

F&B SERVICE MANAGEMENT
UNIT- 7
VARIANCE ANALYSIS



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A variance occurs when expenses such as revenue or labour are either more or less than what the company anticipated and budgeted for. Hospitality businesses such as hotels and restaurants can experience variances due to occupancy rates, check sizes, supply costs or labour costs being different than expected. Variances are analyzed to determine exactly how much these differences have impacted revenue and profits.

Variances may be favourable (F) or unfavourable (U) in terms of their effect on the profitability of the business.



UNIT- 7 VARIANCE ANALYSIS

VARIANCES

If your restaurant anticipates serving 5,000 meals with an average check size of \$20, your anticipated revenue would be \$100,000. If you end up serving only 3,500 meals, but the average check size is \$25, your revenue would be \$87,500. The difference between your expected revenue and your actual revenue is called the variance. In this case, there would be a negative revenue variance of \$12,500. If you end up having higher-than-anticipated revenues, you would have a positive revenue variance.



UNIT- 7 VARIANCE ANALYSIS

ANALYSIS

Variance analysis allows the owner or manager to determine what caused the variance. For example, if a hotel expected labour costs to total \$50,000 but ended up paying \$55,000, a variance analysis would be conducted to determine what happened. If the hotel's estimate was based on renting 10,000 rooms and paying the cleaning staff \$10 an hour to clean them, with an estimated cleaning time of half an hour, differences in any of these factors could have caused the variance. If the analysis determines that the hotel rented as many rooms as anticipated and paid the same hourly rate as anticipated, the variance can only have occurred because the rooms took longer than half an hour to clean.



UNIT- 7 VARIANCE ANALYSIS

SIGNIFICANCE

Variance analysis makes it possible for owners and managers in the hospitality industry to make the correct strategic decisions needed to overcome problems before they cut into profits too much. If you don't conduct a variance analysis when a significant variance occurs, you have nothing other than guesswork to guide you. You cannot know whether to address the variance by charging higher rates, finding a more affordable supplier, controlling labour costs or improving occupancy rates unless you do a variance analysis to find out exactly what happened and why.

CH: 1 & 2.
STANDARD COST & COSTING





CH: 1 & 2. STANDARD COST & COSTING

STANDARD COSTS

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.

A standard cost has been described as a *predetermined cost*, an *estimated future cost*, an *expected cost*, a *budgeted unit cost*, a *forecast cost*, or a “*should be*” cost. Standard costs are often a part of a manufacturer’s annual profit plan and operating budgets. Standard costs will be established for the following year’s direct materials, direct labour, and manufacturing overhead.



CH: 1 & 2. STANDARD COST & COSTING

If standard costs are used, there will be:

- ❖ a standard cost for each unit of input (e.g., \$20 per hour of direct labour)
- ❖ a standard quantity of each input for each unit of output (e.g., 2 hours of labour for each product)
- ❖ a standard cost for each unit of output (e.g., \$20 X 2 hours = \$40 of direct labour per product)



CH: 1 & 2. STANDARD COST & COSTING

STANDARD COSTING

Standard costing is the practice of substituting an expected cost for an actual cost in the accounting records, and then periodically recording variances showing the difference between the expected and actual costs. This approach represents a simplified alternative to cost layering systems, such as the FIFO and LIFO methods, where large amounts of historical cost information must be maintained for items held in stock.

Standard costing involves the creation of estimated (i.e., standard) costs for some or all activities within a company. The core reason for using standard costs is that there are a number of applications where it is too time-consuming to collect actual costs, so standard costs are used as a close approximation to actual costs.



CH: 1 & 2. STANDARD COST & COSTING

ADVANTAGES OF STANDARD COSTING

Though most companies do not use standard costing in its original application of calculating the cost of ending inventory, it is still useful for a number of other applications. In most cases, users are probably not even aware that they are using standard costing, only that they are using an approximation of actual costs. Here are some potential uses:

- ❖ Budgeting
- ❖ Inventory costing.
- ❖ Overhead application
- ❖ Price formulation.



CH: 3 TO CH: 9 TYPES OF VARIANCE





CH: 3 TO CH: 9 TYPES OF VARIANCE

1. COST VARIANCES

A cost variance is a difference between an actual expenditure and the expected (or budgeted) expenditure. A cost variance can relate to virtually any kind of expense, ranging from elements of the cost of goods sold to selling or administrative expenses. This variance is most useful as a monitoring tool when a business is attempting to spend in accordance with the amounts stated in its budget.

The cost variance formula is usually comprised of two elements, which are:

- ❖ **VOLUME VARIANCE.** This is the difference in the actual versus expected unit volume of whatever is being measured, multiplied by the standard price per unit.
- ❖ **PRICE VARIANCE.** This is the difference between the actual versus the expected price of whatever is being measured, multiplied by the standard number of units.



CH: 3 TO CH: 9 TYPES OF VARIANCE

2. MATERIAL VARIANCES

The difference between the standard cost of direct materials and the actual cost of direct materials that an organization uses for production is known as Material Variance.

Material Cost Variance Formula:

Standard Cost – Actual Cost

In other words, (Standard Quantity x Standard Price) – (Actual Quantity x Actual Price)

Material Variance is further sub-divided into two heads:

❖ MATERIAL PRICE VARIANCE:

MPV = (Standard Price – Actual Price) x Actual Quantity

❖ MATERIAL USAGE VARIANCE:

MUV = (Standard Quantity – Actual Quantity) x Standard Price



CH: 3 TO CH: 9 TYPES OF VARIANCE

3. LABOUR VARIANCES

Labor Variance arises when there is a difference between the actual cost associated with a labour activity from the standard cost.

Labor Variance Formula:

Standard Wages – Actual Wages

In other words, (Standard Hours x Standard Rate) – (Actual Hours x Actual Rate)

Labor Variance is further sub-divided into two heads:

❖ LABOR RATE VARIANCE:

LRV = (Standard Rate – Actual Rate) x Actual Hours

❖ LABOR EFFICIENCY VARIANCE:

LEV = (Actual Hours – Standard Hours) x Standard Rate



CH: 3 TO CH: 9 TYPES OF VARIANCE

4, OVERHEAD (VARIABLE) VARIANCE

Variable Overhead Variance arises when there is a difference between the actual variable overhead and the standard variable overhead based on budgets.

Variable Overhead Variance Formula:

Standard Variable Overhead – Actual Variable Overhead

In other words, (Standard Rate – Actual Rate) x Actual Output

Variable Overhead Variance is further sub-divided into two heads:

❖ VARIABLE OVERHEAD EFFICIENCY VARIANCE:

VOEV = (Actual Output – Standard Output) x Standard Rate

❖ VARIABLE OVERHEAD EXPENDITURE VARIANCE:

VOEV = (Standard Output x Standard Rate) – (Actual Output x Actual Rate)



CH: 3 TO CH: 9 TYPES OF VARIANCE

5. FIXED OVERHEAD VARIANCE

It arises when there is a difference between the standard fixed overhead for actual output and the actual fixed overhead.

Fixed Overhead Variance Formula:

= (Actual Output x Standard Rate per unit) – Actual Fixed Overhead

Fixed Overhead Variance is further sub-divided into two heads:

❖ FIXED OVERHEAD EXPENDITURE VARIANCE:

FOEV = Standard Fixed Overhead – Actual Fixed Overhead

❖ FIXED OVERHEAD VOLUME VARIANCE:

FOVV = (Actual Output x Standard Rate per unit) – Standard Fixed Overhead



CH: 3 TO CH: 9 TYPES OF VARIANCE

6. SALES VARIANCE

Sales Variance is the difference between the actual sales and budgeted sales of an organization.

Sales Variance Formula:

$$= (\text{Budgeted Quantity} \times \text{Budgeted Price}) - (\text{Actual Quantity} \times \text{Actual Price})$$

Sales Variance is further sub-divided into two heads:

❖ SALES VOLUME VARIANCE:

$$\text{SVV} = (\text{Budgeted Quantity} - \text{Actual Quantity}) \times \text{Budgeted Price}$$

❖ SALES PRICE VARIANCE:

$$\text{SPV} = (\text{Budgeted Price} - \text{Actual Price}) \times \text{Actual Quantity}$$



CH: 3 TO CH: 9 TYPES OF VARIANCE

7. PROFIT VARIANCE

Profit variance is the difference between the actual profit experienced and the budgeted profit level. There are four types of profit variance, which are derived from different parts of the income statement. They are:

- ❖ **GROSS PROFIT VARIANCE.** This measures the ability of a business to generate a profit from its sales and manufacturing capabilities, including all fixed and variable production costs.
- ❖ **CONTRIBUTION MARGIN VARIANCE.** This is the same as the gross profit variance, except that fixed production costs are excluded.



CH: 3 TO CH: 9 TYPES OF VARIANCE

- ❖ **OPERATING PROFIT VARIANCE.** This only measures the results of operations; it excludes all financing and extraneous gains and losses. This variance provides the best view of how the core operations of a business are functioning.
- ❖ **NET PROFIT VARIANCE.** This is the most commonly-used version of the profit variance. It encompasses all aspects of a company's financial results, without exception.



Thank
you.