Unit-6 Managerial and Cost Accounting

concept of cost in accounting

In accounting, the concept of cost refers to the monetary value assigned to resources or assets used or consumed in the production of goods or services. It represents the expenses incurred by a business to acquire, produce, or deliver its products or services. Cost is a fundamental concept in accounting as it helps determine the profitability of a business and aids in decision-making processes. Here are key aspects of the concept of cost in accounting:

1. Cost Classification: Costs can be classified into various categories based on their nature and purpose. Common cost classifications include direct costs (easily traceable to a specific product or service) and indirect costs (not directly traceable to a specific product or service), fixed costs (remain constant regardless of production or sales volume) and variable costs (vary based on production or sales volume), and product costs (costs directly associated with producing goods) and period costs (costs not directly linked to production and expensed in the period incurred).

2. Cost Measurement: Costs are measured and recorded in monetary terms to reflect the value of resources utilized or consumed. Accurate measurement of costs enables businesses to track and control expenses, determine the profitability of products or services, and assess the efficiency of operations.

3. Cost Accumulation: Businesses accumulate costs through various methods, such as job costing, process costing, or activity-based costing. These methods help allocate costs to specific products, services, departments, or activities, providing insights into the cost drivers and helping in cost control and decision-making.

4. Cost Control: Effective cost control is essential for businesses to manage expenses and optimize profitability. By monitoring and analyzing costs, businesses can identify areas of inefficiency, implement cost reduction strategies, and improve operational performance.

5. Cost Reporting: Costs are reported in financial statements, such as the income statement, balance sheet, and statement of cash flows. The income statement shows the cost of goods sold and operating expenses, reflecting the cost incurred to generate revenue. The balance sheet may include the value of inventory or assets acquired at their cost, and the statement of cash flows reflects cash outflows related to costs.

6. Cost Behavior: Understanding the behavior of costs is crucial for planning, budgeting, and decision-making. Costs can be classified as fixed, variable, or mixed (both fixed and variable components). Analyzing cost behavior helps in forecasting future expenses, setting prices, determining break-even points, and evaluating the impact of changes in volume or activity levels.

By considering the concept of cost in accounting, businesses can gain valuable insights into their financial performance, make informed decisions, and improve overall efficiency and profitability.

classifications and types of costs:

Costs can be classified into various categories based on different criteria. Here are some common classifications and types of costs:

1. Based on Nature or Function:

a. Direct Costs: These costs are directly attributable to a specific product, service, or cost object. Examples include the cost of raw materials, direct labor, and direct expenses.

b. Indirect Costs: Also known as overhead costs, these costs are not directly traceable to a specific product or service but are incurred to support overall operations. Examples include rent, utilities, salaries of support staff, and depreciation.

2. Based on Behavior:

a. Fixed Costs: These costs remain unchanged within a certain range of activity or production volume. Examples include rent, salaries of permanent staff, and insurance premiums.

b. Variable Costs: Variable costs vary in direct proportion to the level of activity or production volume. Examples include the cost of raw materials, direct labor tied to production, and sales commissions.

c. Semi-Variable Costs: Also known as mixed costs, these costs have both fixed and variable components. Examples include utility bills (fixed base charge plus variable usage charge) and telephone bills (fixed line rental plus variable call charges).

3. Based on Traceability to Products or Services:

a. Product Costs: These costs are directly associated with the production or acquisition of goods. They include direct materials, direct labor, and manufacturing overhead. Product costs are initially recorded as inventory and later expensed as cost of goods sold when the products are sold.

b. Period Costs: Period costs are not directly tied to the production process but are incurred over a specific period of time. They are expensed in the period they are incurred. Examples include selling and marketing expenses, administrative expenses, and research and development costs.

4. Based on Decision-Making Relevance:

a. Differential Costs: These costs represent the difference in costs between two or more alternative courses of action. They help in making decisions by comparing the costs and benefits of different options.

b. Opportunity Costs: Opportunity costs represent the potential benefit forgone by choosing one alternative over the next best alternative. They are the value of the best alternative that is not chosen.

c. Sunk Costs: Sunk costs are costs that have already been incurred and cannot be changed or recovered. They are irrelevant for decision-making since they are already spent.

These are just some of the common classifications and types of costs in accounting. Businesses may have specific cost classifications based on their industry, operations, and reporting requirements. It is important for businesses to accurately identify, classify, and analyze costs to effectively manage expenses, make informed decisions, and assess profitability.

preparation of a cost sheet

The preparation of a cost sheet is an important process in cost accounting that helps businesses analyze and understand the costs associated with producing a specific product or providing a service. A cost sheet provides a detailed breakdown of various cost elements, allowing management to make informed decisions regarding pricing, cost control, and profitability. Here are the key steps involved in preparing a cost sheet:

1. Identify the Cost Elements: Determine the different cost elements that contribute to the production or provision of the product or service. Common cost elements include direct materials, direct labor, manufacturing overhead, and any other relevant expenses specific to the product or service.

2. Collect Cost Data: Gather the necessary data related to each cost element. This may involve reviewing purchase invoices for materials, tracking labor hours and rates, and analyzing overhead costs based on allocated expenses or cost drivers.

3. Classify Costs: Classify the costs into various categories, such as direct costs and indirect costs, fixed costs and variable costs, and prime costs and overhead costs. This classification helps in understanding the cost structure and facilitates analysis.

4. Calculate Direct Costs: Calculate the direct costs associated with the product or service. This includes the cost of direct materials and direct labor. Direct materials cost can be determined by multiplying the quantity used by the cost per unit, while direct labor cost is calculated by multiplying the labor hours spent by the labor rate per hour.

5. Determine Manufacturing Overhead: Calculate the manufacturing overhead costs that cannot be directly attributed to the product or service. This may include items such as factory rent, utilities, depreciation, and indirect labor. Manufacturing overhead can be allocated using predetermined rates, based on factors like machine hours, labor hours, or production volume.

6. Summarize and Calculate Total Cost: Summarize the costs of direct materials, direct labor, and manufacturing overhead to determine the total cost of production. This total cost represents the expenses incurred in producing one unit of the product or providing the service.

7. Prepare Cost Sheet: Present the calculated costs in a structured format known as the cost sheet. The cost sheet typically includes the product or service details, the quantities of materials used, labor hours, rates, overhead costs, and the total cost per unit.

8. Analysis and Decision-Making: Analyze the cost sheet to gain insights into the cost components, cost drivers, and overall profitability. The cost sheet provides valuable information for pricing decisions, cost control measures, and evaluating the financial viability of the product or service.

It's important to note that the specific format and content of the cost sheet may vary based on the organization's requirements and industry practices. The cost sheet is a dynamic tool that should be updated regularly to reflect changes in costs and production processes.

What are Overheads?

Overheads are business costs that are related to the day-to-day running of the business. Unlike operating expenses, overheads cannot be traced to a specific cost unit or business activity. Instead, they support the overall revenue-generating activities of the business.

For example, a vehicle retail company pays a premium rent for business space in an area with additional space to accommodate a showroom. The premium rent is one of the overhead costs of the business. A business must pay its overhead costs on an ongoing basis, regardless of whether its products are selling or not.

Types of Overheads

There are three main types of overhead that businesses incur. The overhead expenses vary depending on the nature of the business and the industry it operates in.

1. Fixed overheads

Fixed overheads are costs that remain constant every month and do not change with changes in business activity levels. Examples of fixed overheads include salaries, rent, property taxes, depreciation of assets, and government licenses.

2. Variable overheads

Variable overheads are expenses that vary with business activity levels, and they can increase or decrease with different levels of business activity. During high levels of business activity, the expenses will increase, but with reduced business activities, the overheads will substantially decline or even be eliminated.

Examples of variable overheads include shipping costs, office supplies, advertising and marketing costs, consultancy service charges, legal expenses, as well as maintenance and repair of equipment.

3. Semi-variable overheads

Semi-variable overheads possess some of the characteristics of both fixed and variable costs. A business may incur such costs at any time, even though the exact cost will fluctuate depending on the business activity level. A semi-variable overhead may come with a base rate that the company must pay at any activity level, plus a variable cost that is determined by the level of usage.

Examples of semi-variable overheads include sales commissions, vehicle usage, and some utilities such as power and water costs that have a fixed charge plus an additional cost based on the usage.

Examples of Overhead Costs

Overhead costs are important in determining how much a company must charge for its products or services in order to generate a profit. The most common overhead costs that any business incur include:

1. Rent

Rent is the cost that a business pays for using its business premises. If the property is purchased, then the business will book depreciation expense.

Rent is payable monthly, quarterly, or annually, as agreed in the tenant agreement with the landlord. When the business is experiencing slow sales, it can reduce this cost by negotiating the rental charges or by moving to less expensive premises.

2. Administrative costs

Administrative costs are costs related to the normal running of the business and may include costs incurred in paying salaries to a receptionist, accountant, cleaner, etc. Such costs are treated as overhead costs since they are not directly tied to a particular function of the business and they do not directly result in profit generation. Rather, administrative costs support the general running of the business.

Examples of administrative costs may include audit fees, legal fees, employee salaries, and entertainment costs. A business can reduce administrative expenses by laying off some of its employees, switching employees from full-time to part-time, hiring employees on a contract basis, or by eliminating certain expenses, such as entertainment and office supplies.

3. Utilities

Utilities are the basic services that the business requires to support its main functions. Examples of utilities include water, gas, electricity, internet, sewer, and phone service.

A business may be able to reduce utility expenses by negotiating for lower rates from suppliers.

4. Insurance

Insurance is a cost incurred by a business to protect itself from financial loss. There are various types of insurance coverage, depending on the risk that may cause loss to the business. For example, a business may purchase property insurance to protect its property or business premises from certain risks such as flood, damage, or theft.

Another type of insurance is professional liability insurance that protects the business (such as an accounting firm or law firm) from liability arising from malpractice. Other types of insurance include health insurance, home insurance, renter’s insurance, flood insurance, life insurance, disability insurance, etc.

5. Sales and marketing

Sales and marketing overheads are costs incurred in the marketing of a company’s products or services to potential customers. Examples of sales and marketing overheads include promotional materials, trade shows, paid advertisements, wages of salespeople, and commissions for sales staff.

The activities are geared toward making the company's products and services popular among customers and to compete with similar products in the market.

6. Repair and maintenance of motor vehicles and machinery

Rent and maintenance overheads are incurred in businesses that rely on motor vehicles and equipment in their normal functions. Such businesses include distributors, parcel delivery services, landscaping, transport services, and equipment leasing.

Motor vehicles and machinery need to be maintained on a continuous basis and repaired whenever they break down.

Marginal Costing: Meaning, Features, Advantages and Limitations

Meaning of Marginal Costing:

Marginal costing is **"The ascertainment, by differentiating between fixed cost and variable cost, of marginal cost and of the effect on profit of changes in volume or type of output".**

Under this technique all costs are classified into fixed costs and variable costs.

Only variable costs are considered product costs and are allocated to products manufactured. These costs include direct materials, direct labour, direct expenses and variable overhead. Fixed costs are not considered for computing the cost of products or valuation of inventory.

Fixed costs are mostly concerned with the period, hence they are called period costs and are written-off in the Costing Profit and Loss Account of the period in which they are incurred.

Features of Marginal Costing:

The main features of marginal costing may be summed up as:

(i) This technique is used to ascertain the marginal cost and to know the impact of variable costs on the volume of output.

(ii) All costs are classified on the basis of variability into fixed cost and variable cost. Semi-variable costs are segregated into fixed and variable costs.

(iii) Marginal (i.e., variable) costs are treated as the cost of the product or service. Fixed costs are charged to Costing Profit and Loss Account of the period in which they are incurred.

(iv) Stock of finished goods and work-in-progress are valued on the basis of marginal costs.

(v) Selling price is based on marginal cost plus contribution.

(vi) Profit is calculated in the usual manner. When marginal cost is deducted from sales it gives rise to contribution. When fixed cost is deducted from contribution it results in profit.

(vii) Break-even analysis and cost-volume profit analysis are integral parts of this technique.

(viii) The relative profitability of products or departments is based on the contribution made available by each department or product.

Advantages of Marginal Costing:

The advantages claimed for marginal costing are:

(i) The technique is simple to understand and easy to operate because it avoids the complexities of apportionment of fixed costs which, is really, arbitrary.

(ii) It also avoids the carry forward of a portion of the current period's fixed overhead to the subsequent period. As such cost and profit are not vitiated. Cost comparisons become more meaningful.

(iii) The technique provides useful data for managerial decision-making.

(iv) There is no problem of over or under-absorption of overheads.

(v) The impact of profit on sales fluctuations are clearly shown under marginal costing.

(vi) The technique can be used along with other techniques such as budgetary control and standard costing.

(vii) It establishes a clear relationship between cost, sales and volume of output and breakeven analysis.

(viii) It shows the relative contributions to profit which are made by each of a number of products, and shows where the sales effort should be concentrated.

(ix) Stock of finished goods and work-in-progress are valued at marginal cost, which is uniform.

Limitations of Marginal Costing:

Marginal costing suffers from the following limitations:

(i) Segregation of costs into fixed and variable elements involves considerable technical difficulty.

(ii) The linear relationship between output and variable costs may not be true at different levels of activity. In reality, neither the fixed costs remain constant nor do the variable costs vary in proportion to the level of activity.

(iii) The value of stock cannot be accepted by taxation authorities since it deflates profit.

(iv) This technique cannot be applied in the case of contract costing where the value of work-in-progress will always be high.

(v) This technique also cannot be used in the case of cost plus contracts unless fixed costs and profits are considered.

(vi) Pricing decisions cannot be based on contribution alone.

(vii) The elimination of fixed costs renders cost comparison of jobs difficult.

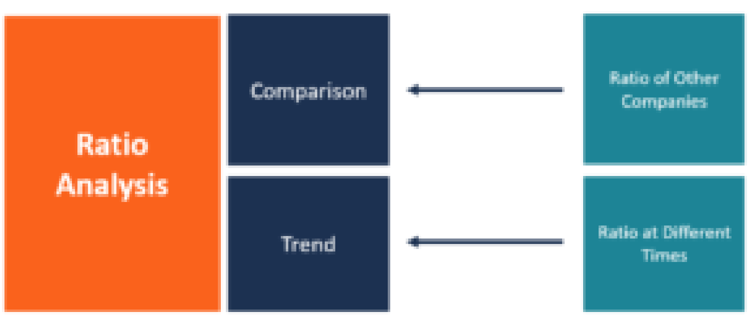
(viii) The distinction between fixed and variable costs holds good only in the short run. In the long run, however, all costs are variable.

(ix) With the increased use of automatic machinery, the proportion of fixed costs increases. A system which ignores fixed costs is, therefore, less effective.

(x) The technique need not be considered to be unique from the point of cost control.

What is Ratio Analysis?

Ratio analysis refers to the analysis of various pieces of financial information in the financial statements of a business. They are mainly used by external analysts to determine various aspects of a business, such as its profitability, liquidity, and solvency.



Analysts rely on current and past financial statements to obtain data to evaluate the financial performance of a company. They use the data to determine if a company's financial health is on an upward or downward trend and to draw comparisons to other competing firms.

Uses of Ratio Analysis

1. Comparisons

One of the uses of ratio analysis is to compare a company's financial performance to similar firms in the industry to understand the company's position in the market. Obtaining financial ratios, such as Price/Earnings, from known competitors and comparing it to the company's ratios can help management identify market gaps and examine its competitive advantages, strengths, and weaknesses. The management can then use the information to formulate decisions that aim to improve the company's position in the market.

2. Trend line

Companies can also use ratios to see if there is a trend in financial performance. Established companies collect data from the financial statements over a large number of reporting periods. The trend obtained can be used to predict the direction of future financial performance, and also identify any expected financial turbulence that would not be possible to predict using ratios for a single reporting period.

3. Operational efficiency

The management of a company can also use financial ratio analysis to determine the degree of efficiency in the management of assets and liabilities. Inefficient use of assets such as motor vehicles, land, and building results in unnecessary expenses that ought to be eliminated. Financial ratios can also help to determine if the financial resources are over- or under-utilized.

Ratio Analysis – Categories of Financial Ratios

There are numerous financial ratios that are used for ratio analysis, and they are grouped into the following categories:

1. Liquidity ratios

Liquidity ratios measure a company's ability to meet its debt obligations using its current assets. When a company is experiencing financial difficulties and is unable to pay its debts, it can convert its assets into cash and use the money to settle any pending debts with more ease.

Some common liquidity ratios include the quick ratio, the cash ratio, and the current ratio. Liquidity ratios are used by banks, creditors, and suppliers to determine if a client has the ability to honor their financial obligations as they come due.

2. Solvency ratios

Solvency ratios measure a company's long-term financial viability. These ratios compare the debt levels of a company to its assets, equity, or annual earnings.

Important solvency ratios include the debt to capital ratio, debt ratio, interest coverage ratio, and equity multiplier. Solvency ratios are mainly used by governments, banks, employees, and institutional investors.

3. Profitability Ratios

Profitability ratios measure a business' ability to earn profits, relative to their associated expenses. Recording a higher profitability ratio than in the previous financial reporting period shows that the business is improving financially. A profitability ratio can also be compared to a similar firm's ratio to determine how profitable the business is relative to its competitors.

Some examples of important profitability ratios include the return on equity ratio, return on assets, profit margin, gross margin, and return on capital employed.

4. Efficiency ratios

Efficiency ratios measure how well the business is using its assets and liabilities to generate sales and earn profits. They calculate the use of inventory, machinery utilization, turnover of liabilities, as well as the usage of equity. These ratios are important because, when there is an improvement in the efficiency ratios, the business stands to generate more revenues and profits.

Some of the important efficiency ratios include the asset turnover ratio, inventory turnover, payables turnover, working capital turnover, fixed asset turnover, and receivables turnover ratio.

5. Coverage ratios

Coverage ratios measure a business' ability to service its debts and other obligations. Analysts can use the coverage ratios across several reporting periods to draw a trend that predicts the company's financial position in the future. A higher coverage ratio means that a business can service its debts and associated obligations with greater ease.

Key coverage ratios include the debt coverage ratio, interest coverage, fixed charge coverage, and EBIDTA coverage.

6. Market prospect ratios

Market prospect ratios help investors to predict how much they will earn from specific investments. The earnings can be in the form of higher stock value or future dividends. Investors can use current earnings and dividends to help determine the probable future stock price and the dividends they may expect to earn.

Key market prospect ratios include dividend yield, earnings per share, the price-to-earnings ratio, and the dividend payout ratio.

Application of Ratio Analysis

The fundamental basis of ratio analysis is to compare multiple figures and derive a calculated value. By itself, that value may hold little to no value. Instead, ratio analysis must often be applied to a comparable to determine whether or a company's financial health is strong, weak, improving, or deteriorating.

Ratio Analysis Over Time

A company can perform ratio analysis over time to get a better understanding of the trajectory of its company. Instead of being focused on where it is today, the company is more interested n how the company has performed over time, what changes have worked, and what risks still exist looking to the future. Performing ratio analysis is a central part in forming long-term decisions and strategic planning.

To perform ratio analysis over time, a company selects a single financial ratio, then calculates that ratio on a fixed cadence (i.e. calculating its quick ratio every month). Be mindful of seasonality and how temporarily fluctuations in account balances may impact month-over-month ratio calculations. Then, a company analyzes how the ratio has changed over time (whether it is improving, the rate at which it is changing, and whether the company wanted the ratio to change over time).

Ratio Analysis Across Companies

Imagine a company with a 10% gross profit margin. A company may be thrilled with this financial ratio until it learns that every competitor is achieving a gross profit margin of 25%. Ratio analysis is incredibly useful for a company to better stand how its performance compares to similar companies.

To correctly implement ratio analysis to compare different companies, consider only analyzing similar companies within the same industry. In addition, be mindful how different capital structures and company sizes may impact a company's ability to be efficient. In addition, consider how companies with varying product lines (i.e. some technology companies may offer products as well as services, two different product lines with varying impacts to ratio analysis).

Different industries simply have different ratio expectations. A debt-equity ratio that might be normal for a utility company that can obtain low-cost debt might be deemed unsustainably high for a technology company that relies more heavily on private investor funding.

Ratio Analysis Against Benchmarks

Companies may set internal targets for their financial ratios. These calculations may hold current levels steady or strive for operational growth. For example, a company's existing current ratio may be 1.1; if the company wants to become more liquid, it may set the internal target of having a current ratio of 1.2 by the end of the fiscal year.

Benchmarks are also frequently implemented by external parties such lenders. Lending institutions often set requirements for financial health as part of covenants in loan documents. Covenants form part of the loan's terms and conditions and companies must maintain certain metrics or the loan may be recalled.

If these benchmarks are not met, an entire loan may be callable or a company may be faced with an adjusted higher rate of interest to compensation for this risk. An example of a benchmark set by a lender is often the debt service coverage ratio which measures a company's cash flow against it's debt balances.