CAtestseries.org®

CA Final | Inter | Foundation Test Series

As Per New Syllabus of

ICAI

7 Times AIR 1

NOTES

Concept Notes

Cost and management accounting

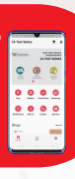
Chapter - 1

Only Test Series Providing
Other Than **ICAI** Questions
In Test Papers

Unique MCQ's with Detailed Reasoning

INDIA'S FIRST FREE DOUBT SOLVING PORTAL FOR ALL CA STUDENTS

GET IT ON Google Play | Available on the App Store



www.CAtestseries.org
+91 99884-83167

Meet Our Proud Achievers

7 All India Rank #1

Meet Anil Shah
CA FINAL

Ca Akshay Jain
CA FINAL

Sri Krishna Praneeth
CA FINAL

Harsh Chaudhary
CA FINAL

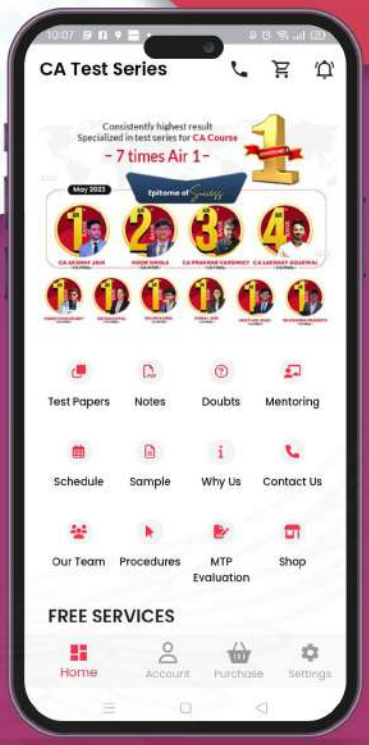
Komal Jain
CA FINAL

Rajan Kabra
CA INTER

Diksha Goyal
CA INTER

Highest Results with Top Quality Since 2015

Don't wait for the opportunity...



FREE DOUBT SOLVING

Download our App Now

GET IT ON Google Play

Download on the App Store

- Only Test Series which provides New Unseen Q's other than ICAI Mat to test your actual preparation
- Being the Ex-Examiners, Evaluation and Paper pattern is strictly as per the requirement of ICAI Exams
- Individual specific & attempt wise approach
- Application based Questions
- Notes + Doubt solving + Mentoring + Guidance Videos
- Suggested Answer + Toppers Sheets for comparison
- Study Planners + Imp Q's + Imp MCQs & Case Study MCQs
- Dedicated subject-wise experts for Mentoring & Doubt Solving

To thoroughly assess your preparation and provide accurate guidance for improvement, CA Test Series introduces new unique questions, adhering to the latest ICAI exam standards. Relying solely on Study Material questions can lead to exam-hall struggles. CA Test Series addresses this by introducing New Unique questions, enabling early identification of conceptual gaps accurately.

CONCEPTS NOTES

COST AND MANAGEMENT ACCOUNTING

CHAPTER-1

INTRODUCTION TO COST AND MANAGEMENT ACCOUNTING

INTRODUCTION

In Michael E. Porter's Generic Competitive Strategies, 'Cost Leadership' is a key dimension aimed at achieving a competitive advantage by producing goods or services at the lowest cost while maintaining quality. This strategic approach is crucial for businesses seeking to excel in both domestic and global markets. Cost Leadership aligns with the principles of Cost and Management Accounting, emphasizing the importance of a robust accounting system for its successful implementation. This chapter explores the various facets of Cost and Management Accounting and its practical applications in both manufacturing and service industries.

MEANING AND DEFINITION

1) Cost: The resource relinquished for goods or services. As a noun, it's the expenditure on a specified article, product, or activity. As a verb, it involves determining the cost of a specific thing or activity.

2) Costing: The technique of determining costs. According to CIMA, an organization's costing system serves as the foundation for the internal financial information system, supplying crucial information for managerial planning, control, and decision-making about future activities.

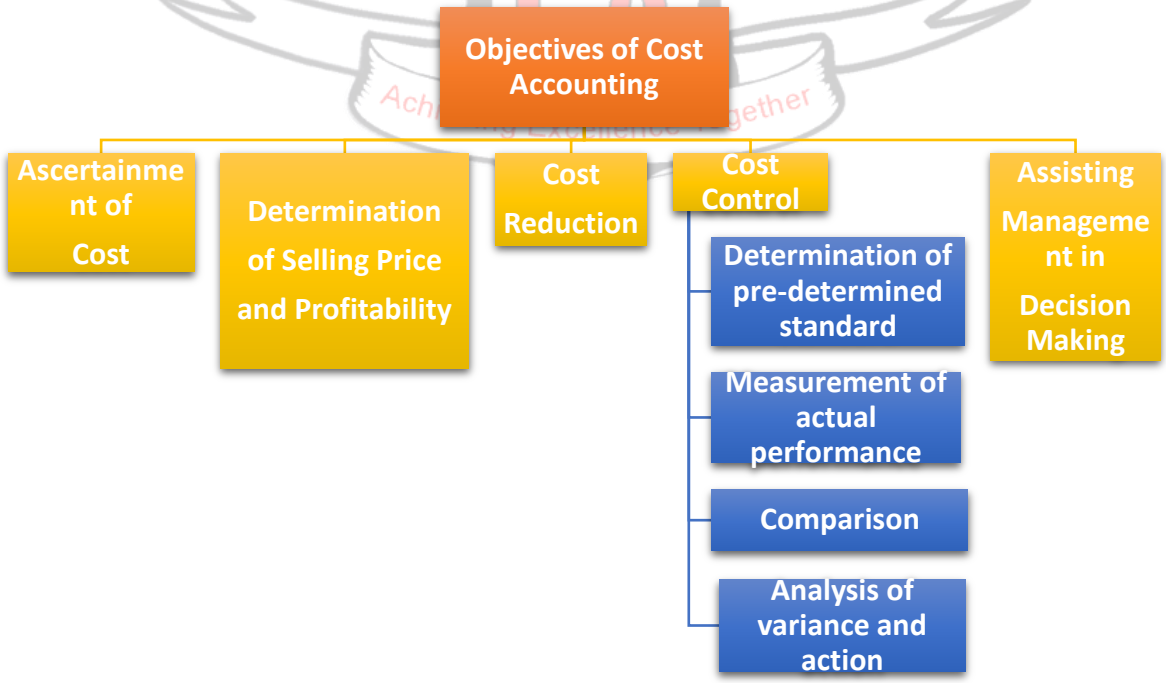
3) Cost Accounting: The accounting process for costs, starting with recording income and expenditure or their calculation bases, and concluding with the preparation of periodic statements and reports to ascertain and control costs.

4) Cost Accountancy: The application of costing and cost accounting principles, methods, and techniques to control costs and determine profitability. It involves presenting derived information for managerial decision-making.

5) Management Accounting: The application of accounting and financial management principles to enhance value for stakeholders in for-profit and not-for-profit enterprises, according to CIMA Official Terminology. It is integral to management functions, aiding in planning, organizing, controlling, and decision-making by providing relevant information.

6) Cost Management: The application of management accounting concepts, methods of data collection, analysis, and presentation to provide essential information for planning, monitoring, and controlling costs.

OBJECTIVES OF COST ACCOUNTING



Cost and Management Accounting aims to achieve the following objectives:

(A) Ascertainment of Cost Objective: The primary goal of Cost Accounting is to accumulate and determine costs for various cost objects such as units, jobs, operations, processes, departments, or services.

(B) Price and Profitability Determination: Cost Accounting aids in establishing selling prices and gauging the profitability of a cost object. While external factors often influence competitive pricing, the cost accounting system serves as a foundation for price setting and rate negotiations.

(C) Cost Reduction: The pursuit of sustained and actual decreases in the unit cost of goods or services without compromising their intended use or product quality. It involves a management approach that identifies potential cost reductions by considering every aspect, treating no cost as fixed, and exploring all possibilities for lowering costs. This approach involves specific actions to achieve cost reduction.

a) Analyzing each entity activity to distinguish between value-added and non-value-added activities. Non-value-added activities are eliminated without compromising essential product or process characteristics. Value Chain Analysis, a strategic tool by Michael Porter, is used for this purpose.

b) Ongoing research and study to determine the most optimal methods for manufacturing a product or delivering a service.

The three-fold assumptions in the definition of cost reduction can be summarized as follows:

- Ensuring a reduction in unit costs.
- Confirming that the savings achieved are of a lasting nature.
- Ensuring that the goods and services' utility and quality are either maintained or improved, unaffected by cost reduction efforts.

(D) Cost Control: A key objective of effective cost accounting is to enforce discipline in expenditure. This involves aligning expenditures with predetermined standards and consistently monitoring any deviations from these standards. To maintain control over costs, a continuous process is implemented, involving systematic steps.

I. Establishing standard costs or performance targets for a cost object or center before the commencement of production or service.

II. Evaluating the actual cost or results of the cost object or center in a manner consistent with the set targets.

III. Contrasting the measured actual performance with the predetermined standard or target, noting any variances.

IV. Analyzing noted variances to identify reasons and taking appropriate action for future compliance. If necessary, adjusting standards to account for developments.

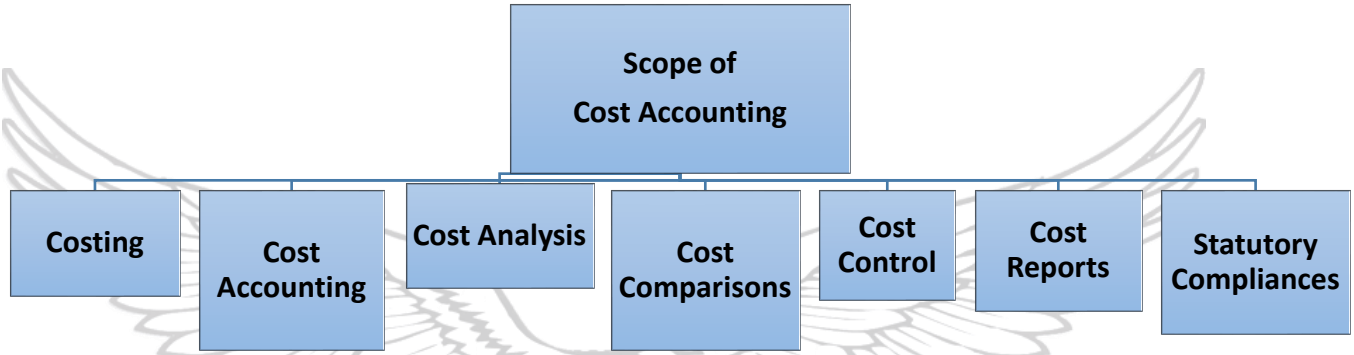
(E)Decision Support: Cost and Management Accounting offer vital information to aid management in planning, implementing, measuring, controlling, and evaluating activities. A strong system provides both internal and external industry-relevant data, crucial for informed decision-making.

DIFFERENCE BETWEEN COST CONTROL AND COST REDUCTION

Aspect	Cost Control	Cost Reduction
Objective	Maintaining costs in line with established standards	Reducing costs; challenging and improving standards continuously
Approach	Seeks the lowest possible cost under existing conditions	Recognizes no condition as permanent, aims for lower costs through change
Time Focus	Emphasis on past and present	Focus on present and future
Function	Preventive function	Corrective function; operates alongside an efficient cost control system
Completion	Ends when targets are achieved	Has no visible end, a continuous

		and ongoing process

SCOPE OF COST ACCOUNTING



The scope of Cost Accounting encompasses the following functions:

(i) Costing: The technique of ascertaining costs for products or services, utilizing principles like historical costs, standard costs, process costs, and operation costs.

(ii) Cost Accounting: A formal process that begins with recording expenditures and concludes with preparing periodic statements for ascertaining and controlling costs.

(iii) Cost Analysis: Identifying factors causing variances in actual costs from budgeted costs, facilitating better cost management and strategic decisions.

(iv) Cost Comparisons: Comparing costs of alternative actions, such as different production technologies or various products/services, over time.

(v) Cost Control: Involves a detailed examination of each cost to ensure it aligns with the benefits received, analyzing whether costs exceed budgeted amounts, and identifying possibilities for cost reduction.

(vi) Cost Reports: The ultimate function providing management with information for planning, control, performance appraisal, and decision-making at different levels.

(vii) Statutory Compliances: Adhering to rules prescribed by statutes, maintaining cost accounting records related to material, labour, and other cost components as applicable to the production of goods or provision of services.

RELATIONSHIP OF COST AND MANAGEMENT ACCOUNTING WITH OTHER RELATED DISCIPLINES

Cost and Management Accounting relies on and is interconnected with various other accounting disciplines.

(1) Cost Accounting with Management Accounting

While Cost Accounting and Management Accounting are often used interchangeably, Management Accounting is a broader discipline, facilitating informed decision-making for managers. It integrates inputs from various sources, including cost accounts, financial accounts, statistical data, and operational management tools.

Difference between Cost Accounting and Management Accounting

Aspect	Cost Accounting	Management Accounting
Nature	Quantitative aspect only.	Both qualitative and quantitative aspects.
Objective	Records the cost of production and services.	Provides information for management planning and coordination.
Area	Primarily deals with cost ascertainment.	Wider scope, including financial accounting, budgeting, taxation, planning, etc.
Recording of Data	Uses both past and present	Focuses on projecting future

	figures.	figures.
Development	Linked to the industrial revolution.	Tied to the needs of the modern business world.
Rules and Regulation	Follows specific principles and procedures for recording costs.	Does not adhere to specific rules and regulations.

(2) Cost Accounting with Financial Accounting

Cost accounting accumulates and determines costs for goods sold and inventories, serving as a crucial input for recording costs in the financial accounting system.

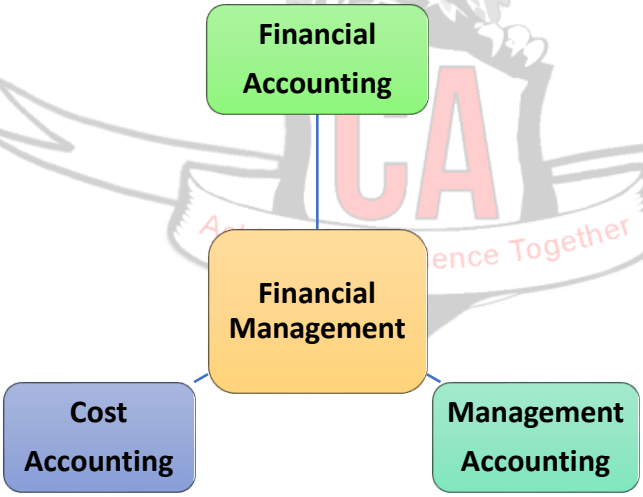
Difference between Financial Accounting and Cost Accounting

Aspect	Financial Accounting	Cost Accounting
Objective	Focuses on providing insights into an entity's overall financial performance.	Aims to determine and control costs for effective decision-making.
Nature	Involves classifying, recording, and interpreting transactions in monetary terms.	Involves the classification of costs and their detailed analysis in a meaningful way.
Recording of Data	Primarily records historical financial data.	Utilizes both historical and predetermined costs for recording.
Users of Information	Mainly serves external stakeholders such as shareholders, creditors, and financial analysts.	Primarily used by internal management for decision-making, though regulatory authorities may also access it.
Analysis of Cost and Profit	Shows the overall profit or loss of the organization, either by segment or as a whole.	Provides detailed cost breakdowns for specific cost objects like products, processes, jobs, etc.

Time Period	Financial statements are prepared annually.	Reports and statements are generated as needed, not restricted to a fixed time frame.
Presentation of Information	Follows a set format for presenting financial information, ensuring consistency.	Generally lacks standardized formats for presenting cost information, allowing flexibility based on specific needs.

(3) Cost and Management Accounting with Financial Management

Cost and Management Accounting is an integral part of Financial Management, utilized specifically for informed decision-making. The interconnection among Cost Accounting, Management Accounting, Financial Accounting, and Financial Management is illustrated in the following diagram, emphasizing their collaborative role in providing comprehensive financial insights for effective managerial decision-making. This integration ensures a cohesive approach to financial strategy and decision support within an organization.



ROLE & FUNCTIONS OF COST AND MANAGEMENT ACCOUNTING

The primary purpose of a cost and management accounting system is to:

❖ Facilitate decision-making through relevant information.

❖ Support management in planning, measurement, evaluation, and control of business activities.

❖ Aid in cost allocation to products and inventories for both internal and external users.

Cost Accounting focuses on gathering and assigning costs to various cost objects, while Management Accounting provides decision-making information to internal users.

The roles of Cost and Management Accounting encompass:

(i) Gather and accumulate costs for each cost element.

(ii) Assign costs to cost objects to determine total costs.

(iii) Establish budgets and standards, analyze and report on any deviations for cost control.

(iv) Provide relevant information through a Management Information System (MIS) for decision-making, including cost optimization, pricing, and performance evaluation of responsibility centers.

USERS OF COST AND MANAGEMENT ACCOUNTING

Cost and Management Accounting information serves both internal and external stakeholders, with internal users utilizing the data for decision-making within the entity, while external users rely on it for external assessments, such as investors or regulatory bodies.

Internal users	External users
• **Policy makers** • **Managers** • **Operational level staffs** • **Employees**	• **Regulatory Authorities** • **Auditors** • **Shareholders** • **Creditors and Lenders**

(a) Internal Users: Internal users of Cost and Management Accounting information may include management, department heads, and operational teams.

- **Strategic Functions of Policy Makers**: Policy makers develop and implement strategies to achieve both short and long-term goals, ensuring the fulfilment of organizational objectives. They navigate the competitive market landscape to position the organization effectively. Additionally, they design the organizational structure to facilitate the implementation of policies and strategies.
- **Information Utilization by Managers for Decision-making:** Managers utilize information to assess the cost of a cost object and cost center, determine product or service prices, measure and evaluate the performance of responsibility centers, analyze profitability by product, department, and customer, and evaluate strategic options to make informed decisions.
- **Operational Level Information Needs:** Operational level staff, such as supervisors, foremen, and team leaders, need information to understand their objectives and performance goals, be aware of product and service specifications (including volume, quality, and processes), access performance parameters for measurement and evaluation, and understand divisional (responsibility center) profitability.
- **Employee Concerns in the Workplace:** Employees are primarily interested in information related to time and attendance, incentives for work, and performance standards.

(b) External Users: External users of Cost and Management Accounting information may include:

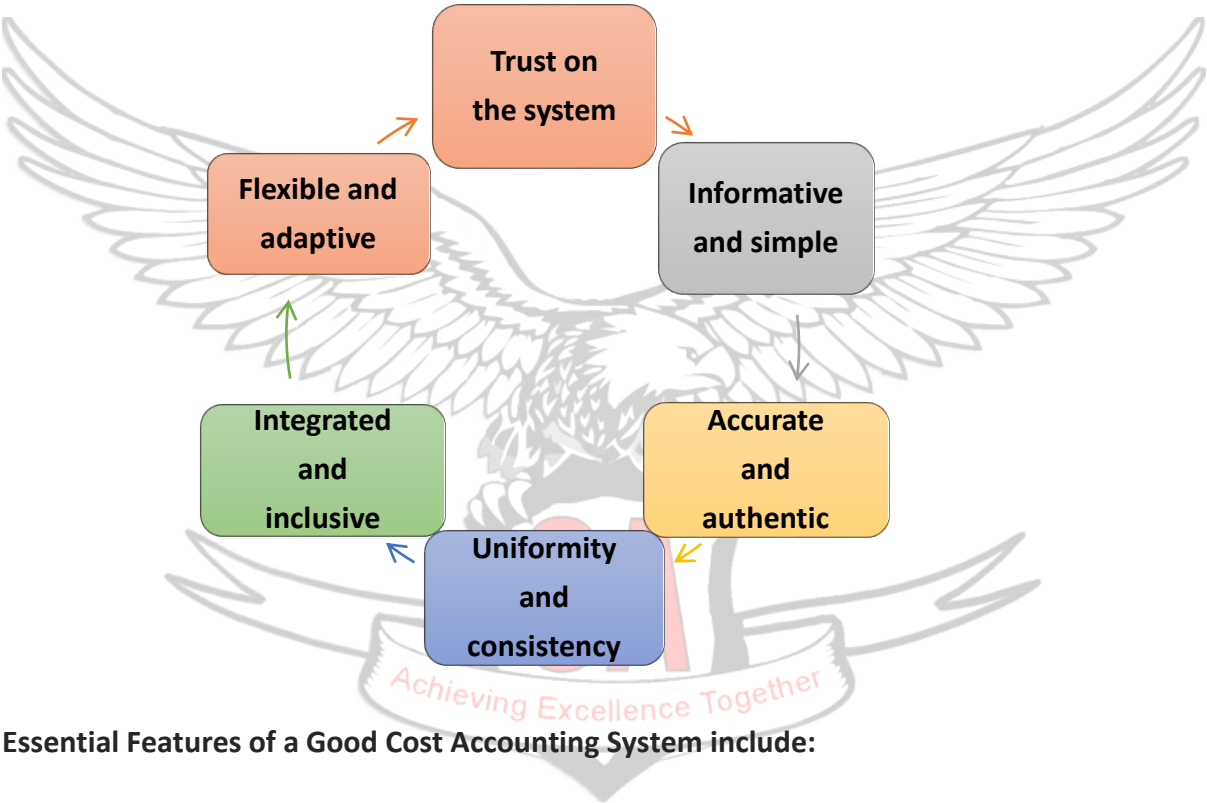
1. Regulatory Authorities: Regulatory authorities use cost accounting data for purposes such as tariff determination, providing subsidies, and rate fixation. They rely on standardized information formats to fulfil these needs.

2. Auditors: Auditors, whether conducting financial audits or specialized cost audits, require information related to costing and management-reviewed reports. This is crucial for ensuring accuracy and compliance.

3. Shareholders: Shareholders are interested in information that impacts their investments. Management communicates through periodic updates and annual reports, providing details on new orders, product expansion, and market share.

4. Creditors and Lenders: Creditors and lenders focus on data affecting an entity's ability to meet financial obligations. Financial institutions, for instance, closely monitor reports on net debt position and stock balances for entities they lend to.

ESSENTIALS OF A GOOD COST ACCOUNTING SYSTEM



Essential Features of a Good Cost Accounting System include:

(1)Informative and Simple: The cost accounting system should be practical, tailored to the business's needs, and avoid unnecessary complexity without sacrificing utility.

(2)Accurate and Authentic: Data used in the system must be accurate and authenticated to prevent distorted outputs that could lead to incorrect decision-making.

(3)Uniformity and Consistency: Maintain uniformity and consistency in classifying, treating, and reporting cost data for benchmarking and comparability in both horizontal and vertical analyses.

(4)Integrated and Inclusive: Ensure integration with other systems, such as financial accounting and operational research, for a comprehensive overview and clear results.

(5)Flexible and Adaptive: The system should be flexible to accommodate amendments and modifications, adapting to changes in technology, reporting standards, regulations, and other requirements.

(6)Trust in the System: Management should have confidence in the system's output, emphasizing an active role in its development to install a strong conviction in using information for decision-making.

INSTALLATION OF COSTING SYSTEM

The decision to install a Cost Accounting System hinges on its potential profitability and the need for comprehensive and accurate information for effective decision-making. A well-established costing system is essential to furnish timely and relevant information to both management and stakeholders. This ensures that decision-makers have the necessary insights for strategic planning and operational efficiency, contributing to the overall success of the organization.

Before establishing a cost accounting system, study the following factors:

a) Objective: Define the purpose of the costing system, such as fixing prices or implementing cost control measures.

b) Nature of Business or Industry: Consider the unique characteristics and objectives of the industry in which the business operates, tailoring cost accounting methods accordingly. For instance, an oil refinery may use process-wise cost accounts.

c) Organisational Hierarchy: Ensure the costing system meets the information needs of different management levels, addressing corporate strategy for top management, marketing strategy for strategic level management, and operational details for middle management.

d) Knowing the Product: Tailor the costing system to the nature of the product, accounting for by-products or using marginal costing for perishable goods to determine contribution and minimum selling prices.

e) Knowing the Production Process: Acquire a thorough understanding of the production process for effective cost apportionment, considering the degree of effort or resources consumed in each step.

f) Information Synchronisation: Consider the information needs of various departments during the drafting of a costing system to ensure synchronization. For example, accounting departments may need to provide stock details for lender banks and tax authorities.

g) Method of Maintenance of Cost Records: Determine how Cost and Financial Accounts will be integrated into a single accounting system and how separate accounts will be reconciled through control accounts.

h) Statutory Compliances and Audit: Adhere to statutory requirements and cost accounting standards, ensuring proper record maintenance and compliance.

i) Information Attributes: Ensure that information generated by the costing system possesses essential attributes—completeness, accuracy, timeliness, and relevance—to facilitate an effective Management Information System (MIS).

COST ACCOUNTING WITH THE USE OF INFORMATION TECHNOLOGY (IT)

The integration of Information Technology (IT) into Cost Accounting, driven by the rise of e-commerce and heightened business competition, is evident with the advent of Enterprise Resource Planning (ERP) systems. The automation and enhancement of Cost Accounting and Management Information Systems through IT, particularly in the era of Industry 4.0, emphasize digitization and automation for improved cost control and market competitiveness. This digital innovation results in substantial savings in terms of time, money, and effort within the Cost Accounting System.

- **Integration with ERPs:** ERPs integrate various functional activities, allowing a single entry in the accounting system to generate custom reports for diverse purposes. This streamlines

processes, eliminating the need for multiple document sets, and simplifies the reconciliation between cost and financial accounting systems.

- **Paperless Environment:** The shift to a paperless environment eliminates the need for multiple copies of documents such as Bill of Material, Material Requisition Note, Goods Received Note, and labour utilization reports. Departments can now access e-copies directly from the system, streamlining document preparation processes.

- **Resource Procurement:** Information Technology, leveraging the internet, facilitates resource procurement and mobilization. For instance, the production department can access materials from stores without physically issuing material requisition notes. Purchase orders can be initiated to suppliers through extranet, enabling a shift towards a Just-in-Time (JIT) approach for inventory management and production.

- **Automated Cost Accumulation:** Cost information for cost centers or objects is accurately and promptly ascertained through codification. Each cost center or object is assigned specific codes, automating the cost accumulation process. This allows customization of cost information based on needs, providing managers with detailed insights such as job-wise, batch-wise, process-wise, and cost center-wise data in manufacturing or service operations.

- **Uniform Reporting:** IT, particularly ERP software, ensures uniformity in report, budget, and standard preparation across diverse factors such as location, currency, language, and regulations. This standardization is crucial for consistency and efficiency in financial and operational processes within an organization.

- **Real-time Variance Reports:** Real-time generation of cost and revenue variance reports through IT empowers management to promptly implement control measures. This quick access to critical financial insights allows for swift decision-making and responsive actions to address variances as they occur.

Process Monitoring: IT enables close monitoring and analysis of each manufacturing or service process, aiding in the identification and elimination of non-value-added activities. This targeted analysis improves operational efficiency and resource utilization.

❖ Digital Costing System

The Digital costing system, similar to traditional cost accounting, collects, classifies, and accounts for data to inform decision-making. However, the key difference lies in the method of collection, storage medium, and forms of analysis and reporting. In the digital system, integration occurs across various business functions like production, procurement, and inventory management, connecting with suppliers, customers, and the market through data sharing and network interaction. This interconnected approach enhances efficiency and collaboration in the decision-making process.

Digital Costing System supplies data to obtain the following information:

(i) Cost Incurred for a Cost Object.

(ii) Time Spent Data.

(iii) Resource Consumption Data.

(iv) Current Market Prices for Final Products and Raw Materials.

(v) Lead Time and Material Availability Data.

(vi) Product Demand and Trend Information.

❖ Benefits of Digital Costing System

AI and ML analyzing Big Data for consumption and demand patterns yield the following benefits:

1. Certainty in Cost Ascertainment: AI and ML provide certainty in determining costs for specific objects, facilitating analysis for accurate cost allocation and apportionment.

2. Time Spent Analysis for Incentive Plans: Analysis of time spent on activities aids in formulating effective incentive plans.

3. Material Requirement Planning and Optimization: AI and ML support material requirement planning, scheduling procurement, and optimizing resource consumption for zero wastage and Just-in-Time (JIT) practices.

4. Identification and Elimination of Non-Value-Added Activities: These technologies help identify and eliminate non-value-added activities, streamlining processes.

5. Real-time Standards and Variance Measurement: AI and ML enable real-time analysis of resource consumption data, assisting in setting standards and measuring variances.

6. Market Prices Estimation on Marked to Market (M2M) Basis: Current market prices of materials are estimated using AI and ML, allowing for cost estimation and standard setting based on Marked to Market (M2M) principles.

7. Extrapolation of Customer Behaviour Data for Market Demand Prediction: Data on customer behaviour is extrapolated to predict market demand, aiding in budget preparation and production planning.

8. Improved Cost Benefit Analysis through Cost Behaviour Analysis: AI and ML enhance cost behaviour analysis, leading to improved cost-benefit assessments and supporting informed decision-making by management.

COST OBJECTS

A cost object is something that necessitates a distinct measurement of cost. This can include products, services, projects, customers, brand categories, activities, departments, or programs, among others.

Examples of cost objects are:

Product	Smart phone, Tablet computer, SUV Car, Book etc.
Service	An airline flight from Delhi to Mumbai, Concurrent audit assignment, Utility bill payment facility etc
Project	Metro Rail project, Road projects etc.
Activity	Quality inspection of materials, Placing of orders etc.
Process	Refinement of crudes in oil refineries, melting of billets or ingots in rolling mills etc.
Department	Production department, Finance & Accounts, Safety etc**.**

1. Cost Units

Cost units are the entities, whether products, services, or time, in relation to which costs can be determined or expressed. Examples include the cost per ton of steel, per ton-kilometre for a transport service, or cost per machine hour. Cost units can be a single order, a contract, or a batch maintaining its identity through production stages. They are typically measured in physical units like number, weight, area, volume, length, time, or value.

A few typical examples of cost units are as follows:

- **Textiles:** Yard or Meter (for fabric production)
- **Food Manufacturing:** Pound or Kilogram (for packaged goods)
- **Software Development:** Project (for software development projects)
- **Healthcare Services:** Patient Visit (for medical services)
- **Construction:** Square Foot or Square Meter (for building projects)

Some examples from the CIMA terminology are as follows:

✓ **Marketing:** Campaign (for marketing activities)

✓ **IT Support:** Ticket or Service Request (for IT support services)

✓ **Manufacturing Setup:** Production Run (for manufacturing processes)

✓ **Research and Development:** Project (for R&D initiatives)

✓ **Telecommunications:** Subscriber (for telecom services)

✓ **Legal Services:** Billable Hour or Case (for legal services)

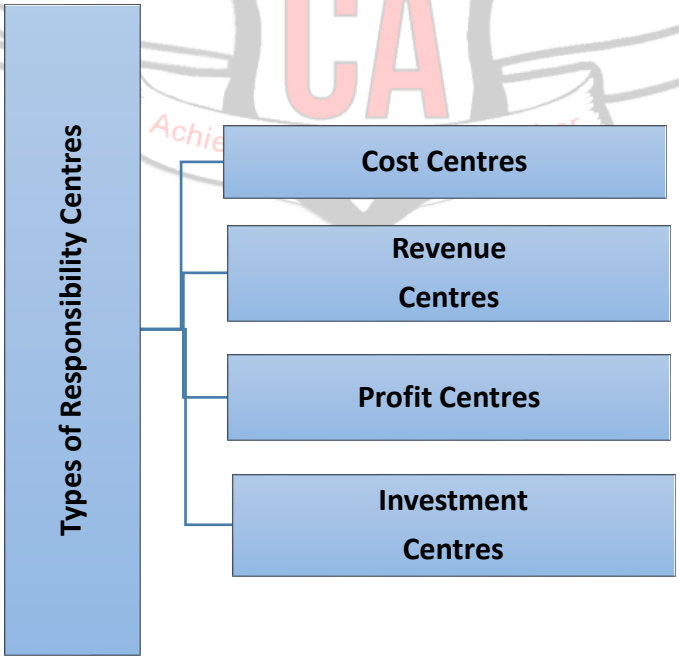
✓ **Environmental Services:** Ton of waste processed (for waste management)

2. Cost Driver

A cost driver is a variable that influences the level of costs, often associated with activities leading to cost incurrence. It is a factor that links resource consumption to product outputs, particularly in the context of Activity Based Costing. Examples of cost drivers include the number of machine setups, purchase orders, hours spent on product inspection, and the number of tests performed.

RESPONSIBILITY CENTRES

As an organization expands, it delegates responsibility and authority to various departments or individuals for better control. These designated entities, known as responsibility centres, bear accountability for performance metrics such as expenditure, revenue, profitability, and return on investment. Their performance is assessed against established standards, such as input-output ratios or budgets, and evaluated in alignment with organizational goals and performance targets. This decentralized approach enhances efficiency and accountability within the organization.



1) Cost Centres: Cost Centres are responsibility centres accountable for incurring costs under their control. Their performance is evaluated against predetermined standards or budgets. There are two types of cost centres:

(a)Standard Cost Centre and (b) Discretionary Cost Centre

(a)Standard Cost Centres: A Standard Cost Centre involves measurable output and specified input requirements. Managers are held responsible for adhering to set standards, and any variance between actual and standard costs is analyzed. The input-output ratio is clearly identifiable, and deviations in cost are categorized into controllable and uncontrollable costs. Managers are expected to comply with standards and are accountable for adverse cost variances.

(b)Discretionary Cost Centres: Discretionary Cost Centres, like Research & Development or Advertisement departments, have unmeasurable output in financial terms, making it challenging to define an input-output ratio. Instead of comparing costs with a standard, the focus is on evaluating input costs against an allocated budget for the activity. This approach acknowledges the inherent uncertainty in measuring the output precisely.

2) Revenue Centres: Entities accountable for revenue generation, like the Sales Department, focus on achieving sales targets. While they lack control over all expenditures, some selling-related costs, such as salesperson commissions, may be incurred by revenue centres.

3) Profit Centres: Responsibility centres managing both revenue generation and expenditures, such as decentralized branches, are measured based on profitability. Managers of profit centres are accountable for both costs and revenue.

4) Investment Centres: These centres, like Maharatna, Navratna, and Miniratna companies in Public Sector Undertakings, not only aim for profitability but also have authority over capital investment decisions. Performance is measured using Return on Investment (ROI) alongside profit.

LIMITATIONS OF COST ACCOUNTING

Cost accounting has limitations, including:

a) Expensive: Cost accounting can be costly due to the extensive work needed for the analysis, allocation, and absorption of overheads. This process demands additional resources and incurs extra expenses.

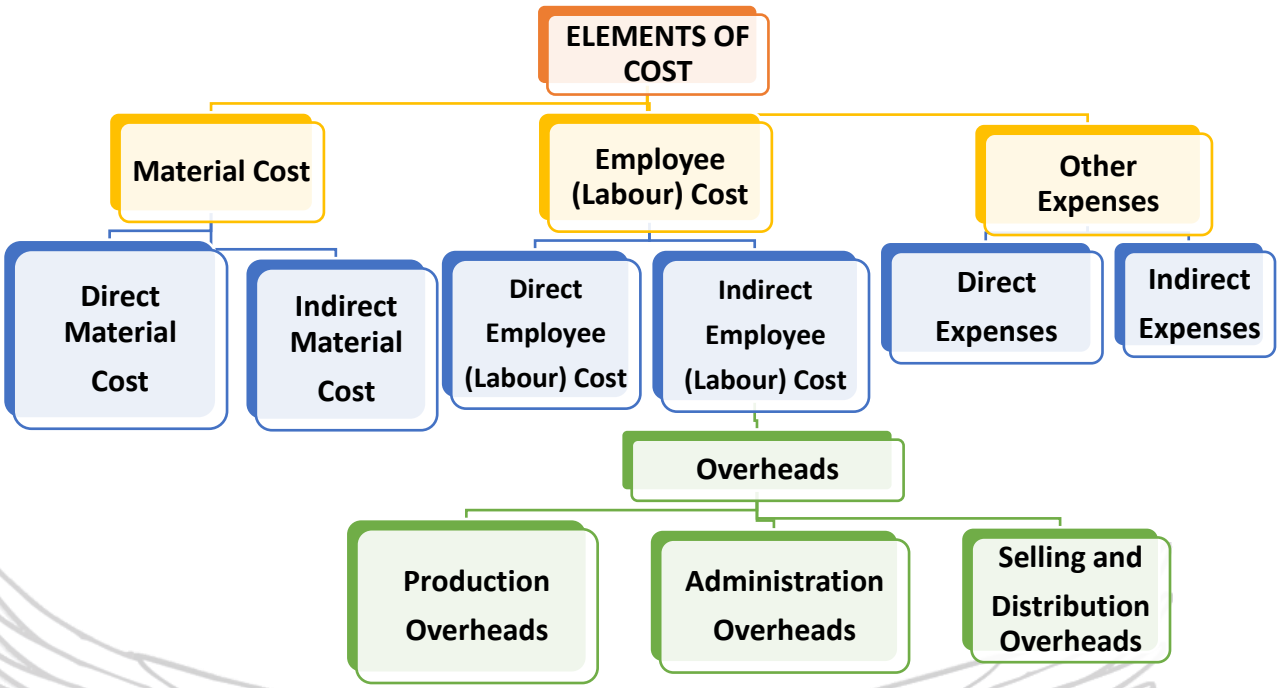
b) Requirement of reconciliation: Cost accounting results may diverge from those presented in financial accounts. To ensure accuracy, reconciliation statements are essential, adding to the workload and complexity.

c) Duplication of work: Maintaining both financial accounts and cost accounts leads to duplication of efforts within the organization. This redundancy can be inefficient and may consume unnecessary resources.

CLASSIFICATION OF COSTS

Cost classification refers to the categorization of costs based on shared characteristics. Key methods of classifying costs include:

(A) By Nature or Element: This classification categorizes the total cost of a cost object based on the fundamental elements of cost, such as material, labour, other expenses, and overheads. It provides a detailed breakdown of costs, allowing for a more granular analysis of the composition of overall expenses.



Material Cost: Material cost refers to the expense associated with raw materials required for manufacturing a product into finished goods. Direct materials are those present in or economically identifiable with the finished product, while indirect materials, even if technically direct, are treated as such due to their small quantities or ancillary use in the business.

Labour Cost: Labour cost involves wages paid to workers for converting raw materials into finished goods. Direct labour refers to workers whose efforts can be wholly attributed to a cost object, such as those directly engaged in production operations.

Other Expenses: Other expenses encompass all costs, aside from material and labour, incurred for a specific cost object. Examples include hire charges for special machinery or costs related to defective work.

Overheads: Overheads comprise indirect material costs, indirect labour costs, and indirect expenses. They are categorized into:

- **Production or Works Overheads:** Indirect expenses incurred in the factory for its operation, such as rent and power.
- **Administration Overheads:** Indirect expenses linked to business management and administration, such as office rent and lighting.

- **Selling Overheads:** Indirect expenses associated with marketing, such as advertisement expenses and sales commissions.
- **Distribution Overheads:** Indirect expenses for the dispatch of goods, including warehouse charges and packing/loading fees.

(B) By Functions

Under this classification, costs are segmented based on the functions for which they are incurred. The divisions encompass:

(i) Production/Manufacturing Cost

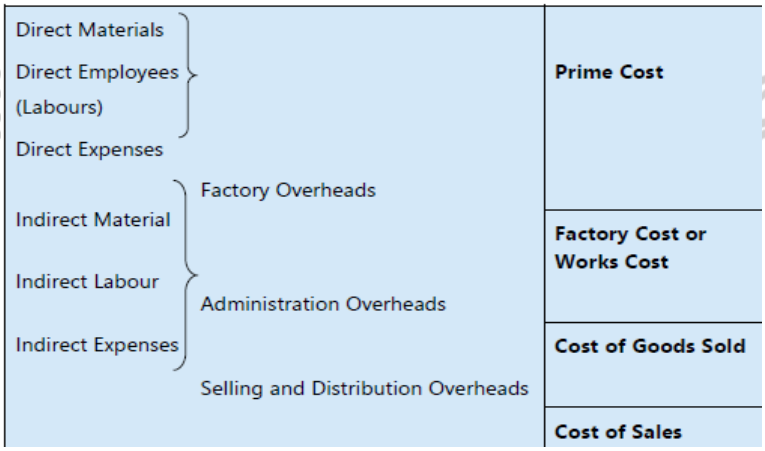
(ii) Administration Cost

(iii) Selling Cost

(iv) Distribution Cost

(v) Research and Development Cost

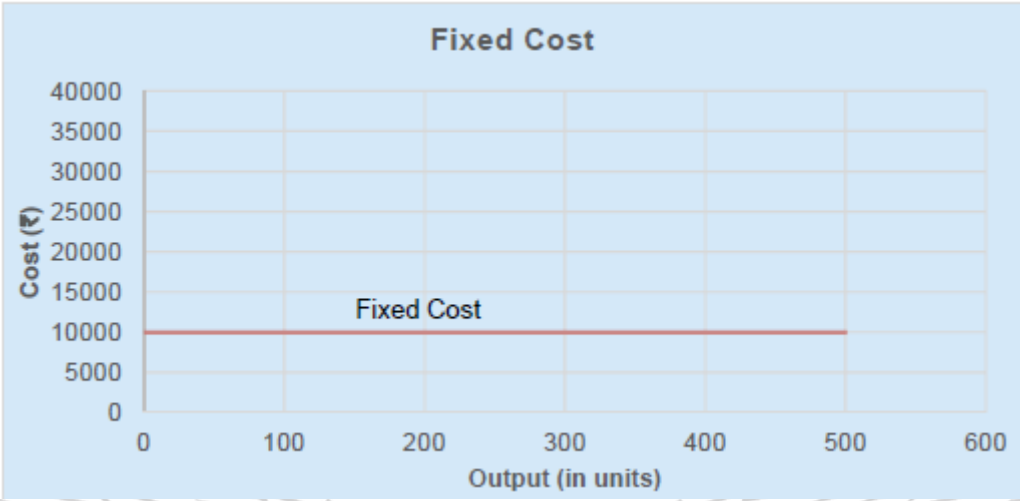
The chart below illustrates the cost flow on a cost sheet under functional classification



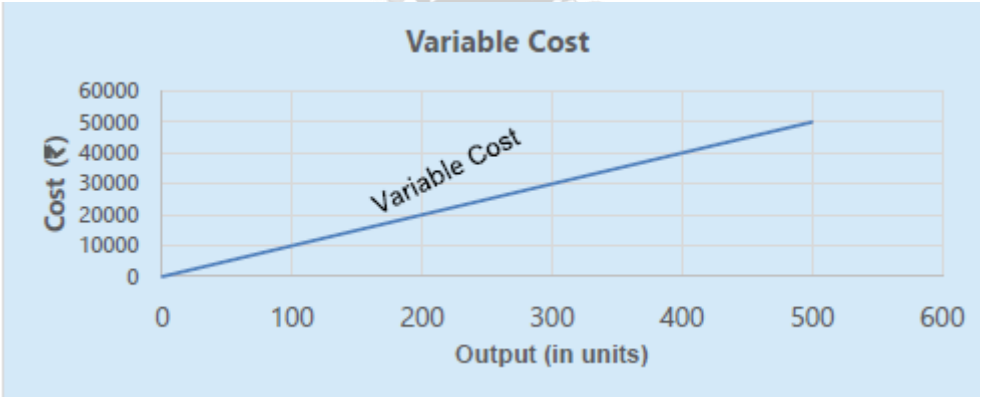
(c) By Variability or Behaviour: Costs are categorized into fixed, variable, and semi-variable groups under this classification.

1) Fixed Costs: Fixed costs are expenses that persist over a specific period and, within certain output or turnover limits, remain relatively unaffected by fluctuations in activity

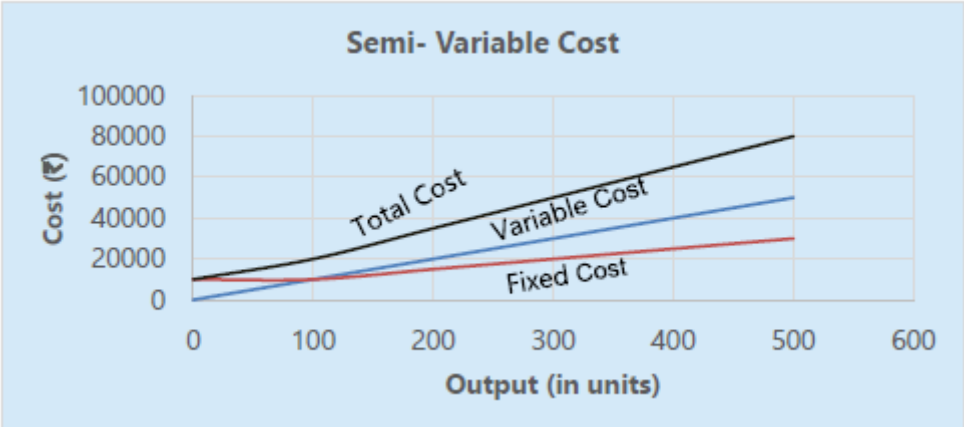
levels, such as production or turnover. These costs do not vary with changes in output; for instance, expenses like rent and insurance for a factory building remain constant irrespective of the production levels.



2) Variable Costs: Variable costs fluctuate in direct proportion to the volume of activity. As the level of activity increases, variable costs rise, and they decrease with a reduction in activity. Examples include the cost of direct materials and direct labour, which vary based on the production or activity levels.



(3) Semi-variable Costs: Semi-variable costs consist of both fixed and variable components, making them partially influenced by fluctuations in the level of activity. Examples include telephone bills and utility costs like gas and electricity. Graphically, these costs exhibit characteristics of both fixed and variable elements.



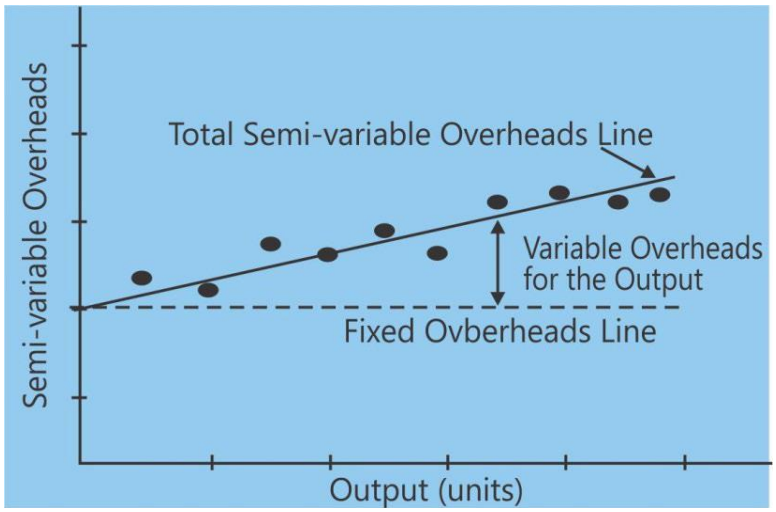
The segregation of semi-variable costs into fixed and variable components can be accomplished through the following methods:

(a)High- Low Method: The High-Low Method calculates the rate of variable cost as the difference between total costs at the highest and lowest volume, divided by the difference between sales values at the same points. The resulting quotient represents the variable cost as a proportion of sales value. This method helps analyze cost behaviour and estimate variable costs based on varying activity levels.

(b)Graphical Method for Cost Analysis: This graphical method provides a visual representation of the cost structure, allowing for a clearer understanding of fixed and variable cost components.

- Gather a substantial number of data points representing total costs at various production levels.
- On a graph, designate the X-axis for output levels and the Y-axis for total costs. Plot the collected observations.
- Employ judgment to draw a line of "best-fit" through the plotted points, ensuring it passes through most or all of them.
- Locate the point where the best-fit line intersects the Y-axis. This intersection represents the total fixed cost component in the overall cost structure.
- Draw a line parallel to the X-axis from the Y-axis intersection point. This line signifies the fixed cost at any production level.

▪ Compute the variable cost at a given output level by subtracting the fixed cost element (found in step v) from the total cost.



(c) Analytical Method: The Analytical Method involves the experienced cost accountant intuitively determining the variable and fixed proportions of semi-variable costs.

For instance: Consider a sales team's salaries, where a portion is fixed and another is commission-based. An experienced cost accountant, through the Analytical Method, might judge that 70% of the salary is fixed, while 30% is variable based on the commission earned. This approach relies on the accountant's empirical judgment to ascertain the variable and fixed proportions of semi-variable costs in specific expense items.

The Comparison by Period or Level of Activity Method involves determining variable overhead by comparing expenses at two different levels of output. As the fixed element remains constant, the variable element can be calculated using the formula:

$$\frac{\textbf{Change in the amount of expense}}{\textbf{Change in the quantity of output}}$$

(d)Least Square Method: The Least Squares Method is a statistical technique that calculates a line of best fit for a set of observations, aiding in the precise separation of fixed and variable components in semi-variable costs. It minimizes the sum of squared vertical distances between the observed data points and the fitted line.

The method uses the linear equation $\mathbf{y = mx + c}$, where

'm' represents the variable element of cost per unit,

'c' represents the total fixed cost,

'y' represents the total cost,

'x' represents the volume of output.

The equation is solved to split total cost into fixed and variable elements.

(E) By Controllability

Costs can be classified as controllable and uncontrollable.

❖ **Controllable Costs:** These are costs that can be controlled or influenced by a manager responsible for a particular center, such as a cost, profit, or investment center. Managers have authority over these costs and can take actions to manage or reduce them. **For instance,** In a manufacturing plant, the production manager has control over the direct labour costs in his department. By implementing efficient work practices or adjusting staffing levels, the production manager can influence and control these labour costs, making them controllable costs.

❖ **Uncontrollable Costs:** These are costs that cannot be influenced or controlled by a specified member of an organization. They are often external factors or costs beyond the manager's authority. **For instance,** A marketing manager faces uncontrollable costs when unexpected changes in government regulations lead to increased taxes, affecting the overall advertising budget beyond the manager's control.

❖ **Distinction between Controllable and Uncontrollable Costs:** The line between controllable and uncontrollable costs is often subjective and depends on individual judgment. In reality, all costs can be influenced by someone, but the classification as controllable or uncontrollable is relative to the authority and control of a particular individual within an organization.

(F) By Normality

(a) Normal Cost: Cost incurred at a given level of output under normal conditions. It represents the typical or expected cost for a certain level of production.

(b) Abnormal Cost: Cost not typically incurred at a given level of output under normal conditions. It deviates from the usual or expected cost and is charged to the Costing Profit and Loss Account.

(G) By Costs used in Managerial Decision Making

Based on this criterion, costs can be categorized as follows:

(a) Pre-determined Cost: A cost computed in advance before production or operations start, considering all factors affecting cost.

(b) Standard Cost: A pre-determined cost based on management's expected standard of efficient operation, used for price fixation and cost control through variance analysis.

(c) Marginal Cost: The amount by which aggregate costs increase or decrease with a one-unit change in the volume of output.

(d) Estimated Cost: The expected cost of manufacture or acquisition predicted in advance of actual production or purchase.

(e) Differential Cost: The change in total cost (variable and fixed) due to a change in activity level, technology, or production method.

(f) Imputed Costs: Notional costs like interest on capital that don't involve cash outlay, similar to opportunity costs.

(g) Capitalized Costs: Costs initially recorded as assets and later treated as expenses, such as installation expenses on machinery.

(h) Product Costs: Costs associated with the acquisition and conversion of materials into finished products for sale.

(i) Opportunity Cost: The value of sacrifice or benefit foregone in accepting an alternative course of action.

(j) Out-of-pocket Cost: That portion of total cost involving cash outflow, used in short-term decisions like pricing or make-or-buy.

(k) Shut down Costs: Costs incurred during temporary plant shutdown, including fixed costs that cannot be avoided.

(l) Sunk Costs: Historical costs incurred in the past, irrelevant to current decision-making.

(m) Absolute Cost: Total cost of a product, process, or unit; used as a base for further analysis and decisions.

(n) Discretionary Costs: Costs not tied to a clear cause and effect relationship, arising from periodic decisions on maximum outlay.

(o) Period Costs: Costs not assigned to products but charged as expenses against the revenue of the period in which they are incurred.

(p) Engineered Costs: Costs resulting from a clear cause and effect relationship between inputs (e.g., direct material costs) and outputs (e.g., cars).

(q) Explicit Costs: Also known as out-of-pocket costs, involving immediate payment of cash for items like salaries, wages, etc.

(r) Implicit Costs: Costs not involving immediate cash payment, also known as economic costs, not recorded in the books of account.

METHODS OF COSTING

Industries adopt diverse costing methods due to variations in their nature of work. The following are various costing methods:

Method	Description
Single or Output Costing	The cost is ascertained for a single product, such as bricks or coal.
Batch Costing	An extension of job costing where batches represent units of cost; each batch is separately costed.
Job Costing	Cost of each job is ascertained separately, suitable for industries like printing presses or motor workshops.

Contract Costing	The cost of each contract is determined separately; suitable for construction firms building bridges, roads, etc.
Process Costing	Cost of completing each stage of work is ascertained; applicable in processes like making pulp and paper.
Operating Costing	Used for service-oriented concerns like transport, water supply, and retail trade.
Multiple Costing	A combination of two or more costing methods; for example, components costed using job or batch costing, and assembly costed using single or output costing.

The table below provides a concise overview of different costing methods applied in various industries:

Nature of Output	Method	Cost Examples	Industries
A Series of Processes or Operation	Process costing	For each process	Sugar
Construction of building	Contract Costing	For each contract	Real estate
Similar units of a Single Product, produced by Single Process	Unit Costing	For the entire activity, but averaged for the output	Cold Drinks
Rendering of Services	Operating Costing	For all services	Hospitals
Customer Specifications: single Unit	Job Costing	For each order/assignment/job	Advertising
Consisting of multiple varieties of activities and	Multiple Costing	Combination of any method	Car Assembly

processes			

TECHNIQUES OF COSTING

Various types of costing are commonly employed to ascertain costs.

Technique	Description
Uniform Costing	When multiple firms in an industry agree to use the same costing system and terminology, it's termed as uniform costing. **Advantages of such a system are:** 1. Enables comparison of performance among firms. 2. Facilitates determination of industry-wide production costs, useful for seeking government relief or protection.
Marginal Costing	It involves differentiating between fixed and variable costs to ascertain marginal cost. Used to analyze the impact of changes in output volume or type on profit.
Standard Costing and Variance Analysis	Standard costing and variance analysis involve pre-determining standard costs and comparing them with actual costs. This technique aids in cost ascertainment and control. It is versatile, applicable with any costing method, but particularly effective for manufacturing processes producing standardized goods in a repetitive manner.
Historical Costing	The ascertainment of costs after they have been incurred. Limited utility. Two variations: **1.** Post Costing: Cost ascertained after production completion. **2.** Continuous Costing: Cost ascertained as soon as the job is completed or even when it's in progress.
Absorption Costing	All costs, both variable and fixed, are charged to operations, processes, or products. Differs from marginal costing where fixed costs are excluded.

CA
Achieving Excellence Together