

## VARIANCE ANALYSIS

Control can be said to be of 3 steps:-

- \* Establishment of Standards.
- \* Evaluation of Activity.
- \* Taking Corrective Action (if any).

The first step has given rise to the concept of standard costing.

Standard costing can be applied to any facet of management especially in relation to production and labour & over head cost.

Standard recipe, standard food cost, standard yield, standard man-hours, time & motion study, *are* all outcomes of standard costing,

Standard costing is also known as pre-costing i.e. costing before the event.

When actual operation is undertaken i.e. the *second* step which is evaluation of activity there are some variations which happen which in management terms is termed as variances. Variances can be Adverse and Favourable.

This analysis and taking corrective action is the management function which is known as Variance Analysis.

Any cost function which *can* be budgeted *can* be subjected to Variance Analysis viz.:-

- \* Sales.
- \* Marketing.
- \* Labour.
- \* Material.
- \* Overhead.
- \* Profit.

Material Variance can be classified into:-

### Material Price Variance

This type of variance occurs when the materials are supplied at different prices over a period (accounting cycle). This type of price variance does not occur much in hotels where tender purchase is followed and food materials are supplied at a uniform price over a period of time.

The mathematical calculation is as follows:-  
(Standard Price - Actual Price) X Actual Quantity

### **Material Usage Variance**

This type of Variance is very common in hotel operations, as much of the materials are fabricated by human beings who are more susceptible to errors. (In other organized industries a lot of machines are used for fabricating materials).

The mathematical calculation is as follows:-  
(Standard Material - Actual Material used) X Actual Price.

### **Labour variance can be classified as under:**

- 1) Labour rate variance : is the difference between the standard and actual rate of pay, multiplied by the actual hours.  
The formula being (Standard rate-Actual rate) X actual hours worked.
- 2) Labour efficiency variance : is due to actual efficiency being different from that expected and is calculated as the difference between actual hours worked and the hours which should have been worked to produce the actual output.  
The formula is (Standard hours of actual output – Actual hours) X Standard rate.

### **Overhead variances are as follows**

- 1) Over head variance is the difference between standard overhead cost for actual output and the actual overhead cost incurred.  
The formula for computing the variance is as follows: Overhead recovered –Actual Overhead.
- 2) Fixed overhead Variance is the difference between the standard fixed overhead for actual output and the actual fixed overhead incurred.  
The formula is as follows: Fixed overhead recovered –Actual over head.

### **Sales Variance**

The technique of variance analysis can be effectively used for the purpose of analyzing sales variance. Sales variance can be used to identify the reasons for divergence between budgeted and actual performance so that adequate control measures may be taken.

There are two methods for calculating sales variances:

- 1) On the basis of turn over (sales) and the formula is : Budgeted sales - Actual sales.
- 2) On the basis of profit margin and the formula is : Budgeted profit – Actual profit.

As far as F & B Operation is concerned we are mainly concerned about Material Variance which is food material.

Similarly labour and overhead variances could be calculated and analysed but strictly it is an area of the Human Resource Department (Labour) & Maintenance Department (Overhead). In small organizations it may be handled by the Sectional Manager also.

#### **Advantages of Variance Analysis or Standard Costing**

- \* It gives a standard for measurement.
- \* It gives an objective to be achieved.
- \* It has given birth to the concepts of:
  1. Standard Purchase Specification
  2. Standard Recipe
  3. Standard yield
  4. Standard Portion Cost

#### **Disadvantages of Variance Analysis / Standard Cost**

- \* Discourages Creativity. Expensive and time consuming.
- \* Cannot be accurately measured in multi-product operations where the same ingredient is used in many products.
- \* It is a step done after the job where rectification is only possible for future events.
- \* Unutilized portions of food cannot be effectively reutilized.