SECTION
8

INTRODUCTION TO COST ACCOUNTING

Cost Accounting

Controlling Cost to Improve Organisational Performance

Introduction

In this section, we will explore the essential concepts of Cost Accounting, which is crucial for effective management and decision-making. We will cover the purpose and basic terminologies such as direct costs, indirect costs, fixed costs and variable costs. Understanding these concepts is key to developing cost management strategies. We will also classify costs based on common characteristics to understand cost structures better and examine the composition of costs in services and operations. By the end of the section, you should understand the importance of cost management and control in enhancing organisational performance.

At the end of this section, you will be able to

- Explain the purpose and basic terminologies used in cost accounting.
- Explain the composition of the cost of products, services and operations.

Key Ideas:

1. ***Cost Accounting*** is a branch of accounting that focuses on recording, classifying and analysing the costs associated with producing goods or providing services. Its main objective is to control and reduce costs, enhance decision-making and determine product profitability.
2. ***Cost Centre*** is a segment or area within an organisation where costs are incurred and tracked. It may be a department, machine, a person, time or specific activity.
3. ***Cost Unit*** is a unit of output or service to which costs can be allocated or measured. It represents the measure of quantity, such as a single product, service, or job, for which cost is calculated.
4. ***Unit Cost*** is the total cost incurred to produce a single unit of output. It is calculated by dividing the total cost by the number of units produced.
5. ***Cost Classification*** is the process of grouping costs based on their nature or purpose, such as direct and indirect costs, fixed and variable costs or product and period costs, to facilitate decision-making and control.
6. ***Element of Cost*** are the basic categories of costs that make up the total cost of production, typically classified into three elements: materials, labour and expenses
7. ***Direct Costs*** are made up of costs that can be directly traced to a specific product, service or cost object. These include expenses like direct materials and direct labour which are linked with the production of a particular good or service.

8. ***Indirect Cost*** are costs that cannot be directly traced to a single product or service and so are typically allocated across various products or departments. These costs support multiple cost objects and include expenses like factory overheads, utilities and administrative expenses

COST ACCOUNTING AND BASIC TERMINOLOGIES USED IN COST ACCOUNTING

Meaning and definition of cost accounting

Cost accounting is a form of management accounting and is the process by which all the costs of a business activity or production are examined to support effective decision making

Cost accounting records all incurred costs associated with the production of goods or provision of a service and enables businesses to track costs over time.

Functions of cost accounting

Cost accounting is used by business to:

1. Provide relevant information to management to support decision-making.
2. Assist management in planning, measuring and controlling business activities.
3. Allocate cost to products and services.
4. Help in the collection and accumulation of cost.
5. Set budgets and standards.
6. Evaluate the performance of departments.

Activity 8.1

1. In pairs, discuss the meaning of cost accounting and record your agreed definition.
2. Identify the functions of cost accounting.

   You could use a table such as the one below to record your responses.

Definition of cost accounting	
Functions of cost accounting	

3. Compare your answers with another pair for discussion and feedback.

Basic Cost Accounting Terminologies

To understand cost accounting, it is necessary to explain the terminology used in the process. Some basic terms are defined below:

Cost Centre

Cost centres allow businesses or departments to organise their accounts based on their specific activities. Each cost is assigned to a cost centre to enable monitoring or performance and control over expenditure.

- A cost centre could be a location, e.g. a department or a sales area of the business;
- a person e.g. a salesman or machine operator;
- an item of equipment e.g. a delivery van or a machine;
- a group of these.

Cost Unit / Cost Object

A cost unit is defined as a product, service or time to which cost may be expressed. Cost unit refers to the product or service that a company produces for example: a tin of milk, a car, a bag of rice, etc.

Unit Cost

A unit cost refers to the cost incurred per unit of output. It is the cost price of a product. It is measured as total cost divided by the total number of units produced.

Cost Classification

This refers to the process of grouping costs according to their common features or characteristics. This ensures effective reporting and communication of costs.

1. Classification according to **Nature of Cost.**

   Under this classification, cost can be described as **Direct or Indirect.**
   Direct costs are those costs that are traced or conveniently identified with a particular cost centre or cost unit. For example, the cost of wood used in making a table.

   Indirect costs are those costs which cannot be traced to any particular cost centre. They are general costs that are incurred for the benefit of a number of cost centres. Examples are insurance, rent and salaries.

2. Classification according to **Behaviour.**
   Here, cost can be classified as **Fixed or Variable.**

   Fixed costs are those costs that remain constant over a range of activities for a period of time. That is, a fixed cost does not change as output changes. For example, rent, depreciation, insurance on vehicles.

   Variable costs are those costs that usually vary in direct proportion to output. That is, as output rises, variable cost also increases and vice versa. E.g. cost of raw materials.

3. Classification according to **Management Function**.
   A cost item can be described on the basis of the functional areas of the business. In this regard, cost may be classified as:

   Production/Factory cost e.g. cost of raw materials, direct labour

   Administration cost e.g. salaries of management, stationery.

   Selling & distribution cost e.g. advertising and promotions cost, salaries of salesmen, warehouse rent.

4. Classification according to **Profit Determination**
   Under this, a cost can be classified as a product cost or a period cost.

   Product costs are costs that are necessary for production of goods. Such costs are not incurred when there is no production. They include the cost of raw materials and direct labour.

   Period costs are those costs that are made even when there is no production. They include rent, insurance, salaries of management, etc. Period costs are written off as expenses in the period in which they are incurred**.**

In addition to these cost classifications, costs may be seen as follows.

1. **Relevant Cost** refers to any cost is incurred in direct response to a decision. It can therefore be altered, or will be dependent upon the nature of that decision.
2. **Irrelevant Cost** is any cost that does not change in the decision-making process. For example, in deciding to increase the number of goods in the warehouse, the salary of the storekeeper is an irrelevant cost, but the price of the product is relevant.

3. **Sunk Cost** is a past or previous cost that cannot be changed by any decision. It refers to the cost of resources already acquired and is unaffected by the choice between two alternatives. For example, the cost of a machine purchased five years ago.
4. **Opportunity Cost** is the value of the option not taken when a business makes a decision, in other words the potential benefit that a business sacrifices when choosing one alternative over another. Where there is no alternative use for a resource, then the opportunity cost is zero.
5. **Avoidable Cost** is any cost that management can choose not to incur. Examples are advertising, overtime allowances, medical bills of staff, etc.
6. **Incremental / Differential Cost is** the difference in total relevant cost between two alternatives. It is a cost that differs as a result of changing levels of activity.
7. **Marginal Cost** refers to the additional cost of producing one extra unit of a product.
8. **Conversion Cost** is the cost of transforming raw materials, direct labour and overheads into finished goods. It is the amount of direct labour and overheads that are required to turn raw materials into finished products.

Activity 8.2

1. In groups, complete the table below by writing the appropriate costings term for the following definitions.

s/n	Definition	Appropriate terminology
1	The expense incurred per unit of output. It is calculated by dividing the entire cost by the total quantity produced.	
2	The additional cost of producing one additional unit of a product.	
3	Any cost that can be changed by a management decision.	
4	A person, place, or piece of equipment for which a cost may be calculated and used for control.	
5	The price of converting raw materials, direct labour and overhead into final items. It is the total amount of labour and overhead needed to convert raw resources into final goods.	
6	Expenses incurred even in the absence of productivity. They include things like rent, insurance, management pay, etc. `	
7	Costs that typically change in direct proportion to production. In other words, costs that increases with output and vice versa.	

2. Make a presentation of your responses using a flip chart to share with the wider class.

Extension task 1

Analyse three classifications of cost and explain how they are applied to cost accounting. Include examples in your answer.

Extension task 2

Answer at least one of the following questions to support the review of your learning in this area.

- Outline the functions of cost accounting.
- Outline the basic cost accounting terminologies.
- Describe the different ways by which cost can be classified.

ELEMENTS OF COST OF SERVICES AND OPERATIONS

Elements of Cost

Elements constitute the components that make up the cost of a product or service.

The main elements of cost are materials, labour and other expenses.

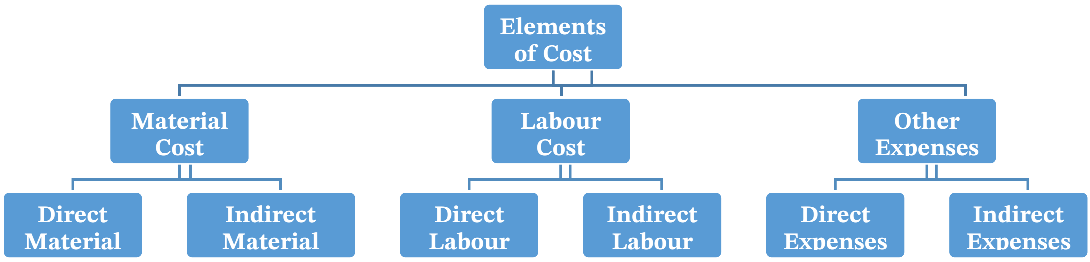
1. **Materials** are all the ingredients, raw materials or inputs that go into the production of the final product or service. Material cost is made up of direct materials and indirect materials.
    a. Direct material cost – the cost of raw materials that go into production to be transformed, through the manufacturing process, to become finished products or saleable services. For example, leather used for shoes, cement used for building, palm oil used for soap and cassava used for gari.
    b. Indirect material cost – the cost incurred on physical components that do not form part of the final product. Indirect materials cannot be easily traced to a particular product or service. For example, cleaning materials, lubricants used in machines and packaging materials.

2. **Labour** refers to all human effort (physical or mental) used in the production of goods and services. Labour cost is made up of direct labour and indirect labour and can be made up of wages, salaries, bonuses, overtime, etc.
   a. Direct labour – this is the remuneration paid to workers whose services can be linked directly with a particular product or service. For example, wages of a mason building a house, salaries of a machine operator, carpenter or a tailor.
   b. Indirect labour – this is the remuneration paid for services that cannot be easily traced to a product or service. Examples are salaries of supervisors, cleaners and security men.

3. **Other expenses** refer to all costs incurred other than materials and labour. They are costs of services paid or unpaid, rendered to an organisation.
   a) Direct Expenses – these are expenses that can be easily traced to or identified with a particular product or service. For example, royalties paid on patents and mining, cost of hiring a special machine, fees of architects or consultants and experimental cost.
   b) Indirect expenses – these are expenses that cannot be easily traced or identified with a particular product or service. For example, rent and rates, telephone bills, depreciation and insurance

Note: The total of all direct cost is known as **prime cost** while the total of all indirect cost is called **overheads**.

The diagram gives an overview of how cost is broken down



Activity 8.3

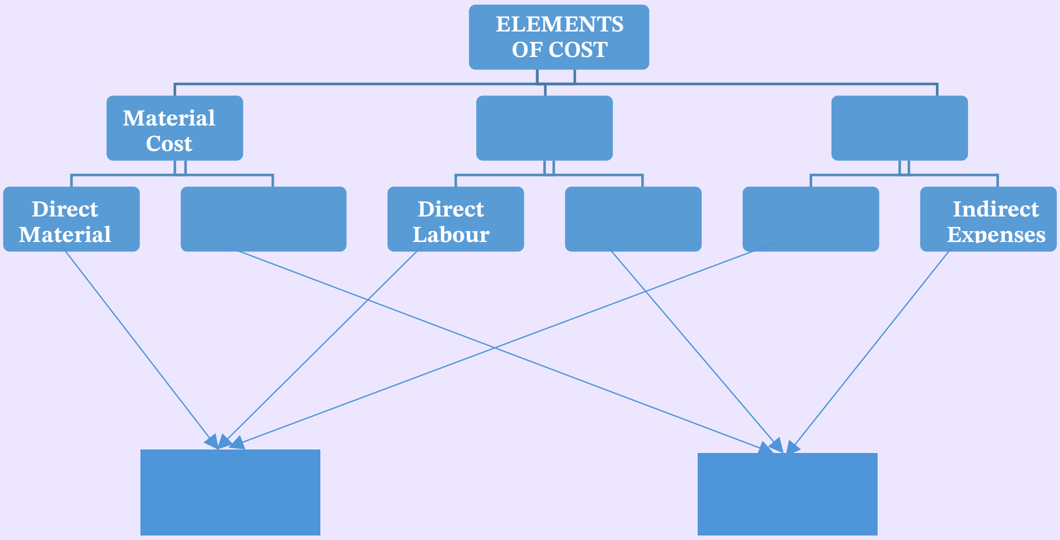
1. Working in pairs, discuss the following elements of cost and write down your agreed definitions.
   a. Material cost
   b. Labour cost
   c. Other expenses
2. For each of these components of cost, give three examples of:
   a. Direct costs
   b. Indirect costs

3. Present your responses on manila cards. You could use a table such the one below to record your responses.
4. Share your response with another group for feedback and discussion.

	Definition	Type	Examples
Materials		**Direct**	**1.** **2.** **3.**
		Indirect	**1.** **2.** **3.**
Labour		**Direct**	**1.** **2.** **3.**
		Indirect	**1.** **2.** **3.**
Other expenses		**Direct**	**1.** **2.** **3.**
		Indirect	**1.** **2.** **3.**

Activity 8.4

1. Copy and complete the flow chart below. Complete your version in the context of production of a particular product or service (i.e. a car, or cocoa production). Include examples of the types of direct and indirect costs that would be incurred.



2. Make a poster presentation to the larger class.

Extension task 3

Answer at least one of the following questions to support the review of your learning.

1. Identify the elements of cost.
2. Summarise the elements of cost and their importance to production.
3. Give four examples of indirect cost and four examples of material costs

Review Questions

1. How can cost accounting help a business identify and manage production costs more effectively?
2. Define the following cost accounting terms:
   a. Cost Centre
   b. Cost Unit
   c. Unit Cost
3. Explain how costs are classified.
4. What are overheads?

Answers to Review Question

Question 1

Cost accounting is a method of accounting that focuses on capturing, recording, and analysing the costs associated with producing goods or providing services. By tracking direct costs (like raw materials and labour) and indirect costs (such as utilities and overhead), businesses can:

a. **Control Cost**: Cost accounting helps businesses monitor and control cost by tracking and analysing costs associated with production. It highlights areas where costs can be reduced without affecting quality

b. **Improve Efficiency**: Through the identification of cost drivers, cost accounting helps in optimising processes and resource allocation.

c. **Inventory Valuation**: Cost accounting provides the needed data for valuing inventory accurately by determining the cost of goods manufactured and sold.

d. **Make Data-Driven Decisions**: Cost accounting provides necessary data that helps management to make informed decisions, such as pricing, product line selection, budgeting and financial planning. It helps evaluate the cost-effectiveness through detailed cost analysis which allows for better financial forecasting and planning.

All the above enable a business to identify and manage production costs more effectively to improve profitability and maintain the financial health of their organisation.

Question 2

a. **Cost Centre**: A cost centre is a specific department, function or location within an organisation where costs are accumulated for control and management purposes. It does not directly generate revenue but incurs costs, such as the human resources or maintenance department.

b. **Cost Unit**: A cost unit refers to a unit of product, service, or time in relation to which costs are measured or expressed. For example, in a manufacturing company, a cost unit could be a single item produced, such as a car or a chair.

c. **Unit Cost**: Unit cost is the total cost incurred to produce, store and sell one unit of a product or service. It is calculated by dividing the total cost of production by the number of units produced, giving the cost per individual item.

Question 3

a. **Classification by Management Function:**
This classification organises costs based on the different functional areas within a business. It helps in allocating costs to specific activities, which is crucial for internal management and control.

i. **Production Costs**: These are costs incurred in the process of manufacturing products or providing services. Examples include raw material costs, labour costs and factory overhead.

ii. **Administrative Costs**: Costs associated with general management and administrative functions, such as salaries of management staff, office supplies and administrative overhead.

iii. **Selling and Distribution Costs**: These include expenses related to selling products and delivering them to customers, such as advertising, sales commissions and shipping costs.

iv. **Research and Development (R&D) Costs**: Costs incurred in innovating, designing and developing new products or services, such as research expenses, prototype development and testing.

b. **Classification by Profit Determination:**

This classification distinguishes costs based on their relevance to profit determination, helping businesses assess profitability and prepare financial statements.

i. **Product Costs**: These are costs that are directly related to the production of goods and are included in inventory until the product is sold. Product costs consist of direct materials, direct labour and manufacturing overhead.

ii. **Period Costs**: Costs that are not directly related to the production process and are expensed in the period in which they are incurred. Examples include administrative expenses, selling expenses and rent.

c. **Classification by Behaviour:**

Costs can be classified based on how they behave in relation to changes in production levels or business activity. This classification is essential for budgeting, forecasting and decision-making.

i. **Fixed Costs**: These costs remain constant regardless of the level of production or business activity. Examples include rent, salaries of permanent staff and insurance. Fixed costs do not change with output in the short term but can impact profitability if sales volumes fluctuate.

ii. **Variable Costs**: These costs vary directly with the level of production or sales volume. Examples include raw materials, direct labour and sales commissions. Variable costs increase as production rises and decrease as production falls, making them directly linked to profit margins.

d. **Classification by Nature:**

This classification groups costs based on the economic elements they involve. It helps in understanding the composition of total costs and is often used in financial accounting and reporting.

i. **Direct Costs**: Costs that can be directly traced to a specific product, service, or department. Examples include direct materials (e.g., raw materials used in production) and direct labour (e.g., wages of workers directly involved in manufacturing). Direct costs are easily identifiable with the cost object.

ii. **Indirect Costs**: Costs that cannot be directly traced to a specific product or service and are typically allocated across different departments or products. Examples include factory rent, utility expenses and office supplies. Indirect costs are often considered part of overhead.

iii. **Material Costs**: These are costs associated with raw materials and components used in the production process. Materials can be direct (easily attributable to the product) or indirect (used in production but not directly traceable).

iv. **Labour Costs**: These are wages and salaries paid to employees. Labour can also be direct (e.g., wages of assembly line workers) or indirect (e.g., salaries of supervisors).

v. **Expenses**: This category includes all other costs that are neither materials nor labour. Expenses can include costs like depreciation, rent, utilities and insurance. These are necessary for operations but may not be directly linked to production.

Question 4

Overheads are indirect costs necessary for running a business that cannot be directly attributed to producing a specific product or service. They include expenses such as rent, utilities and administrative salaries.

EXTENDED READING

- Eric Oduro (2012), Principles of Cost Accounting for Senior High Schools 4th Edition. Accra: Terror Publications. (**Pages 1 – 30**)
- Dadzie Barnabas (2013) Costing for "U", 5th Edition. Obuasi: For U Printing House (**Pages 1-11**)

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6. ICAI, Study Text - Introduction to Cost and Management Accounting, India
7. NaCCa (2023), Business Studies Curriculum.

GLOSSARY

Budget	A financial plan that estimates income and expenditures for a specific period, helping to allocate resources and control costs.
Cost	This refers to the monetary value of resources (such as materials, labour and overheads) used to produce goods or services.
Overheads	Indirect costs incurred during production, such as rent, utilities and administrative expenses that cannot be directly traced to specific products or services.
Patents	Legal rights granted to inventors, providing them exclusive control over the use and sale of their invention for a specified period, which can affect production costs if the patented technology is used.
Prime Cost	The sum of direct materials, direct labour costs and direct expenses that are directly attributable to the production of goods.
Remunerations	Payments or compensation provided to employees or workers for their labour, typically including wages, salaries and bonuses.
Royalties	Payments made to the owner of intellectual property, such as patents or trademarks, for the right to use that property in production.
Trademarks	This refers to legally protected symbols, names, or logos that distinguish a company's products or services from others. The costs associated with trademarks, such as registration, legal fees and brand development, are typically considered intangible assets.

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