Management Accounting Decision and Control

Lesson 1 – Management Accounting Techniques and Standard Costing – Direct Costs

High Low Technique

- The High Low Technique enables us to find the fixed and variable cost elements within a semi variable cost
- Once we have found both of these elements, we can use them to calculate the total cost for any given level of output
- Whilst we have used the High Low Technique before, we may now also be required to incorporate stepped fixed costs or quantity discounts to variable costs into our calculations

Standard Costing

- Standard costing calculates the standard cost of each element of a product or service so that a total standard cost can be calculated

- Advantages of standard costing are that it helps with:

- **Decision making** – deciding how much to charge for a product or service

- **Planning** – deciding how much material and labour are needed

- **Monitoring and controlling costs** – calculating variances and taking corrective action where necessary

Setting Standards

- When using standard costing it is necessary to set standards – these show what is expected to happen
- Standards that can be used are:
- **Ideal Standard** – assumes the business operates in perfect conditions with no inefficiencies or wastage – can be demotivating to staff if used
- **Attainable Standard** – allows for a small amount of inefficiencies or wastage to reflect realistic operating conditions – should be challenging but attainable
- **Basic Standard** – historical information from when the standard was first set that is often out of date

Standard Costing and Variances

- There will often be differences between the standard costs and actual costs which are the cost variances
- When variances are calculated, it is important to see whether or not it is necessary to take corrective action
- **Control limits** can be used to show where variances are acceptable (and do not need further investigation) and where variances are not acceptable (and need further investigation)
- It is also important to look at **trends** even if the variances are within the control limits as they might show, for instance, decreasing labour efficiency

Modifying Standards

- Where variances exist, it is important for a business to investigate whether the variances are due to short term changes or long term changes
- Where the variances are due to short term changes, the standard should remain the same, but the situation should be monitored. An example of a short term change could be where a material price variance arises due to having to temporarily use an alternative supplier which is more expensive
- Where the variances are due to long term changes, the standard should be modified to reflect the new situation. An example of a long term change is where the minimum wage increases significantly which would otherwise result in adverse labour rate variances

Completing Standard Cost Cards

- To calculate the standard cost of one unit of product or service a business will need to produce a standard cost card
- This will include both the direct and indirect costs for each unit
- The standard cost card sets out the standard costs which the business will then monitor its actual costs against to calculate variances

Direct Material Variances

- The main direct materials variance is the **Total Direct Material Variance**
- This is calculated as:
- ***Standard cost of materials for the actual production level less actual cost of materials for the actual production level***
- This can be broken down into the following direct materials sub-variances:
- **Direct Material Price Variance**
- **Direct Material Usage Variance**

Direct Material Price Variance

- This compares what the actual material bought should have cost with what the actual material bought did cost

- This is calculated as:

- ***Standard cost of actual quantity of material used less actual cost of actual quantity of material used***

Direct Material Price Variance

- Causes of the Direct Material Price Variance can include:
- Market driven increase or decrease in the price of direct materials
- Change of supplier which is more or less expensive
- Change in quality of material purchased (higher or lower quality material)
- Purchasing a more expensive material to serve the same purpose

Direct Material Usage Variance

- This compares how much direct material the actual production level should have used with how much direct material the actual production level did use
- The answer is then multiplied by the standard direct material price per unit
- This is calculated as:
- ***Standard quantity of material for actual production at standard price less actual quantity of material used at standard price***

Direct Material Usage Variance

- Causes of the Direct Material Usage Variance can include:
- Higher or lower levels of wastage than expected
- This is normally due to:
- More or less experienced staff (more experience tends to equal less wastage)
- Higher or lower quality materials (higher quality materials equal less wastage)

Direct Labour Variances

- The main direct labour variance is the **Total Direct Labour Variance**
- This is calculated as:
- ***Standard cost of labour for the actual production level less actual cost of labour for the actual production level***
- This can be broken down into the following direct labour sub-variances:
- **Direct Labour Rate Variance**
- **Direct Labour Efficiency Variance**

Direct Labour Rate Variance

- This compares what the actual direct labour hours worked should have cost with what the actual direct labour hours worked did cost

- This is calculated as:

- ***Standard cost of actual direct labour hours worked less actual cost of actual direct labour hours worked***

Direct Labour Rate Variance

- Causes of the Direct Labour Rate Variance can include:
- Pay increases and bonuses for staff not factored into standard costs
- Additional overtime being worked, often at enhanced rates
- Using agency staff to cover for staff absences or shortages
- Hiring more or less qualified and experienced staff than planned

Direct Labour Efficiency Variance

- This compares how many direct labour hours the actual production level should have taken with how many direct labour hours the actual production level did take

- The answer is then multiplied by the standard direct labour cost per hour

- This is calculated as:

- ***Standard number of direct labour hours for actual production at standard direct labour cost per hour less actual number of direct labour hours used at standard direct labour cost per hour***

Direct Labour Efficiency Variance

- Causes of the Direct Labour Efficiency Variance can include:
- Hiring more or less qualified and experienced staff
- Using higher or lower quality of direct materials
- How much are staff used to the specific processes and machinery for the job
- Levels of motivation of the workforce and how well they are supervised
- Unplanned events – for instance running out of direct materials, machines breaking down or power cuts