

Standard Costing

General

The idea is to set a standard for cost based on experience and historical data. This standard can then be used to cost inventory and as a performance assessment measure to see how actuals compare to the expected standard.

Variable Production overheads

1. **Expenditure** - $(AH \times SR) - \text{Actual cost} = (\text{adverse}) / \text{favorable}$
< What **should** the cost be vs what **did** it cost >
 1. **Efficiency** - $(SH - AH) \times SR = (\text{adverse}) / \text{favorable}$
< Hours **expected** vs **actual** hours >
- KN** - No split if changes in overheads is inline with production volume.

Fixed Production Overheads

1. **Expenditure** - Budgeted Overheads - Actual = (adverse) / favorable.
2. **Volume** - Budgeted Production x SR - Actual Production x SR = (adverse) / favorable.
3. **Volume Efficiency** - $(SH - AR) \times SR = (\text{adverse}) / \text{favorable}$.
4. **Volume Capacity** - $(\text{Budgeted Hours} - \text{Actual Hours}) \times SR = (\text{Favorable}) / \text{adverse}$

Material Variance

1. **Price** - $(AQ \times SP) - (AP \times AQ) = (\text{adverse}) / \text{Favorable}$
< What **should** it have cost vs what **did** it cost >
2. **Usage** - $(SQ - AQ) \times SR = (\text{adverse}) / \text{favorable}$
< How many **should** you have used vs what **did** your use >

Labour Variances

1. **Rate** - $(AH \times SP) - (AH \times AR) = (\text{adverse}) / \text{favorable}$
< What **should** it cost vs what **did** it cost >
1. **Idle Time** - Idle hours x SR = (adverse)
2. **Efficiency** - $(SH - AH) \times SR = (\text{adverse}) / \text{favorable}$
< Hours that **should** have been used vs **actually** used >

- AQ = ACTUAL QUANTITY
- SP = STANDARD PRICE
- AP = ACTUAL PRICE
- AH = ACTUAL HOURS
- AR = ACTUAL RATE
- SH = STANDARD HOURS

Sales Variance

1. **Price** - $(AU - SR) - \text{Sales} = (\text{Favorable}) / \text{adverse}$
< What revenue **should be** at the **SP** vs what it **actually** was >
2. **Volume** - $(\text{Budgeted Volumes} - \text{Actual Volume}) \times SP = (\text{favorable}) / \text{adverse}$
< effect on **profit** due to increase / decrease in sales volume >

Standard Costing

Mix Variance

1. Calculate your **standard** mix
2. Calculate your **actual** mix
3. Deduct 1 from 2 x SR

This variance tells us the variance in the formula applied i.e different amounts of inputs to the standard formula.

Discussion Notes

1. Think logically about the **variance** and what it **tells** you.
2. Think about the **inputs** and what **affects** those **inputs**.
3. Key things to comment on:
 - Quality of materials.
 - Economic conditions affecting stakeholders
 - Unforeseen events

Usage Variance

Where there are **Normal Losses:**
 $(\text{Actual output} / (100\% - \text{Loss}\%) \times \text{Standard Mix} - \text{Actual}) \times \text{SR}$

Where a **material** mix is used.

Top 4 reasons for variances

1. Measurement **errors**
2. Out of **date** standards
3. Random / unexpected **fluctuations**
4. Efficient / **Inefficient** operations
5. **Efficient** / Inefficient **controls**

Sales

Sales Quantity - $(\text{Actual Sales} \times \text{Budgeted Sales Mix} - \text{Budgeted Sales Units}) \times \text{SR}$

Sales Mix - $(\text{Actual Sales} \times \text{Standard Mix} - \text{Actual Mix}) \times \text{SR}$

- AQ = ACTUAL QUANTITY
- SP = STANDARD PRICE
- AP = ACTUAL PRICE
- AH = ACTUAL HOURS
- AR = ACTUAL RATE
- SH = STANDARD HOURS

Yield Variance

$(\text{Material Used}) / (100\% - \text{normal loss \%}) - \text{Actual Yield}) \times \text{SR}$

Think based on my standard how much **should** I have made based on my production vs how much I **actually** made.