

CMA INTER

Chapter 1 Introduction

Cost Accounting: process of accounting for cost which begins with the recording of income and expenditure and ends with the preparation of periodical statements ascertaining costs.

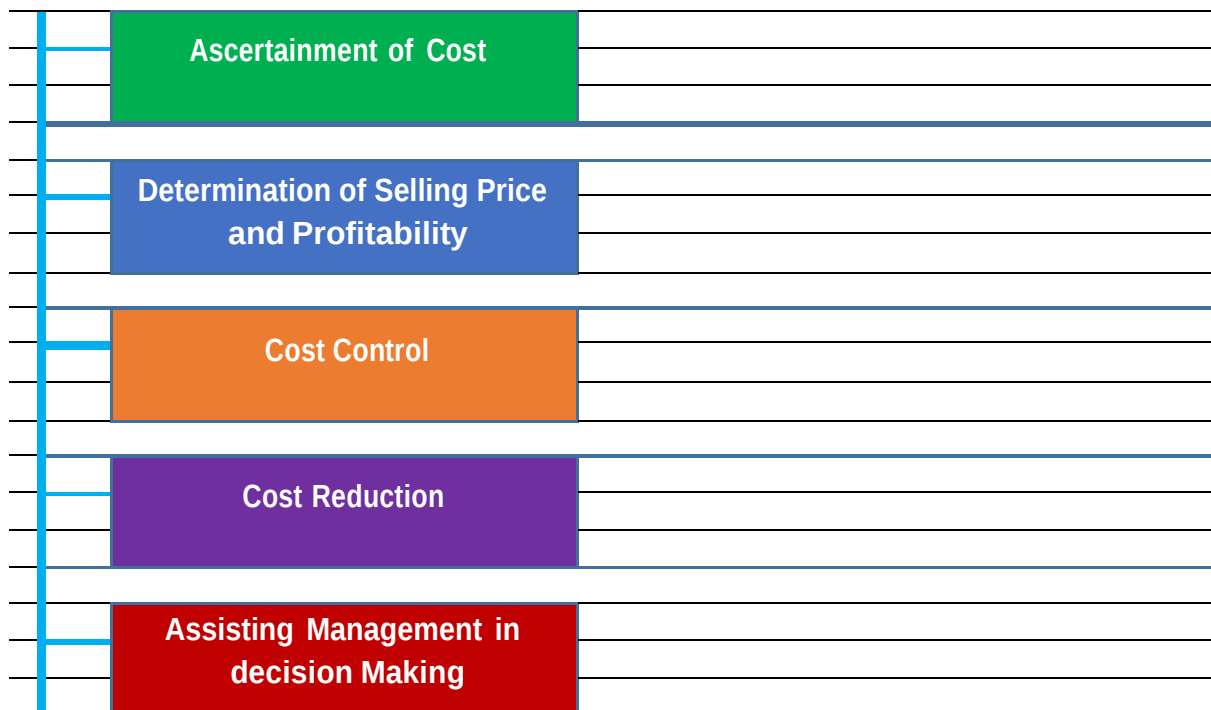
Costing: the technique and process of ascertaining per unit cost of goods and services

Cost Accountancy: presentation of information for the purpose of managerial decision making.

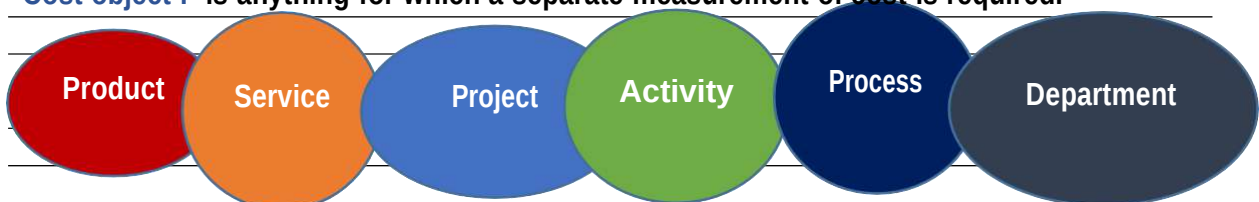
Management Accounting: assists management by provision of relevant information for planning, organising, controlling, decision making etc.

Cost: amount of expenditure (actual or notional) incurred on or attributable to a specified article, product or activity.

OBJECTIVES OF COST ACCOUNTING



Cost object : is anything for which a separate measurement of cost is required.



Cost Unit: It is a unit of product, service or time in relation to which costs may be ascertained or expressed.

Industry	Cost Units
Automobile	Number
Cement	Ton/ per bag etc.
Chemicals	Litre, gallon, kilogram, ton etc.
Power	Kilo-watt hour (kWh)
Steel	Ton
Transport	Passenger- kilometer
Gas	Cubic feet
Brewing	Barrel
Brick-making	1,000 bricks
Coal mining	Tonne/ton
Electricity	Kilowatt-hour (kWh)
Engineering	Contract, job
Oil	Barrel, tonne, litre
Hotel/Catering	Room/meal
Professional services	Chargeable hour, job, contract
Education	Course, enrolled
Hospitals	Patient day

RESPONSIBILITY CENTRES : To have a better control over the organisation, management delegates its responsibility and authority to various departments or persons. These departments or persons are known as responsibility centres

Types

Cost Centre held accountable for incurrence of costs which are under its control	Revenue Centres: The responsibility centres which are accountable for generation of revenue for	Profit Centres: These are the responsibility centres which have both responsibility of generation of revenue and incurrence of expenditures	Investment Centres authority to make capital investment decisions
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LIMITATIONS OF COST ACCOUNTING

Expensive Requirement of Reconciliation Duplication of Work Inefficiency

Cost Accounting / Financial accounting / Management accounting

Basis	Cost accounting	Financial Accounting	Management Accounting
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Nature	Records Quantitative aspects Only	Records Monetary aspect	Records Quantitative and Qualitative aspect
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Area	Deals with cost ascertainment	Deals with profit ascertainment	Deals with financial accounting, financial management , taxation
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Objective	Records cost of producing a product	Provides information about Financial performance	Provides Information to management for cordination and planning
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Cost Classification

By Costs used in Managerial Decision Making

According to this basis, cost may be categorised as follows:

Pre-determined Cost - A cost which is *computed in advance before production or operations start*, on the basis of specification of all the factors affecting cost, is known as a pre-determined cost.

Standard Cost - A pre-determined cost, which is calculated from managements 'expected standard of efficient operation' and the relevant necessary expenditure. It may be used as a basis for price fixation and for cost control through variance analysis.

Marginal Cost - The amount at any given volume of output by which aggregate costs increases if the volume of output is increased or decreased by one unit.

Estimated Cost - Kohler defines estimated cost as "the expected cost of manufacture, or acquisition, often in terms of a unit of product computed on the basis of information available in advance of actual production or purchase". Estimated costs are **prospective costs** since they refer to prediction of costs.

Differential Cost - (Incremental and decremental costs). It represents the change (increase or decrease) in total cost (variable as well as fixed) due to change in activity level, technology, process or method of production, etc. For example, if any change is proposed in the existing level or in the existing method of production, the increase or decrease in total cost or in specific elements of cost as a result of this decision will be known as incremental cost or decremental cost.

Imputed Costs - These costs are **notional costs** which do not involve any cash outlay. Interest on capital, the payment for which is not actually made, is an example of imputed cost.

Capitalized Costs - These are costs which are initially recorded as assets and subsequently treated as expenses. Example, installation expenses on the erection of a machine are added to the cost of a machine

Product Costs - These are the costs which are associated with the *purchase and sale of goods* (in the case of merchandise inventory). In the production scenario, such costs are associated with the *acquisition and conversion of*

materials and all other manufacturing inputs into finished product for sale. Hence, under marginal costing, variable manufacturing costs and under absorption costing, total manufacturing costs (variable and fixed) constitute inventoriable or product costs.

Opportunity Cost - This cost refers to the value of sacrifice made or *benefit of opportunity foregone in accepting an alternative course of action*. For example, a firm financing its expansion plan by withdrawing money from its bank deposits. In such a case the loss of interest on the bank deposit is the opportunity cost for carrying out the expansion plan.

Out-of-pocket Cost - It is that portion of total cost, which involves *cash outflow*. This cost concept is a short-run concept and is used in decisions relating to fixation of selling price in recession, make or buy, etc. Out-of-pocket costs can be avoided or saved if a particular proposal under consideration is not accepted.

Shut down Costs - Those costs, which continue to be, incurred even when a plant is temporarily shut-down *e.g. rent, rates, depreciation, etc.* These costs cannot be eliminated with the closure of the plant. In other words, *all fixed costs, which cannot be avoided during the temporary closure of a plant, will be known as shut down costs.*

Sunk Costs - *Historical costs incurred in the past* are known as sunk costs. They play no role in decision making in the current period. For example, in the case of a decision relating to the replacement of a machine, the written down value of the existing machine is a sunk cost and therefore, not considered.

Absolute Cost - These costs refer to the *cost of any product, process or unit in its totality*. When costs are presented in a statement form, various cost components may be shown in absolute amount or as a percentage of total cost or as per unit cost or all together. Here the costs depicted in absolute amount may be called absolute costs and are base costs on which further analysis and decisions are made

Discretionary Costs - Such costs are *not tied to a clear cause and effect relationship between inputs and outputs*. They usually arise from periodic decisions regarding the maximum outlay to be incurred. Examples include advertising, public relations, executive training etc.

Period Costs - These are the costs, which are not assigned to the products

but are charged as expenses against the revenue of the period in which they are incurred. All non-manufacturing costs such as general & administrative expenses, selling and distribution expenses are recognised as period costs.

Engineered Costs - These are costs that result specifically from a *clear cause and effect relationship between inputs and outputs*. The relationship is usually personally observable. Examples of inputs are direct material costs, direct labour costs etc. Examples of output are cars, computers etc.

Explicit Costs - These costs are also known as out-of-pocket costs and refer to *costs involving immediate payment of cash*. salaries, wages, postage and telegram, printing and stationery, interest on loan etc. are some examples of explicit costs involving immediate cash payment.

Implicit Costs - These costs do not involve any immediate cash payment. They *are not recorded in the books of account*. They are also known as economic costs

By Normality

According to this basis, cost may be categorised as follows:

Normal Cost - It is the cost which is normally incurred at a given level of output under the conditions in which that level of output is normally attained.

Abnormal Cost - It is the cost which is not normally incurred at a given level of output in the conditions in which that level of output is normally attained. **It is charged to Costing Profit and loss Account**

By Controllability

Costs here may be classified into controllable and uncontrollable costs.

Controllable Costs: - Cost that can be controlled, typically by a cost, profit or investment centre manager is called controllable cost. Controllable costs incurred in a particular responsibility centre can be influenced by the action of the manager heading that responsibility centre. For example, direct costs comprising direct labour, direct material, direct expenses and some of the overheads are generally controllable by the shop floor supervisor or the factory manager.

Uncontrollable Costs - Costs which cannot be influenced by the action of a specified member of an undertaking are known as uncontrollable costs. For example, expenditure incurred by say, the tool room is controllable by the

foreman in-charge of that section but the share of the tool-room expenditure which is apportioned to a machine shop is not controlled by the machine shop foreman

By Functions

Under this classification, costs are divided according to the function for which they have been incurred. It includes the following:

- Production/ Manufacturing Cost
- Administration Cost
- Selling Cost
- Distribution Cost
- Research and Development cost etc

By Nature or Element

Under this type of classification of cost, total cost of a cost object is classified on the basis of element of

- Material
- Labour
- Other Expenses
- Overheads

By Variability or Behaviour

- Fixed Cost
- Variable Cost
- Semi Variable Cost

METHODS OF COSTING

Methods	Description
Single or Output Costing	Under this method, the cost of a product is ascertained, the product being the only one produced like bricks, coals, etc.
Batch Costing	extension of job costing. A batch may represent a number of small orders passed through the factory in batch. Each batch here is treated as a unit of cost and thus separately costed.
Job Costing	Under this method of costing, cost of each job is ascertained separately. It is suitable in all cases where work is undertaken on receiving a customer's order like a printing press, motor workshop, etc.
Process Costing	Under this method, the cost of completing each stage of work is ascertained, like cost of making pulp and cost of making paper from pulp. In mechanical operations, the cost of each operation may be ascertained separately; the name given is operation costing.
Operating Costing	It is used in the case of concerns rendering services like transport, supply of water, retail trade etc.
Multiple Costing	It is a combination of two or more methods of costing outlined above. Suppose a firm manufactures bicycles including its components; the parts will be costed by the system of job or batch costing but the cost of assembling the bicycle will be computed by the single or output costing method. The whole system of costing is known as multiple costing.

Example

Nature of Output	Method	Cost	Examples of Industries
A Series of Processes			
Construction of building			
Similar units of a Single Product, produced by Single Process			
Rendering of Services			
Customer Specifications: single Unit			
Consisting of multiple varieties of activities and processes			

TECHNIQUES OF COSTING

Techniques	Description
Uniform Costing	When a number of firms in an industry agree among themselves to follow the same system of costing in details, adopting common terminology for various items and processes they are said to follow a system of uniform costing. Advantages of such a system are: (i) A comparison of the performance of each of the firms can be made (ii) Under such a system, it is also possible to determine the cost of production of goods which is true for the industry as a whole.
Marginal Costing	It is defined as the ascertainment of marginal cost by differentiating between fixed and variable costs.

Standard Costing and Variance Analysis	It is the name given to the technique whereby standard costs are pre-determined and subsequently compared with the recorded actual costs. it is especially suitable where the manufacturing method involves production of standardised goods of repetitive nature.
Historical Costing	It is the ascertainment of costs after they have been incurred. This type of costing has limited utility. • Post Costing : It means ascertainment of cost after production is completed. • Continuous costing : Cost is ascertained as soon as the job is completed or even when the job is in progress.
Absorption Costing	It is the practice of charging all costs, both variable and fixed to operations, processes or products. This differs from marginal costing where fixed costs are excluded.

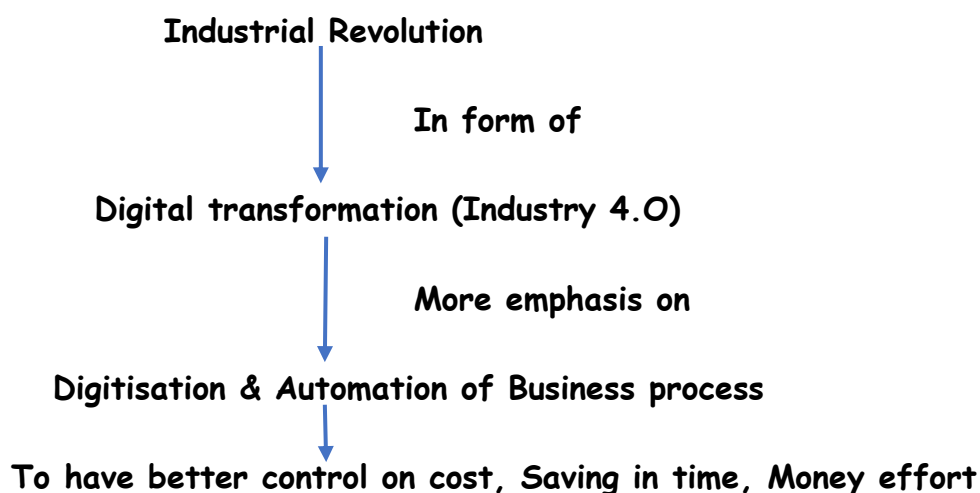
Cost Driver

A Cost driver is a factor or variable which effect level of cost. Generally, it is an **activity which is responsible for cost incurrence**. Level of activity or volume of production is the example of a cost driver

Cost Accounting with use of IT

IT is becoming intergarl part of each activity in an organization including Cost and Management Accounting

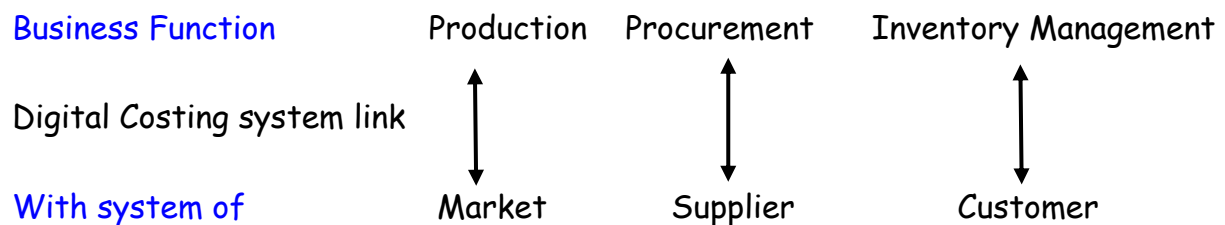
IT Changed Cost and Management Accounting through ERP



Impact of IT in Cost accounting

1. Different Functional Activities get integrated
2. More paperless environment
3. Help in Resource procurement & Mobilization
4. Cost of Cost centre / Cost object is ascertained with accuracy in timely manner
5. Uniformity in report / Budget irrespective of currency / Language
6. Variance report in real time basis
7. IT enable entity to monitor activity and eliminate NVA

Digital Costing System



Digital Costing system provide data to get following information

1. Cost incurred on Cost object
2. Data on time spent
3. Data on resource Consumption
4. Data on lead time and raw material consumption
5. Data on product demand and trend
6. Data on current market price

Benefits

1. Ascertainment of cost
2. Data on time spent
3. Help in MRP and scheduling
4. Identifying and eliminate NVA
5. Setting Standard, Variance calculation on real time basis
6. Predict market demand
7. Improved cost benefit analysis

Essential of Good Cost Accounting System

Informative and simple	Accurate and authentic	Uniformity and Consistency	Integrated and Inclusive	Flexible and adaptive	Trust on system
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Uses of Cost and Management Accounting



Internal User			
Policy Maker	Manger	Operation Level	Employee
Formulate strategies	To know Cost To knoe price To know profitability To evaluate profitability To evaluate performance To evaluate strategic Option and take decision	Supervisor Team Leader Staff To know about procee Quality Volume To know target for performance evaluation	Get information about time, attendance, Incentive For worker

Regulatory Authority	Auditor	Shareholder	Creditors and Lenders
Require Cost accounting information for Tariff determination Subsidy Rate fixation	Require cost information for Cost Audit	Factor that affect their investment in entity like New order received Product expansion Market share	Lender who provide loan against book debt and inventories, interested to know net debt balance and stock baalnce

MCQ

- 1.-----is anything for which a separate measurement is required.
 - a) Cost unit
 - b) Cost object
 - c) Cost driver
 - d) Cost centre
2. Which of the following is true about Cost control:
 - a) It is a corrective function
 - b) It challenges the set standards
 - c) It ends when targets achieved
 - d) It is concerned with future
3. Cost units used in power sector is:
 - a) Kilometer (K.M)
 - b) Kilowatt-hour (kWh)
 - c) Number of electric points
 - d) Number of hours
4. Process Costing method is suitable for
 - a) Transport sector
 - b) Chemical industries
 - c) Dam construction
 - d) Furniture making
5. Which of the following is Not true about the cost control and cost reduction:
 - a) Cost control seeks to attain lowest possible cost under best conditions.
 - b) Cost control emphasises on past and present
 - c) Cost reduction is a corrective function. It operates even when an efficient cost control system exists.
 - d) Cost control ends when targets are achieved.
6. The advantage of using IT in Cost Accounting does not include:
 - a) Integration of various functions
 - b) Stock needs to be reconciled with Goods Received Note
 - c) Reduction in multicity of documents
 - d) Customised reports can be prepared.

7. A taxi provider charges minimum ₹ 80 thereafter ₹ 12 per kilometer of distance travelled, the behaviour of conveyance cost is:

- a) Fixed Cost
- b) Semi-variable Cost
- c) Variable Cost
- d) Administrative cost.

8. A Ltd. has three production department, and each department has two machines, which of the following cannot be treated as cost centre for cost allocation:

- a) Machines under the production department
- b) Production departments
- c) Both Production department and machines
- d) A Ltd

9. Which of the following is an example of functional classification of cost:

- a) Direct Material Cost
- b) Fixed Cost
- c) Administrative Overheads
- d) Indirect Overheads

10. Ticket counter in a Railway Station is an example of

- a) Cost Centre
- b) Revenue Centre
- c) Profit Centre
- d) Investment Centre

11. STATE the method of costing and the suggested unit of cost for the following industries:

- | | | |
|-----------------|-------------------------|-------------------------|
| (a) Transport | (b) Power | (c) Hotel |
| (d) Hospital | (e) Steel | (f) Coal |
| (g) Bicycles | (h) Bridge Construction | (i) Interior Decoration |
| (j) Advertising | (k) Furniture | (l) Brick-works |