

MODULE 1

Introduction to Cost Management

1.1. COST ACCOUNTING

1.1.1. Meaning and Definition of Cost

The total expenditure inclusive of money, labour and time incurred on goods and services is called "Cost". In certain exceptional situations, the costs which are generally considered as expenses in the present scenario might not go into the record books.

The outcome of initiation and consumption of resources is denoted in monetary terms. The producer firms use it as an internal control process and it is not accessible to third parties.

The term 'Cost' is the money used for the purpose of producing something. Since it has been already utilised, it is not available for any other use. The cost also includes the money spent for acquiring something. From business point of view, the expenditure incurred for acquisition and repair purpose constitutes as "cost".

According to ICMA, London, "Cost is the amount of expenditure (actual or notional) incurred on, or attributable to, a specified thing or activity or cost unit".

According to Anthony and Welsh, "Cost is a measurement in monetary terms, of the amount of resources used for some purposes".

1.1.2. Meaning and Definition of Cost Accounting

Cost Accounting may be defined as, "the process of accounting for cost". The process involves recording as well as controlling of various costs. This is a formal system of accounting which ascertains and controls costs related to various products and services.

According to the ICMA, London, cost accounting is "the process of accounting for cost which begins with the recording of income and expenditure and ends with the preparation of periodical statements and reports for ascertaining and controlling costs".

According to L.C. Cropper, "cost accounting means a specialized application of the general principles of accounting in order to ascertain the cost of producing and marketing any unit of manufacture or of carrying out any particular job or contract".

1.1.3. Features of Cost Accounting

Cost accounting is characterized by the following features:

- 1) **Cost Accounting is a Branch of Knowledge:** Generally cost accounting is perceived to be one of the branches of financial accounting. However, a close study of the subject reveals that it is a separate stream of knowledge, independent of financial accounting. The underlying concepts, principles, conventions, etc. pertaining to cost accounting gives it a status of a self-sufficient discipline. Such principles, rules, etc., however, differ from one industry to another.
- 2) **Cost Accounting is a Science:** Cost accounting may be considered as a science (although not as perfect as the natural science), as it exhibits all the features as per the definition of science (science may be defined as "acquisition of knowledge through the medium of study and / or practice"). The subject essentially entails an orderly knowledge of costing aspects of various products and processes. However, the subject also covers a broad range of numerous fields of knowledge such as law, office management, data processing, production management, material control, etc.
- 3) **Cost Accounting is an Art:** Cost accounting may also be considered as a form of 'Art', keeping in view the application of its principles, procedures and techniques in solving many of the management problems. Such management problems may relate to cost assessment, monitoring the costing aspect (and thereby having a check over various costs), forecasting of profitability, etc.
- 4) **Cost Accounting is a Profession:** Of late, the cost accounting has been evolved as a significant and challenging profession. A considerable number of students all over the world (from the developed as well as the developing countries) have shown inclination to get trained and join this profession. This has prompted the authorities of various countries to establish professional bodies to cater to the needs of such aspiring students. Some of such professional bodies are 'National Association of Accountants' of USA, 'The Institute of Cost and Management Accountants' of UK, and 'The Institute of Cost and Works Accountants' of India. The number of students interested in joining the profession of cost accounting has shown a growing tendency over the last many years.

1.1.4. Functions of Cost Accounting

Cost accounting serves various functions which are as follows:

- 1) **Ascertainment of Cost:** The process of ascertainment of costs involves computation of costs which has been incurred. The costs may be ascertained for different products, services or activities using various costing methods. Determination of costs is important for the purpose of controlling them and for providing cost information to the top management for decision making. It should be ensured that the costs of a particular product or service are properly assessed.

- 2) **Estimation of Cost:** While costs are ascertained after it has been incurred, the estimation of costs is done before their actual incidence. For the purpose of estimation, an allowance is generally made for adjusting deviations as various costs such as material costs, labour costs and overheads tend to fluctuate.
- 3) **Control of Cost:** Cost control is related to controlling and reducing costs for the purpose of improving efficiency. Cost control can achieve this efficiency by full utilization of output at minimum cost. Two main techniques used for this purpose are Budgetary Control and Standard Costing. Under this process, various areas are identified where the efficiency may be increased by reducing wastage and costs. Various remedial measures may also be taken for cost control.
- 4) **Reduction of Cost:** The ending of cost control function is the stating of cost reduction function. It involves making actual and permanent reduction in the production costs of goods and services. It achieves the objective by eradicating non-essential or inefficient activities. Technological advances may render many activities non-essential. Similarly, brain storming sessions may be carried out to question standard activities. Various areas where costs may be controlled are product designing, administration, finance and production.

1.1.5. Objectives of Cost Accounting

Cost accounting serves various objectives which are as follows:

- 1) **Preparation of Cost Statement:** Different elements of total costs are shown in a cost statement. This statement shows total cost, unit cost, units produced and sold, closing stock in terms of units and value, etc. Production process and other processes should be constantly reviewed to maintain efficiency. Cost accounting presents information (such as production units and its total costs) with proper analysis for different time periods ranging from daily basis to yearly. Thus, a cost statement serves complete information tools for the management.
- 2) **Ascertainment of Profitability:** The determination of profits for the activities carried out or planned is one of the important objectives of cost accounting. When a company enters into the new product market, the important consideration is given to earning profit from that product. But the same consideration should also be given on the current activities/performances at the factory.
- 3) **Determination of Selling Price:** The demand and supply mechanism plays a crucial role for any business in determining of tender price. The tender price concludes total cost plus a margin of profits and proprietors have to set it after considering the demand and supply factors. Thus, cost accounting helps in deciding of selling price and bifurcate the cost into variable and fixed cost in order to assist the organization in price decision making, to remain competitive in the market.

- 4) **Formulation of Base for Business Policy:** Cost accounting objective helps in formulating of business policies and assisting in decision making. The management deals with various crucial matters and for proper profit planning, they have to analyze various factors such as gross-profit analysis, the cost-volume-profit relationship, the break-even point of sales, and the differential costing method, etc.
- 5) **Helpful in Managerial Decisions:** Cost accounting is framed in a manner to help the management. It provides information for making various decisions such as "product diversification", "fixing of selling prices" and "make or buy decisions". It is also helpful for evaluating a "product line", "factory shut down decision" and "determination of alternative methods of manufacture". Cost accounting is useful for the purpose of making various other decisions such as "shut down decision", "dropping a product line", "key factor areas" and "selection of profitable product-mix".

1.1.6. Advantages of Cost Accounting

Cost accounting has many advantages which are as follows:

- 1) **Aid to Management:** Cost accounting helps the management in taking various decision regarding different functions. The data provided by cost accounting helps the management in determining unprofitable activities.

It also helps in measuring efficiency of various processes and functions. Cost accounting provides information which may be used for submitting tenders. It also aids in the process of framing policies. Elimination of wasteful activities leads to higher profits. A well-established cost accounting system helps in producing reliable data.

The cost accounting systems serve the management in following ways:

- i) **Help in Eliminating and Turning Unprofitable Activities:** Cost accounting can help in disclosing profitable and unprofitable activities. The management can then decide to take appropriate measures for making unprofitable into profitable activities.
 - ii) **Helpful in Comparison of Data:** Cost accounting also provides data for the purpose of making comparisons which enables to measure the efficiency of the business.
 - iii) **Provide Information on Cost Estimates:** Cost accounting is helpful for making appropriate bids and tender price quotations.
 - iv) **Helps in Managerial Decision Making:** Cost accounting helps in managerial decision making as it explains costs incurred and profits made for various lines of business.
- 2) **Advantage to Employee:** Cost accounting helps in reducing costs and increasing profitability with regard to cost incurred and production unit required in different department and processes. It is also helpful for the purpose of introducing incentive compensation system and bonus plans.

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- 3) **Useful for Outsiders:** An efficient cost accounting system is good for outsiders (creditors, investors and bankers) as well. The data provided by cost accounting system helps them in evaluating financial soundness of the organization. Organizations with well-established accounting system are considered to be more efficient. This can help the firm in attracting more investment.
- 4) **Useful for Government and the Society:** Cost accounting helps organizations in reducing costs and increasing profits. It results in payment of higher taxes which helps the society and economy. Cost control helps in providing goods at lower costs. Cost accounting also helps in making national policies.

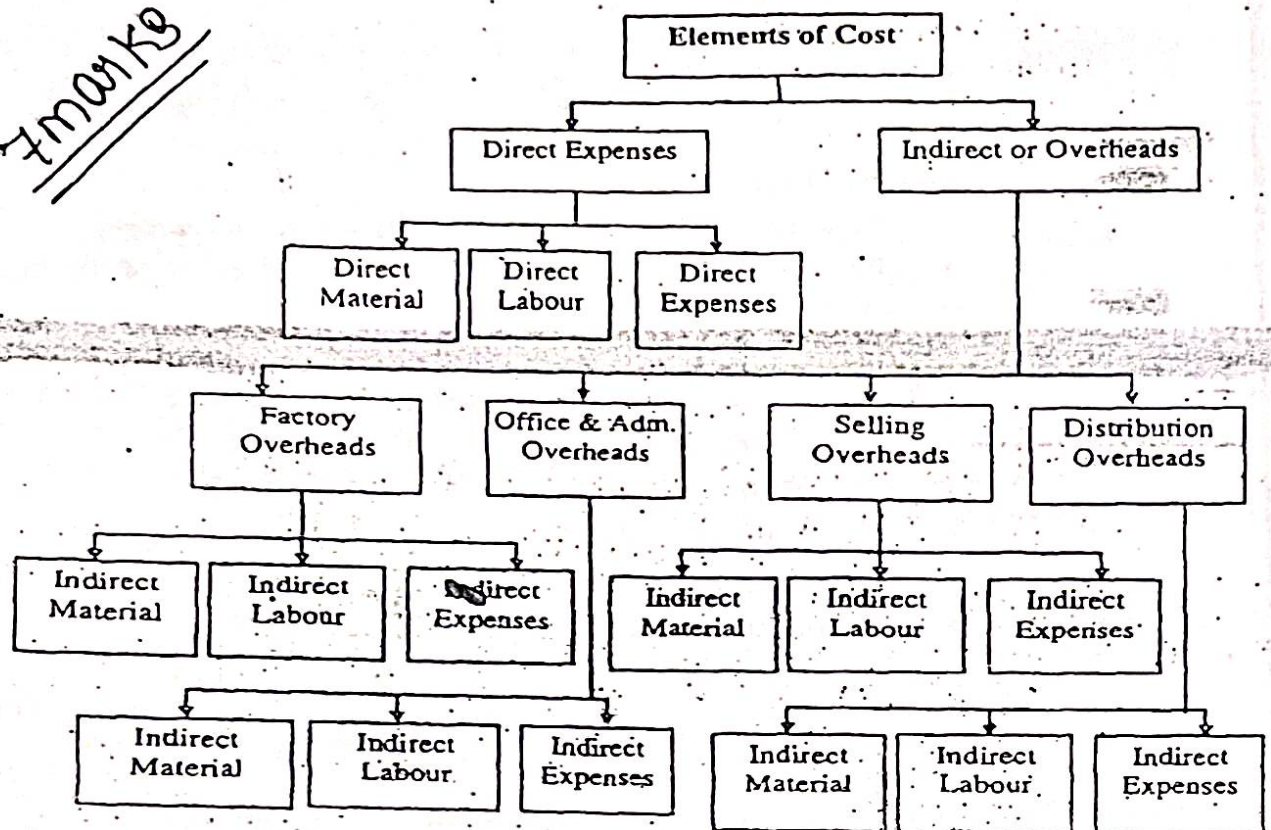
1.1.7. Disadvantages of Cost Accounting

Cost accounting has several shortcomings which are as follows:

- 1) **System is More Complex:** Establishing cost accounting processes is a complex system. It requires various forms and formulas for proper calculations and presentations. This system may be difficult to implement. The employees may also resist its implementation. The complexity of the system may make it difficult for a firm to implement it.
- 2) **Expensive:** Cost accounting system is not only complex but also involves outflow of substantial amount of funds which provide surety of increased wages for the workaholic employees. The ample of investment and work required in the process of analysis, allocation and absorption of overhead. Many small and medium scale organizations may not afford such expenses. It should be established that the benefits derived from such system are higher than the costs involved. The cost involved is one of the biggest limiting factors for a firm.
- 3) **Inapplicability of Costing Method and Technique:** Different organizations use different techniques and methods of cost accounting. These methods are based on the nature and requirements of different circumstances. It should be ensured that accounting procedures are in accordance with the requirements of the organization. Due to this reason, a firm needs to design its own accounting system to suit its procedures, making the process more difficult and expensive.
- 4) **No Social Accounting:** Cost accounting does not deal with social costs and thus provides one-sided view. It does not take cognizance of social duties of the firm.
- 5) **Frequent Reconciliation:** Cost accounting may show results different from financial accounting. In such cases, there is need to reconcile both the systems. Such reconciliations are resource intensive and may prove to be a limiting factor.
- 6) **Duplication of Work:** Cost accounting system is used in conjunction with financial accounting. This may lead to duplicity of efforts. For many firms, financial accounting serves these purposes in an economic manner.

1.1.8. Elements of Costs

The elements of cost are shown as in figure below:



1) **Material:** Commodities or substances used for manufacturing products are called materials. Materials can be either Direct or Indirect.

i) **Direct Material:** This material can be directly identified with the product. Direct materials can also be easily measured and thus charged directly to the product. For example, quantity of wood used for making a table can be identified directly to the product.

Following are the main characteristics of direct material:

- All materials purchased specifically for a particular job, order or process.
- Subsequent issues of materials from store for a particular job, order or process.
- All the components are produced or purchased.
- Material transferred among various processes.
- Primary packing material such as cardboard boxes.

ii) **Indirect Material:** These materials are used for manufacturing a product but these are not direct materials as these cannot be directly tracked back to the product. These ancillary materials are known as indirect material. Main examples of indirect material are consumable stores and threads.

- 2) **Labour:** Like material, labour can also be direct or indirect.
- Direct Labour:** Direct labour includes employees and workers directly involved in the production of the goods. This type of labour can be identified with the goods or services. The compensation paid to direct labour is known as direct wages. For example, wages paid to a cook in a restaurant is included in the above category.
 - Indirect Labour:** Labour which is ancillary to the production of goods or services is known as indirect labour. The wages paid to such labour are known as indirect wages. Such costs cannot be traced back or identified with the product. Salaries paid to supervisors come under this category.

- 3) **Expenses:** Expenses may also be direct or indirect.
- Direct Expenses:** These are expenses which are incurred in the process of manufacturing of goods or rendering a service. It does not include direct wages and direct material costs. Main instances of such costs are Research & Development expenses.

Following are some of the examples of direct expenses:

- Hiring expenses for a machinery or an instrument for a specific product.
 - Costs associated with special drawings, layouts or designs.
 - Maintenance cost of specific equipment's.
 - Royalties related with production.
- Indirect Expenses:** The expenses which are not directly identifiable with a particular product or service are categorized under this head. Following are the main example of such expenses:
 - Factory or production expenses,
 - Office and administrative expenses, and
 - Selling and distribution expenses.

- 4) **Overheads:** This category includes cost of indirect material, indirect labour and indirect expenses. Following are the main categories of overheads:

- Production or Factory Overhead:** This category shows the aggregate of indirect wages, indirect material costs and indirect expenses incurred for various manufacturing activities. Such overheads start with the supply of raw material and continue till the primary packing of finished goods.

Examples of production overhead are:

- Indirect Material Cost**

- Cost incurred for consumable stores and supplies like lubricating oil, etc.
- Cost of printing, postage & stationary used in production department.

b) Indirect Labour Cost

- Salary payable to supervisor, works manager and departmental superintendents.
- Contribution to ESI, P.F., leave pay, maternity pay, etc.

c) Indirect Expenses

- Rent, rates and taxes of factory building.
- Repairs, insurance and depreciation of factory building, plant and machinery and furniture.
- Factory telephone expenses.
- Lighting, heating and cleaning of factory.

ii) **Administration Overhead:** This category includes indirect material cost, indirect wages and indirect expenses incurred for strategic, control and administration purposes.

Following are the some examples of administrative overheads:

a) Indirect Materials Cost

- Printing, postage and stationery expenses incurred by administration department.
- Expenses incurred for dusters, brushes, etc., for cleaning.

b) Indirect Labour Cost

- Salary payable to managing director, whole time director, general manager, finance manager, accounts manager, secretary, legal manager and other staff working in administration department.
- Remuneration paid to internal and statutory cost and financial auditors, legal advisors.

c) Indirect Expenses

- Rent, rates and taxes of office building.
- Repairs, insurance and depreciation of office building, equipment, and furniture.
- Telephone expenses by administration department.
- Lighting, heating and cleaning of Administration office.

iii) **Selling Overhead:** This category shows the aggregate of all indirect material costs, indirect wages and indirect expenses incurred for generating and sustaining demand for product and services. It also includes the costs for fulfilling such demands.

Examples of selling overhead are:

a) Indirect Materials Cost

- Cost of printing, postage and stationery used in sales department.
- Cost of catalogues, list prices, etc.

b) **Indirect Labour Cost**

- Salary of sales director, sales managers, sales officers, salesmen and other staff working in sales department.
- Commission to selling agents.

c) **Indirect Expenses**

- Rent, rates and taxes of sales office and showroom.
- Repairs, insurance and depreciation of sales office building, equipment and furniture.
- Telephone expenses of sales office.
- Lighting, heating and cleaning of sales office.
- Advertising.
- Bad Debts.
- Debt collection charges.
- Travelling expenses of salesmen.
- Entertainment expenses on customer.

iv) **Distribution Overhead:** This category includes indirect material cost, indirect wages and indirect expenses incurred in packing finished products for dispatch and making them available to customers.

Examples of distribution overhead are:

a) **Indirect Materials Cost**

- Cost of printing, postage and stationery used by distribution office.
- Cost of secondary packaging of products.
- Cost of materials used in reconditioning of empty containers returned by customers for re-use.

b) **Indirect Labour Cost**

- Salary of staff attached to distribution office like packers, dispatch staff.
- Salary of driver for distribution vehicle.

c) **Indirect Expenses**

- Rent, rates and taxes of distribution office/godown/ storage/ warehouse.
- Repairs, insurance and depreciation of distribution office building, equipment and furniture, delivery van.
- Telephone expenses of distribution office.
- Lighting, heating and cleaning of distribution office.
- Depreciation, repairs and running expenses of delivery vans.
- Freight and carriage outward.
- Insurance of finished stock in godown.

1.1.9. Classification of Costs

There are several ways in which costs may be classified. Following are the main basis of cost classification:

1) **According to Elements:** The cost may be classified into a) Direct Cost, and (b) Indirect Cost according to elements, viz., Materials, Labour and Expenses.

i) **Material:** Substances or commodities used for producing a product are called "Materials". Materials consumed may be direct or indirect.

a) **Direct Material:** The materials which can be directly identified with the product are called "Direct Material". These materials can be easily measured and can be directly charged to the product. For example, steel used for producing a container.

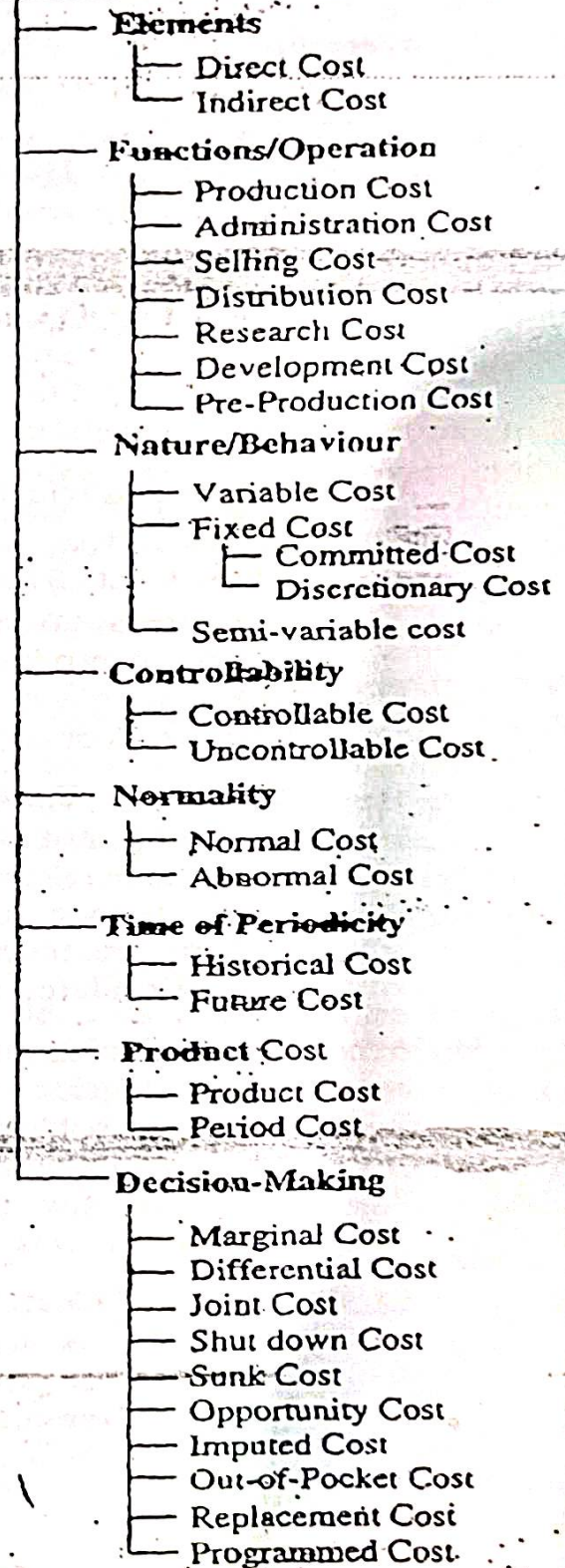
b) **Indirect Material:** These materials are used for production but cannot be directly identified with the product.

These expenses are included in overhead category. Main examples of this category are consumable stores and stationary.

ii) **Labour:** Like material, labour can also be divided into direct and indirect category.

a) **Direct Labour:** Wages and salaries paid to workers and employees directly involved in the process of manufacturing goods is known as "Direct Labour". Wages paid to a machine operator is an example of direct labour.

Classification of Costs



- b) **Indirect Labour:** Wages and salaries payable to workers ancillary to production process are included in "Indirect Labour". The contribution of such workers cannot be directly traced to the product. For example, wages for store keepers is included in indirect labour category.
- iii) **Expenses:** Expenses may also be direct or indirect.
- a) **Direct Expenses:** These expenses are incurred in relation to a specific product. This category does not include direct material cost and direct wages. For example, cost of secret formula and special drawing are included in this category.
- b) **Indirect Expenses:** These expenses cannot be directly and completely allocated to specific product or cost centre. Office and administrative expenses are included under this category.
- 2) **According to Functions or Operations:** On the basis of functions, the costs may be classified as under:
- i) **Production Cost:** Production cost include all such costs which are incurred directly for producing goods either manually or through machine. It includes direct material cost, direct labour costs, direct expenses and overhead expenses related to production.
- ii) **Administration Cost:** It include all costs associated with cost of formulating the policy and measures required for running the operations. However, these costs are not directly traceable to production, selling and distribution or research and development activities. Salaries paid to managerial personnel and workers are included in this category.
- iii) **Selling Cost:** This category includes cost of all the activities which aid in the process of selling the goods. It includes sales promotion costs, consumer services costs and selling organizations. These costs help in increasing the revenue of the firm by ensuring customer satisfaction.
- iv) **Distribution Cost:** This cost includes packing expenses and other expenses related to making the product available for distributing and dispatch. It includes salary of dispatch clerks and running expenses of delivery trucks.
- v) **Research Cost:** The research cost is incurred for the purpose of carrying out research in order to come up with new manufacturing processes or for improving the quality of the product.
- vi) **Development Cost:** This is the cost of converting research into practical mode.
- vii) **Pre-Production Cost:** These are the costs incurred in case of a new manufacturing unit. Costs associated with the launch of a new product also come under this category. These costs are treated as deferred revenue expenditure as these are matched against the cost of future production.

3) **According to Nature or Behavior:** On the basis of nature, following are the main categories of costs:

- i) **Variable Cost:** These costs change proportionally in response to change in volume of production. Direct material and direct labour costs are prime examples of variable cost and include fuel expenses, electricity expenses, etc.
- ii) **Fixed Cost:** These costs do not vary with the change in level of production upto a certain level. These costs do change in the long run but remain fixed in the short term. Fixed costs can be further divided as follows:
 - a) **Committed Fixed Costs:** These costs arise due to possession of assets such as building and plants. The main examples are depreciation, insurance premium and rent. Basic organizational expenses such as staff salaries are also included in this category. Such costs generally cannot be reduced without having adverse impact on the long term performance of the concern.
 - b) **Discretionary Fixed Costs:** These costs are incurred on the basis of decisions made by the management. Following are the main features of such costs:
 - These costs may arise out of regular decisions about the maximum outflow. Such decisions are generally taken on annual basis.
 - These costs do not have clear correlation between inputs and outputs.

For example, advertising, executives training, health care and teaching expenses are included in this category.

iii) **Semi-Variable Cost:** These costs are partly fixed and partly variable. These do not bear linear relationship to the level of production. Telephone and electricity bills are examples of such costs.

4) **According to Controllability:** The costs may be divided as follows:

- i) **Controllable Cost:** CIMA states, "a cost which can be influenced by the action of a specified member of an undertaking". These costs may be controlled by a specific authority within a specific period of time. These are variable costs and can be affected in a time period which is sufficiently long. It requires proper delegation of authority for effective cost control.
- ii) **Uncontrollable Cost:** These costs cannot be controlled at any level of management. These costs are defined as the "cost which cannot be influenced by the action of a specified member of an undertaking".

5) **According to Normality:** On the normality basis the classification of costs is as under:

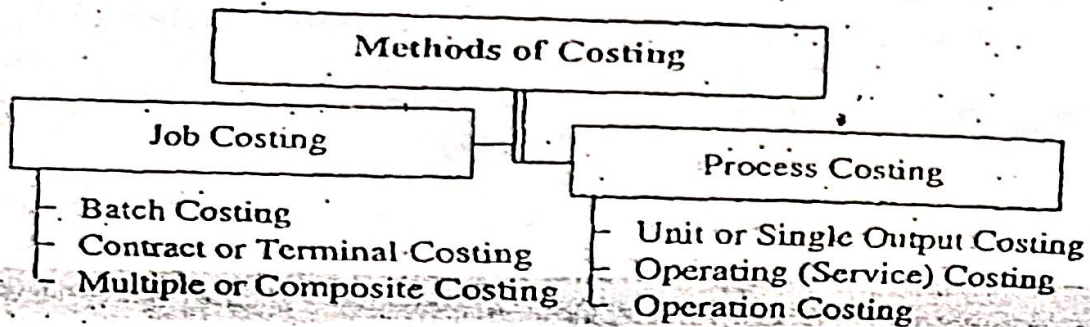
- i) **Normal Cost:** These are the usual costs which are incurred for a given level of output under the given conditions. These costs are charged to costing profit and loss account.

- ii) **Abnormal Cost:** These costs occur over and above normal costs and are not usual costs for a given level of production. These are also charged to costing profit and loss account.
- 6) **According to Time or Periodicity:** These costs may be classified as below:
- i) **Historical Cost:** These are the actual costs which are determined after their occurrence. These costs may be calculated using financial records and accounts. However, these figures may not be appropriate for future projections during the times with frequent changes. These costs form the basis of financial accounting.
 - ii) **Future Cost:** These are the costs which are likely to be incurred in the future. This is an important category of costs as these can be easily controlled by the management. These costs are also important for control, projection, budgeting and appraisal.
- 7) **According to Association with Product:** On this basis, the costs may be classified as follows:
- i) **Product Cost:** These costs can be directly traced back to a product. Product costs are the costs which are assigned to a particular product or a line of products. Under marginal costing, product cost would include variable manufacturing costs while in the case of absorption costing, product costs will include total manufacturing costs.
 - ii) **Period Cost:** These costs are incurred during a specified period of time and are not assigned to a product. The main examples of such costs are general and administrative expenses. These costs are charged against revenue of that particular period. While fixed factory overheads are treated as period costs under marginal costing, these may be considered product cost under absorption costing.
- 8) **According to Relevance to Decision Making and Control:** Following are the main categories of costs under this criteria:
- i) **Marginal Cost:** It is the amount by which total costs change in response to increase or decrease in volume of output by one unit. In other words, this is the amount which could not be avoided if that particular unit was not produced.
 - ii) **Differential Cost:** Management is expected to compare the costs of alternatives proposal in order to make decisions. For this purpose, the costs which are common across different alternatives are ignored and only the differential is considered. Thus, a differential cost is the difference in cost among various alternatives. Incremental cost is the increase in cost due to the decision while decremental cost is the decrease in total cost.
 - iii) **Joint Cost:** These are the costs incurred upto the point till the products cannot be separately identified. Same raw material used for producing two different products is an example of joint cost. These costs are apportioned among concerned products.

- iv) **Shut-down Costs:** These are the costs which are incurred even if the firm completely stops production. Office rent, insurance, premium are examples of such costs. These costs are important to make decisions regarding continuing operations during 'off-season'. In general, it is decided to remain open as long as the revenue is sufficient to meet variable costs and a part of fixed costs.
- v) **Sunk Cost:** These are the costs which have already been incurred and cannot be recovered. These costs are considered irrelevant for the purpose of decision making. This cost may be defined as, "an expenditure for equipment or productive resources which has no economic relevance to the present decision-making process". It may also be defined as, "the difference between purchase price and the salvage value of the asset". Sunk costs may also be non-incremental costs.
- vi) **Opportunity Cost:** These are the economic resources which are required to be given up for accepting one proposal over another. CIMA states, "Opportunity cost is the value of a benefit sacrificed in favour of an alternative course of action". For example, a firm could sell its land for ₹5,00,000 but decided to retain it for setting up a factory. In such case, ₹5,00,000 is the opportunity cost.
- vii) **Imputed/Notional Cost:** These are the costs which are implicit in the product and are not physically recorded in the accounts. These costs are hypothetical in nature and do not require actual cash outflow. Interest on capital is an example of such costs as no actual payment is required to be made. Although, no actual payments are made, but an estimation of earnings, had the funds been invested elsewhere is made. These costs are important for decision making and forms a part of opportunity costs.
- viii) **Out of Pocket Cost:** These are the costs which require an actual outflow of cash. It includes historical costs as well as future costs. Most of the expenses fall under this category. These costs are important for managerial decision making process and for determining the profitability of a project. Many fixed costs and most of the variable and semi-variable costs fall under this category.
- ix) **Replacement Cost:** These costs need to be incurred for replacing a product with an identical one on the date of valuation. It excludes change in cost due to improvement in the product. This cost is different from the actual acquisition cost of the asset. It represents the outflow required for replacing an asset at present or at some point in future time.
- x) **Programmed Cost:** These costs are incurred for long-term survival and have less importance to current processes. These costs are incurred at the discretion of management and can be controlled accordingly. Advertising cost is an example of such cost. Sales promotion expenses and research & development expenses also fall under this category.

1.1.10. Methods of Costing

Methods of costing may be broadly classified into two categories:



Both the categories of the costing methods and their sub-categories are described in the following points:

- 1) **Job Costing:** This type of costing is applied in business organisations, which carry out production according to the specific requirements of a customer. Each of such job work (production of merchandise) is unique / distinctive and customer-specific. Job costing method is generally used by the business entities engaged in the profession of house-building, ship-building, production of machineries, repairing, etc. Job costing method may be classified into following sub-categories:
 - i) **Batch Costing:** Foundation of this method of costing is the theory of contract costing. It is applied for ascertaining the cost of a group having products with similar characteristics. Instead of an individual product, the entire batch containing such products is considered as one unit. Batch costing method is used effectively by business entrepreneurs engaged in manufacturing of nuts and bolts, medicines and other components, which are produced in specific batches.
 - ii) **Contract or Terminal Costing:** Foundation of this method of costing is based on job costing. It is generally used by business enterprises engaged in the business of house building and civil contractors. The contract entered into is considered as the cost unit and relevant costs are accumulated accordingly.
 - iii) **Multiple or Composite Costing:** This method of costing is common amongst the enterprises engaged in the manufacture of complex products, e.g. aeroplanes, motor cars, etc. In such cases, accumulation of costs is done in respect of individual components (constituting the final product). Thereafter, their total is taken to arrive at the total cost of the product.
- 2) **Process Costing:** This method of costing is used by those manufacturing sectors, which are engaged in the manufacture of products in a continual manner on an on-going basis, e.g. gas, chemicals, oil, paper, etc. In case of such industries, it is not easy to compute the costs of specific units; the average of total cost is taken for the number of units produced. For the monitoring & supervision purpose, the total cost and per unit cost is computed at each stage of production.

Process costing may be classified into following sub-categories:

- i) **Unit or Single Output Costing:** This method of costing is popular amongst the entrepreneurs engaged in the production of a single item, i.e. the end products are identical in nature. Per unit cost is computed by using simple arithmetic, i.e. dividing the total cost by the total number of units produced.
- ii) **Operating (Service) Costing:** This method of costing is common in the business entities not engaged in manufacturing any product; they are engaged in providing services like education, transportation, power supply, hospitals, etc. Calculation of per unit cost is different for different service providers depending upon the nature of services provided. Examples of the units are per student (college), per passenger (bus), tonne/kilometres (Truck), bed / patient (hospital), etc.
- iii) **Operation Costing:** Under this method of costing, the costs are assessed operation-wise (instead of process-wise). The underlying presumption of operation costing is that the final accomplishment is arrived through various operations.

1.1.11. Techniques of Costing

Techniques of costing are of the following types:

- 1) **Historical Costing:** Under this technique, the costs are ascertained after their incurrence.
- 2) **Standard Costing:** Under this technique, there are pre-determined costs incurred at the time of optimum operational efficiency and utilisation of resources referred to as the standard costs, which are compared with the actual costs. Variations between the standard costs and the actual costs become the basis for initiating corrective measures.
- 3) **Absorption or Full Costing:** Under this technique of costing, all costs incurred in connection with the process of manufacturing, whether fixed costs or variable costs, are taken into consideration for the computation of total costs.
- 4) **Variable or Marginal Costing:** As the nomenclature itself indicates, only variable costs pertaining to products or jobs are taken into consideration under this technique. Fixed costs incurred in connection with (i) production, (ii) administrative work, (iii) selling and distribution, etc. are charged to the profits of the business organisation, during the period, in which they are incurred.
- 5) **Uniform Costing:** Under uniform costing, application of similar costing principles is predicted and as such it should not be considered as a costing technique at all. It may be defined as the practice of employing standardized principles and methods of cost accounting, adopted by a number of business entrepreneurs. Standardization of principles and methods may include the methods of costing, accounting classification including codes, methods of

1.2. INTRODUCTION TO COST MANAGEMENT

1.2.1. Meaning of Cost Management

Cost management is the process of taking initiatives and decisions and aims in improving the cost leadership of an organisation. It involves gathering the information relating to the costs and evaluating the same resulting in the cost control. To achieve this, there should be constant communication of the information by the concerned managers. Cost management should be incorporated by the companies as part of their policy document to reap the desired benefits. The Japanese were the first to come out with this concept and is now followed worldwide. Nowadays, companies use cost management in order to reduce various costs incurred by them.

Today cost management is considered as part of every business model, but they all carry in their own way. It has no single definition. It generally means the long-run and the short-run planning done by the management to enhance the customer satisfaction level and at the same time reducing the overall costs. For example, managers are engaged in deciding about the quality of material to be used, change in the plant processes and product designs, etc. Accounting information assists the managers in deciding this, but the accounting information and the system are not complete as they are not the cost management. Cost management is a wider concept. Though it includes controlling the costs, but it is not just limited to this only. It also helps in planning and increasing the sales and the profits. For example, in order to increase the revenue from operations and the profits, managers may opt for certain advertisements and sales promotion expenses.

1.2.2. Objectives of Cost Management

Following are the objectives of cost management:

- 1) **Spending Timely:** Ensure that the expenditure is carried out in terms of the budget and the set standards. There do not exist any undue deviations;
- 2) **Spending Wisely:** Ensure that the value for the amount spent is obtained. No part of the amount expended should go waste;
- 3) **Spending Correctly:** Ensure the expenditures are carried only for those items which is required for;
- 4) **Spending Perceptively:** Ensure that spending *versus* achievement variances are identified, analysed, corrected so that preventive actions can be initiated.

1.2.3. Application/Scope of Cost Management

The scope of cost management is as follows:

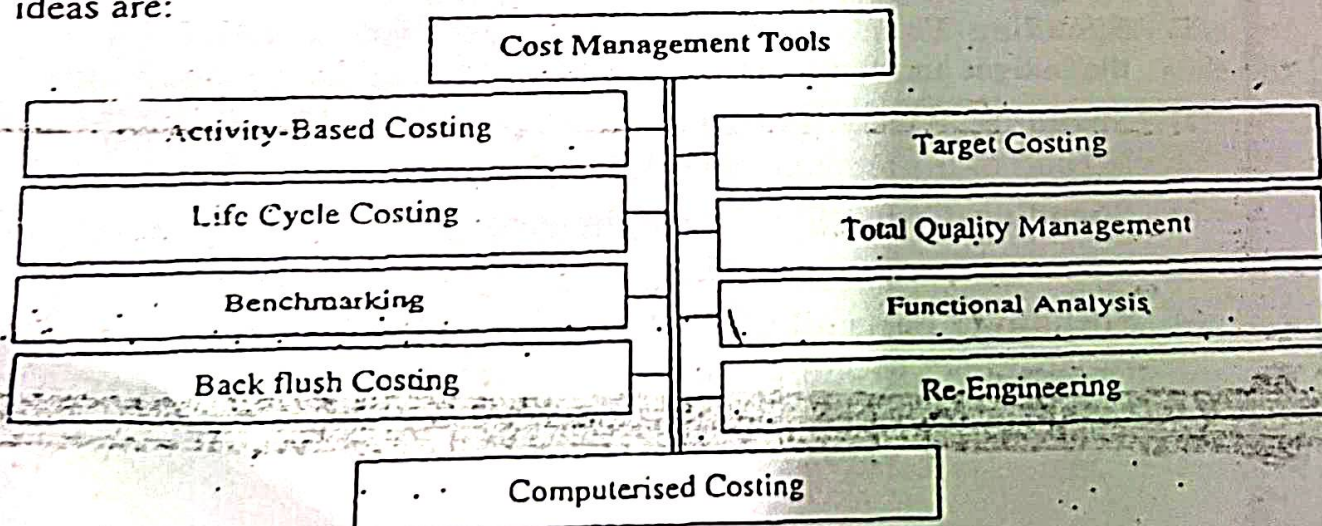
- 1) **Cost Ascertainment:** It involves collecting and analysing the details of the expenses incurred. It also includes measuring the expenses at different production levels and to establish a relation between the production and the expenses.
 - i) With the difference in methods for the collection of the expenses, there originates the difference in the costing system as historical costs, actual costs, estimated costs, standard costs, etc.
 - ii) The difference in methods of the measurement of production also results in the different methods of costing as the specific order costing and the operating costing.

Thus, to establish a relation with the production and the expenses, there exist different techniques of costing such as marginal costing and absorption costing:

- 2) **Proper Matching of Cost with Revenue:** Under this, periodic statements are prepared to identify the cost and the income data matched with the revenue of that period.
- 3) **Aids to Management:** Cost management not only provides the details about the cost of the various products, jobs and the services, but also provides with the standard to be set for various costs. It helps in identifying the wastages and taking corrective and preventive measures. Investigations and policies are made and conducted to ensure the most profitable situation for the company.
- 4) **Cost Control:** It signifies complying with the standards. Certain standard cost levels are fixed and the actual costs incurred then compare with that level. Any adverse deviation found from the standards is then corrected. Certain techniques like standard costing and budgetary control are used to carry out the cost audit and reporting of the cost related information.

1.2.4. Cost Management Tools

Some of the important strategies of cost management and their recent basic ideas are:



1) **Activity Based Costing:** Under this system, detail description regarding the different activities involved is made. They are formed the cost pools. Further, it improves the accuracy of cost analysis by tracking the costs to the cost objects. Cost drivers influence the cost of the product. In the present environment, now the scope of ABC analysis is extended and is now termed as ABM (Activity Based Management) and it focuses on improving the operational and the management control. It has now significantly incorporated in all the business areas.

2) **Target Costing:** The target cost of a product is defined under this strategy. It signifies the price at which the market is ready to accept the product and reduced by the desired profits. It can be mathematically denoted as,

$$\text{Target Cost} = \text{Acceptable Selling Price} - \text{Desired Profits}$$

If the target cost happens to be less than the actual cost, then the management tries to reduce the actual cost. An attempt is always made to compare the actual cost with the target cost. For all stages of a product life cycle, i.e. planning, designing and purchasing of a new product this technique is used to control the costs.

3) **Life Cycle Costing:** It is a technique where the costs are monitored for a product for its entire life cycle. The life cycle of a product consists of the series of steps starting from designing the product, purchasing the raw material and making the finished product.

These steps include the activities of R&D, administration, marketing and sales. In olden days, emphasis was given on the third step, but presently the full life cycle is considered for the cost reduction. So, it has widened the scope and focus of the costing.

4) **Total Quality Management:** Under this technique, certain policies and procedures are framed by the management to provide the customers with the highest satisfaction level. To achieve this, the product's functioning, reliability, durability and serviceability are improved. Kaizen, which means a continuous improvement, holds the key at the same is an ongoing process.

5) **Benchmarking:** Under this approach, a company not only considers some of its success factors, but also takes into account the best practices followed by some other companies. An attempt is made towards improving and beating these benchmarks. Other companies in the industry that are performing well become the idol and the company tries to over par with them. Xerox Corporation of USA was the pioneer in benchmarking. In the present scenario, this technique is adopted by many firms and some of these are leaders in their segment.

6) **Functional Analysis:** This technique evaluates the performance and the cost of every major function in the manufacturing of the product. The idea is to establish a desired level of performance and cost. Efforts are made to achieve the desired performance level and to reduce the cost level. It is a common type of value engineering.

- 7) **Back Flush Costing:** It is the reversal of the allocation process of costs and the cost is flushed through the accounting records as the works are around its completion stage. The process of allocation is put on hold till the time goods are finally manufactured or sold. As soon as the goods are completed and sale of finished goods takes place, allocation of the costs is carried out. This system is quite distinct from the traditional system, where the costs were allocated with the starting of the production. By adopting this technique, there is no requirement of preparing the work in process account and the manufacturing costs are directly charged to the finished goods.
- 8) **Re-Engineering:** This technique focuses more on creating the competitive advantage. The managerial functions are recognised by the firm. It is a dynamic process involving re-thinking, re-designing and re-gearing of the business processes. The main areas being the cost, quality, service and the speed. Many under-performing, sick units, considers the same as a mode of revival by significantly reducing the costs. Cost accounting and cost management supports, this technique to be carried out in an effective manner.
- 9) **Computerised Costing:** The use of modern technology has changed completely the processing, analysing and the controlling system. Nowadays, the industries are found using the computers for all their operations which has brought accuracy. Computers are used to carry out accounting process globally. It aids in providing the extensive database of the historical costs and other information relating to the manufacturing process.

1.3. A STRATEGIC VIEW TO COST MANAGEMENT

1.3.1. Introduction

Strategic cost management has become an essential area now days. While formulating the strategy for the accomplishment of organizational overall objectives, different cost driver should be clearly identified. Identification of key cost drivers helps companies to focus on key activities that will constitute almost 90% of the total costs. In view of this, the importance of strategic cost management should not be underestimated. This implies that organization should be installing appropriate framework of strategic cost management to reduce its costs in key areas on which the success of organization is heavily dependent.

To give spotlight to the companies in this complex business model we have covered some important aspects of strategic cost management. This can be very much helpful to the business world.

1.3.2. Meaning and Definition of Strategic Cost Management

Strategic cost management is defined as the application of costing information to the development and implementation of a company's strategy. Rapid changes in the business environment and corresponding changes in product and

manufacturing processes have forced the organizations to adopt a more proactive and strategic approach towards costing. They realized that costing system should be flexible enough to support changes in the business environment and help management take better strategic decisions and control.

Strategic cost management can be defined as "Scrutinizing every process within your organization, knocking down departmental barriers, understanding your suppliers' business, and helping to improve their processes".

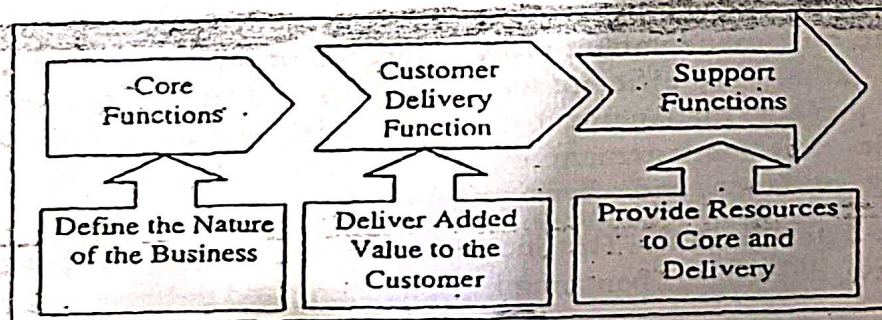
1.3.3. Applications of Strategic Cost Management

There are three basic business areas where strategic cost management can be applied:

- 1) **Strategy:** A strategy in general terms refers to a plan of action that will shape the direction of organization's success. Companies of late have realized the importance of clear articulation of strategy and its effective implementation. Before formulating any strategy, the management should think about the business model whether it is still relevant or need to be changed? Or whether the objectives of the business are going to be accomplished through laid-out strategy.
- 2) **Operations:** By setting the priorities according to its significance we can operate the tasks effectively and efficiently.
- 3) **Organisation:** Company should time and again check whether it is allocating its limited resources in the businesses, which generate more value for the entire organisation. Resources as such are the limiting factors for any organisation and that is why the company should be focus on the structure of the business and it should decide well in advance whether it should own all resources or not?

1.3.4. Strategic Cost Management Framework

The strategic cost management framework provides a clear plan of attack for addressing costs and decisions that affect them. Following are the three core components of this framework:

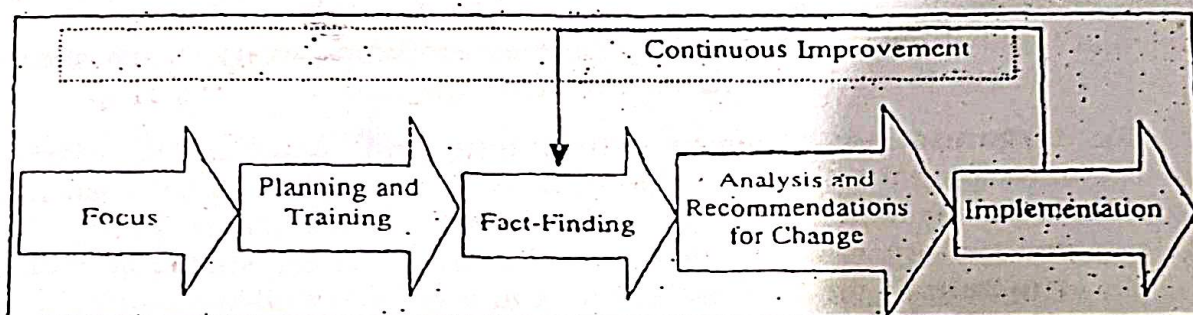


- 1) **Core Functions:** Core functions elaborate on the nature of the business. It answers the very obvious question what type of business are we in? At this stage the company has to clearly identify its courses of actions with respect to strategy planning, research and development, and product development.

- 2) **Customer Delivery Function:** This step emphasises more on value addition with various activities such as marketing, sales, manufacturing, quality assurance and control, sourcing, procurement and logistics, engineering and maintenance, customer service and technical support, etc. Excellence in those activities can create a sort of competitive advantage for the company if it could harness its resources intelligently than its competitors.
- 3) **Support Functions:** As the name suggests, to support the core activities of business some secondary activities are to be carried-out which includes IT, Finance and Accounting, HR management general administration. These activities will facilitate the performance of the core activities in a way that goals of the business can be accomplished successfully without wasting limited resources. They will also help in synchronising the different tasks which are to be carried-out simultaneously.

1.3.5. Steps in Strategic Cost Management

SCM includes following five steps. These steps can be detailed-out as follows:



Step 1: Focus: This state starts with reviewing the different strategies of the company. Reviewing the strategies will lead to clear identification of performance gaps and this will help to bridge the gap by improving targets already set beforehand. Modifying the targets will lead to developed plan of attack which will foster better internal communication within the organisation.

Step 2: Planning and Training: This plays a crucial role in implementing strategic cost management programme. To implement the planning, a manager should gather very efficient team members and train them accordingly. Setting-up of project management structure will facilitate the implementation of strategic cost management by clearly identifying the day to day activities, steering guidance, and offering *ad hoc* assistance.

Step 3: Fact-Finding: This includes the tasks such as data gathering, conducting interview, developing benchmarks, conducting and customer surveys.

Step 4: Analysis and Recommendations for Changes: Analysis of activities plays a crucial role in ascertaining the cost of the company. It can be done by various strategic cost management analytical tools, viz., cost driver analysis, activity-based costing, selective business process re-engineering, etc. An action plan for proposed change should address the following questions what, who, when, how aspects of the activities.

Step 5: Implementation: In implementation stage the first task to be done is to define responsibilities and accountability of each individual and controlling, i.e., monitoring and corrective action should be taken at each stage of programme. And this is how the continuous improvement can be achieved.

1.4. PREPARATION OF COST SHEET

1.4.1. Meaning of Cost Sheet

This is a statement to show the output during a particular period of time. It also shows the classification of costs. The data for the purpose of preparing this statement is collected from various sources. This sheet is useful for the purpose of analysing total cost of production and cost of sales.

Cost sheet is a statement which shows per unit cost structure for various levels of production. It is important to identify the stage of production and relevant price. Cost sheet is generally prepared in the case of manufacturing the single product.

Cost sheet may be prepared for different time periods ranging from weekly to annually. It bifurcates the costs into various categories such as prime costs, cost of production and total costs. The main classifications used are prime cost, cost of production, works cost and cost of goods sold.

1.4.2. Objectives of Cost Sheet

Following are the main objectives of cost sheet:

- 1) This statement shows total cost as well as cost per unit of production.
- 2) It also provides detailed analysis of costs under various categories such as material cost, labour cost, etc.
- 3) It helps in making time series comparison. This is done by comparing current costs with past costs and analysing the deviations.
- 4) The cost sheet is an important tool for making managerial decisions, making bids and cost control, etc.

1.4.3. Types of Cost Sheet

Historical and estimated data is used for the purpose of preparing cost sheet:

- 1) **Historical Cost Sheet:** Actual costs are used for preparing this type of cost sheet. The statement showing costs after it has been incurred is known as historical cost sheet.
- 2) **Estimated Cost Sheet:** Estimated costs are used for preparing this type of cost sheet. The estimated cost sheet is usually prepared before the beginning of production. Such cost sheets are useful for various purposes such as bidding for tender. It is also used for estimating various components of cost. The estimates are made using present conditions and likely future conditions.

1.4.4. Proforma of Cost Sheet

Compulsory

Particulars	Total Cost (₹)	Cost Per Unit (₹)
Opening Stock of Raw Material		
Add: Purchase of Raw Material		
Carriage Inward		
Other Expenses on Purchase		
Less: Closing Stock of Raw Material		
Direct Material Consumed		
Add: Direct Labour/Wages		
Direct Expenses		
Direct Cost/Prime Cost		
Add: Factory/Manufacturing/Production/Work Overhead:		
Factory Rent		
Power and Fuel		
Haulage Charges		
Indirect Material		
Supervisor Salary		
Depreciation on Machinery		
Oil and Water Charges, etc.		
Factory Cost		
Add: Opening Work-in-Progress		
Less: Closing Work-in-Progress		
Factory/Manufacturing/Production/Work Overhead Cost		
Add: Office and Administration Overheads:		
Audit Fees		
Director Fees		
Legal Charges		
Depreciation on furniture		
General expenses		
Postage, Telephone, Printing and Stationary		
Donation, Bank Charges, Insurance of Office, etc.		
Office Cost/Cost of Production		
Add: Opening Stock of Finished Goods		
Less: Closing Stock of Finished Goods		
Cost of Goods Sold		
Add: Selling and Distribution Overheads:		
Trade Discount, Cash Discount Allowed, Brokerage, Commission,		
Sample Expenses, Branch Expenses, Delivery Van Expenses,		
Advertisement, Bad Debts, Free Gifts, After-Sale Service,		
Expenses of Catalogue and Price List, Driver Salary, etc.		
Total Cost		
Profit/Loss		
Sales		

Note:

- 1) Factory overhead can be charged on the basis of labour cost.
- 2) Office and administrative expenses and selling and distribution expenses can be charged on the basis of work cost or factory cost.