical skill
- Segregation of variances into controllable and noncontrollable factors
- Duplication in recording,
- Either too strict or too liberal.

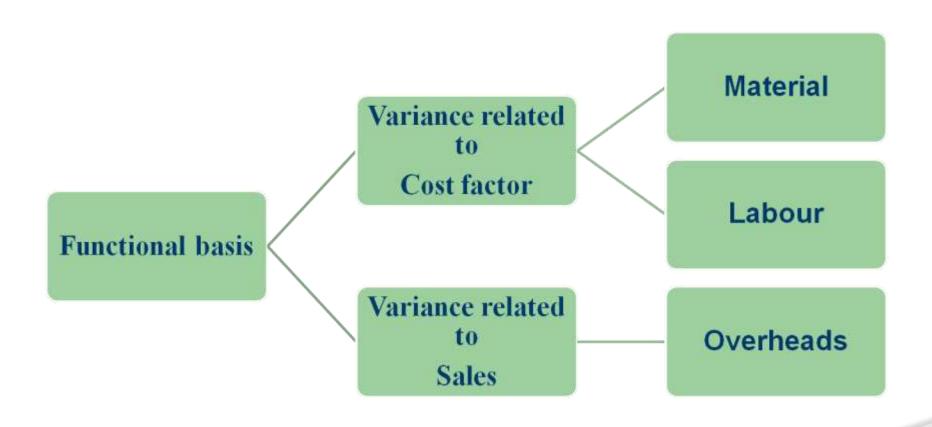
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# **FUNCTIONAL BASIS**





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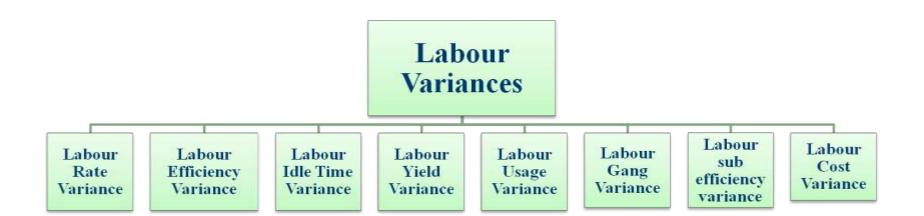
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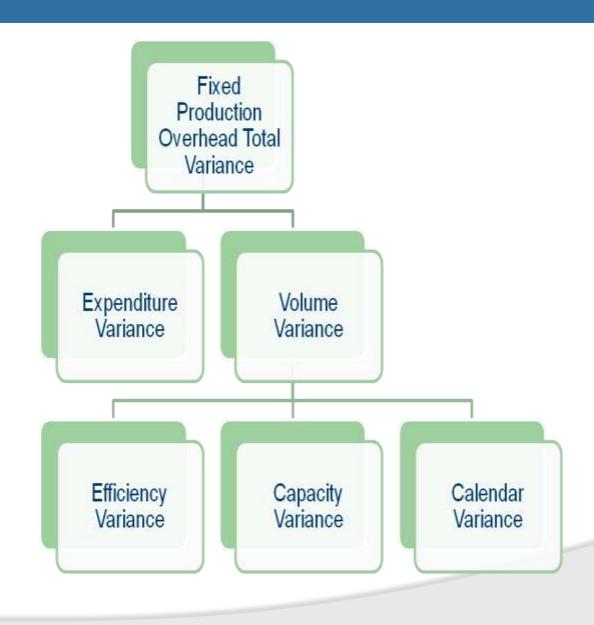


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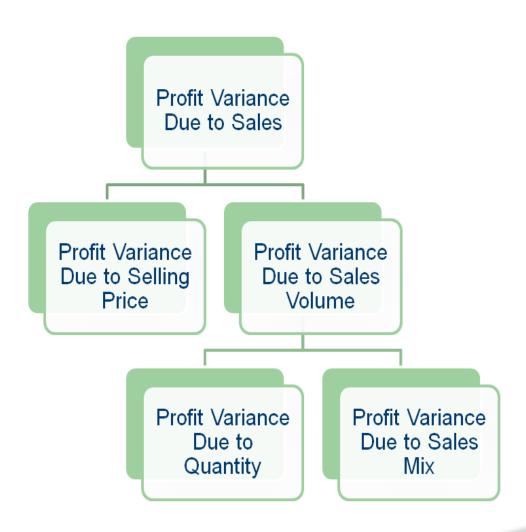
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- Material yield variance = [(Standard loss in terms of actual input) – (Actual loss on actual input)] × (Average standard price)
- Material yield variance = Material usage variance
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# **FIXED PRODUCTION OVERHEAD**



## **PROFIT METHOD**





#### **APPLICATION OF STANDARD COSTING**



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- 2. Service industries
- 3. Engineering industries
- 4. Textile industries
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### **ADVANTAGES OF STANDARD COSTING**



- Formulation of price and production policies Comparison and analysis of data Management by exception
- Delegation of authority and responsibility Cost consciousness
- Better capacity to anticipate
- Better economy, efficiency, and productivity Preparation of periodical financial statements Facilities budgeting

#### LIMITATIONS OF STANDARD COSTING



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