Module 5

Standard Costing and Variance Analysis

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Standard Costing

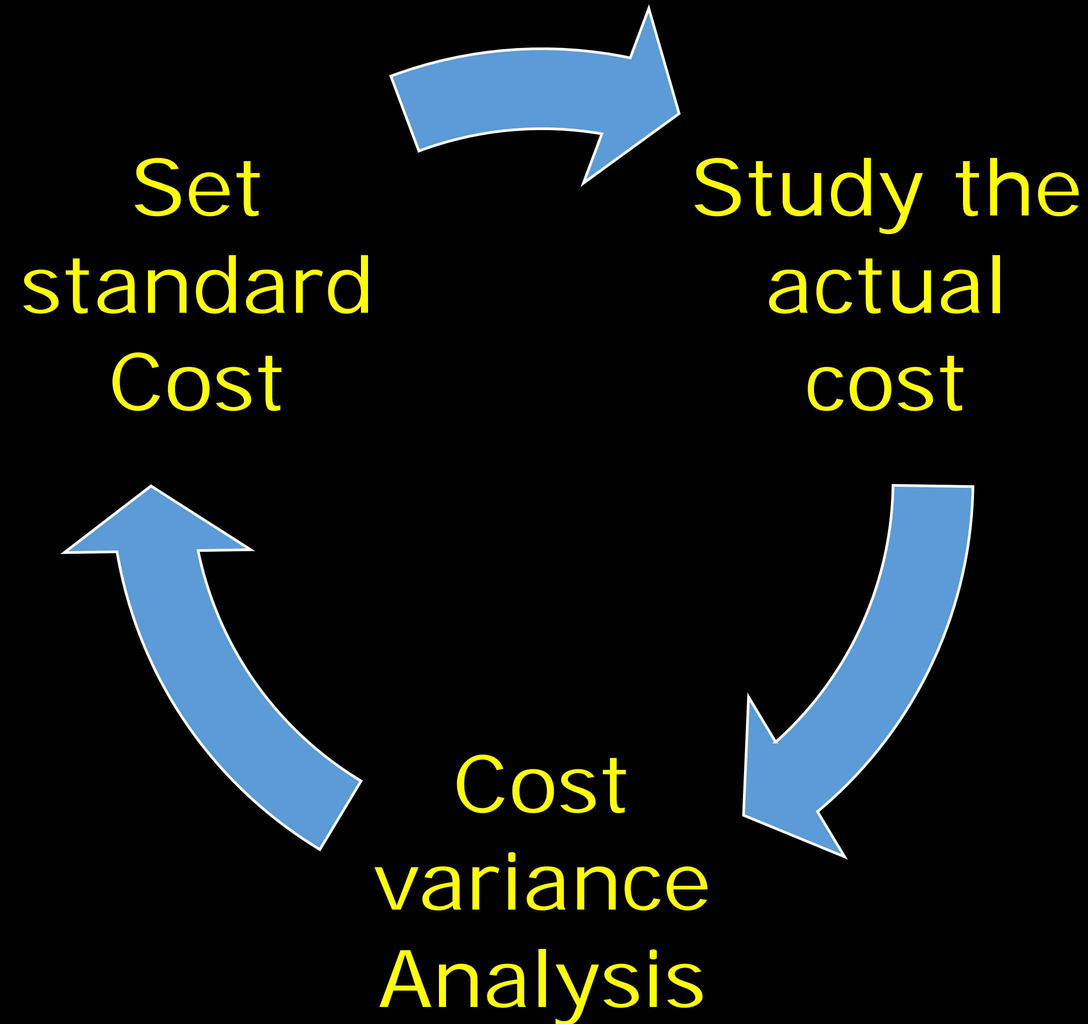
- Definition
- Steps in standard costing
- Types of Standards
- Variance
- Types of variance
- Variance Analysis
- Advantages & disadvantages of Standard costing

Standard Costing

- Standard cost is a pre-determined cost which is calculated from management's standards of efficient operation and the relevant necessary expenditure. It may be used as a basis for price fixing and for cost control through variance analysis.

In simple words it is a budget for the production of one unit of product or service. It is chosen to serve as a benchmark in the budgetary control system.

Steps in Standard Costing



- **Set the standard cost**

✓ A predetermined or standard cost per unit is set.

✓ Budgeted cost determined by using standard cost.

- **Study the actual cost**

✓ Calculate actual cost incurred in the production process

- **Cost variance**
  - ✓ Comparison of the actual cost with the budgeted cost.
  - ✓ The cost variance is used in controlling cost.
  - ✓ Fix responsibilities to control cost
  - ✓ Take suitable action and create effective control system .

Types of standards

- Ideal Standards:

These represents the level of performance attainable when prices for material and labour are most favorable, when the highest output is achieved with the best equipment and layout and when maximum efficiency in utilization of resources results in maximum output with minimum cost.

- <u>Normal Standards</u>: These are the standards that may be achieved under normal operating conditions. The normal activity has been defined as number of standard hours which will produce normal efficiency sufficient goods to meet the average sales demand over a term of years.

- Basic or Bogey standards: These standards are use only when they are likely to remain constant or unaltered over long period. According to this standard, a base year is chosen for comparison purposes in the same way as statistician use price indices. When basic standards are in use, variances are not calculated as the difference between standard and

actual cost. Instead, the actual cost is expressed as a percentage of basic cost.

- <u>Current Standard</u>: These standards reflect the management's anticipation of what actual cost will be for the current period. These are the costs which the business will incur if the anticipated prices are

paid for goods and services and the usage corresponds to that believed to be necessary to produce the planned output.

Variance

- The difference between standard cost and actual cost of the actual output is defined as Variance. A variance may be favourable or unfavourable. If the actual cost is less than the standard cost, the variance is favourable and if the actual cost is more than the standard cost, the variance will be unfavourable.

- It is not enough to know the figures of these variances infact it is required to trace their origin and causes of occurrence for taking necessary remedial steps to reduce / eliminate them.

Controllable and uncontrollable Variance

The purpose of standard costing reports is to investigate the reasons for significant variances so as to identify the problems and take corrective action. Variances are broadly of two types, namely, controllable and uncontrollable.

Controllable variances are those which can be controlled by the departmental heads whereas uncontrollable variances are those which are beyond their control. If uncontrollable variances are of significant nature and are persistent, the standards may need revision.

Variance Analysis

Variance analysis is the analysis of the cost variance into its component parts with appropriate justification of such variances, so that we can approach for corrective measures.

Variances of Efficiency:

- Variance due to the effective or

ineffective use of material quantities, labour hours, once actual quantities are compared with predetermined standards.

Variances of Price Rates:

- Variances arising due to change in unit material prices, standard labour hour rates and standard allowances for indirect costs.

Variances of Due to volume:

- Variance due to effect of difference between actual activity and the level of activity assumed when the standard was set.

Analysis of Variance

- Material Variance
- Labour Variance
- Overhead Variance
- Sales Variance

Reasons of Material Variance

- Change in Basic price
- Fail to purchase anticipated standard quantities at appropriate price
- Use of sub-standard material
- Ineffective use of materials
- Pilferage

Material Variance

- Material Cost Variance= (Standard Quantity X Standard Price) – (Actual Quantity X Actual Price)
- Material Price Variance= Actual Quantity (Standard Price - Actual Price)
- Material Usage Variance= Standard Price (Standard Quantity - Actual Quantity)

Reasons of Labour Variance

- Change in design and quality standard
- Poor working conditions
- Improper scheduling
- Improper placement of labour
- Increments / high labour wages
- Overtime

Labour Variance

- Labour Cost Variance=(Standard Hrs X Standard Rate Per Hour) – (Actual Hrs X Actual Rate Per Hour)
- Labour Rate Variance= Actual Hrs (Standard Rate - Actual Rate)
- Labour efficiency Variance= Standard Rate (Standard Hrs - Actual Hrs worked)
- Idle Time Variance= Idle Hours X Standard Rate

Reasons of Overheads Variance

- Improper planning
- Under or over absorption of fixed overheads
- Reduction of sales
- Breakdowns
- Power Failure

Variable Overheads (OH) Variance

- Variable OH Cost Variance= (Standard Hrs X Standard Variable OH Rate) – Actual OH Cost
- Variable OH Expenditure Variance= (Actual Hrs X Standard Variable OH Rate) – Actual OH Cost
- Variable OH Efficiency Variance= (Standard Hrs - Actual Hrs) X Standard Variable OH Rate

Fixed Overheads (OH) Variance

- Fixed OH Cost Variance= Absorbed OH – Actual Fixed OH Cost
- Fixed OH Expenditure Variance= (Budgeted Hrs X Standard Fixed OH Rate) – Actual Fixed OH Cost
- Fixed OH Volume Variance= (Standard Qty - Actual Qty) X Standard Fixed OH Rate

Reasons of Sales Variance

- Change in price
- Change in Market size
- Change in Market share

Sales Variance

- Sales Value Variance =

  Budgeted Sales – Actual Sales
- Sales Price Variance =

  Actual Quantity (Actual Price - Budgeted Price)
- Sales Volume Variance =

  Budgeted Price (Actual Quantity - Budgeted Quantity)

Advantages & Disadvantages of Standard costing

Advantages

- Basis for sensible cost comparisons
- Employment of management by exception

Disadvantages

- Too comprehensive to be useful
- Precise estimation of prices or rate to paid is not possible

- Means of performance evaluation for employees
- Result in more stable product cost

- May not be useful if frequent change in technology
- Focus on cost minimization rather than quality or service.