**Unit-1**

**COST MANAGEMENT**

**Nature and Scope**

Cost Management is a broad concept than cost accounting, cost control, cost reduction. Cost management information is the information the management needs to effectively manage the firm and includes both financial information about cost and revenues as well as relevant non-financial information about productivity, quality and other key success factors for the firm to lead the firm to competitive success. In cost management, the objective is to increase productivity of resources and factors of production and to relate them to enhance profitability. It continuously looks for and identifies opportunities to have higher return on investment by studying customer needs, bringing improvement in the existing products or services, smoothening process and layout of manufacturing goods or services with a view to supply them to the customers and to ensure customer satisfaction so as to maximise margins and earn higher profits. In this way, cost management achieves its goals by creating and sustaining linkages among revenue, cost, products manufactured or services rendered and the use of resources and infrastructure of an organization.

Cost Management identifies, collects, measures, classifies and reports information that is useful to managers and other internal users in cost ascertainment, planning, controlling and decision-making.

Horngreen, Datar and Foster1 are of the opinion that the term cost management has no uniform definition. Therefore, these authors use cost management to describe the approaches and activities of managers in short-run and long-run planning and control decisions which increase value for customers and lower the costs of products and services. For example, managers make decisions regarding the amounts and kinds of materials being used, changes in plant processes and changes in product designs. Information from accounting systems helps managers to manage costs but the information and the accounting systems themselves are not cost management.

Cost management in its broadest sense includes all of the activities and related infrastructures that an enterprise employs to set and measure the achievement of its goals and objectives. Cost management provides the vital link between a firm’s strategy and its evaluation process, and seeks to determine whether business activities are aligned with and contributing to the successful execution of the strategy. This includes measuring not only enterprise — wide cost but also each organizational unit contribution to the overall cost.

Developing information within cost management requires that one should be aware about the cost structure of a business enterprise. Managers should know how to ascertain costs of different activities, processes, customers, goods, services and any other costing objects. Financial accounting does not deal with these costs and these costs are not found on the financial statements. However, knowledge about these costs is essential to help managers in productivity enhancement, strategic planning and management, total quality management, management control.

Cost control refers to management actions to keep the costs within standards and/or budget. Cost control can be defined as the comparative analysis of actual costs with appropriate standards or budgets to facility performance evaluation and formulation of corrective measures. It aims at accomplishing conformity between actual results and standards or budgets, keeping expenditures within prescribed limits.

Cost Control has the following features:

1. Creation of responsibility centres with defined authority and responsibility for cost incurrence.

2. Formulation of standards and budgets that incorporate objectives and goals to be achieved.

3. Timely cost control reports (responsibility reporting) describing the variances between budgets and standards and actual performance.

4. Formulation of corrective measures to eliminate and reduce unfavourable variances.

5. A systematic and fair plan of motivation to encourage workers to accomplish budgetary goals.

6. Follow-up to ensure that corrective measures are being effectively applied.

 Cost control does not necessarily mean reducing the cost but its aim is to have the maximum utility of cost incurred. In other words, the objective of cost control is the performance of the same job at a lower cost or a better performance for the same cost.

Cost reduction may be defined as a planned, positive approach to bring costs down. It implies real

and permanent reduction in the unit cost of goods manufactured or services rendered without impairing the (product or goods) quality or suitability for the use intended, that is, without reducing their value in terms of utility or satisfaction to the customers. The goal of cost reduction is achieved in two ways:

 (i)by reducing the cost per unit and

(ii) by increasing productivity. The steps for cost reduction include elimination of waste, improving operations, increasing productivity, search for cheaper materials, improved standards of quality, finding other means to reduce unit costs.

Cost reduction has to be achieved using internal factors within the organization. Reduction of

costs due to external factors such as reduction in taxes, government subsidies, grant, etc., do not come under the concept of cost reduction. It should not be the result of wind falls.

With the globalisation of the Indian economy, it is necessary to reduce costs so that prices of our

goods are really competitive in the world markets. This requires a massive effort on cost reduction in Indian industries. Thus, cost reduction techniques occupy a prominent position in any organization aiming to maximise profits.

Management should always attempt to remove difficulties generally found in cost reduction

Programmes. Some such difficulties are as follows:

(i) Workers and employees may not welcome cost reduction programmes and may resist their

Implementation.

(ii) Cost reduction programmes are generally carried out on an ad hoc basis.

(iii) The schemes may be applied in some areas but it should cover all activities.

(iv) Cost reduction programmes may be implemented hurriedly, whereas, they should be carried

out after careful thought and in a planned manner.

Cost reduction is a much wider concept than cost control. As stated earlier, cost control aims at

Controlling costs within prescribed limits with the help of budgets and standards.

The following are the differences between the two:

|  |  |
| --- | --- |
| **Cost Control** | **Cost Reduction** |
| 1. Cost control process involves: (a) setting targets andstandards, (b) ascertaining actual performance, (c)comparing actual performance with targets, (d)investigating the variances, and (e) taking corrective action. In cost control, standards form benchmarks for evaluating actual performance. | 1. Cost reduction is not concerned with setting targets and standards and maintaining performance according to standards. It involves critical examination of the various products, processes, methods, etc., with a view to reduce costs and improve efficiency and effectiveness. |
| 2. It aims at adherence to and achieving standards, that is, cost targets. It assumes existence of standards and these standards are not challenged over the period. | 2. It aims at real and permanent reduction in costs. Thus it aims at improving the standards. It challenges standards and assumes existence of concealed potential savings in the standards. |
| 3. It lacks a dynamic approach as the only objective is not to exceed the standards | 3. It is continuous, dynamic and innovative in nature, looking always for measures and alternative to reduce costs. |
| 4. It is a preventive function. | 4. It is a never-ending corrective function. |
| 5. In cost control, costs are optimised before they are incurred. Being a routine exercise it is operation oriented. | 5. In cost reduction, there is always assumed a scope for reducing the incurred costs under controlled conditions. It is research oriented, always trying to reduce costs through planned research. |
| 6. It is generally applicable to items which havestandards | 6. This is applicable to every activity of the business. |
| 7. It contains guidelines and directive of management as to how to do a thing. | 7. It adds thinking and analysis to action at all levels of management. |
| 8. It requires close monitoring and timely correctiveactions. | 8. It demands creativity. |
| 9. Budgetary control and standard costing are important tools of cost control. | 9. It uses techniques like value engineering, valueanalysis, work study, operation research, ABCanalysis, simplification and standardisation, etc. |

 Both cost control and cost reduction are continuous processes in an enterprise. In all organizations, there should be planned, dynamic programme for cost reduction so that cost standards required for cost control may be improved continuously. However, cost reduction programme is neither a substitute nor it can replace a cost control system which emphasizes prompt investigation into variances and taking immediate corrective actions.

**KEY COMPONENTS OF A COST MANAGEMENT SYSTEM**

Cost management is the analysis of activities to determine the best mix of activities and the optimal level of resources assigned to activities. According to Brimson18 the following are the key components of a cost management system.

**1. Activity Investment Management:** Activity investment analysis evaluates the impact of changing an activity process, such as introducing a new technology, on the cost, performance, and interdependences of activities. The analysis process systematically decomposes the company objectives and strategies into activity level goals that provide a foundation for judging the value of an investment. This facilitates measurement of the cost and nonfinancial performance impacts of the investment by defining the base line set of activities against which to measure change. Activity investment management embraces the concept of continual improvement by routinely challenging how activities are performed. It decreases the probability of selecting and implementing an inappropriate investment by evaluating capital investments relative to “efficient operations” rather than to existing cost structures.

**2. Cost Driver Analysis:** Cost driver analysis identifies activities that influence the cost and

performance of subsequent activities. By reducing or eliminating the event that triggers the first activity in the chain, it may eliminate the need for all subsequent activities. For example, the detection of a defective part requires the part to be reworked or scrapped, the cause of the defect to be corrected, the problem documented, and other related activities. By eliminating the cause —the defective part —the need to perform *all* subsequent activities is eliminated because they are executed *only* when a defective part occurs. Costs are thus reduced. By identifying the cost drivers of a business process or an activity,a company can most effectively control costs.

**3. Activity Budgeting:** Assessing the factors that control activity volume is an important technique for budgeting the resources necessary to perform an activity. For example, one division of an electronics firm required 15 expeditors, whereas a sister division with a similar revenue required only six. At first glance it appears that the second division’s performance was significantly better. However, when one looks at factors such as the number of parts, number of vendors, and complexity of the manufacturing process, the reason for the difference in support department size becomes evident. The first division had many differentiated products that required significantly more expediting support than the sister division, which had a few high-volume products.

Understanding the number of activity occurrences is an effective tool in predicting the effect on

support costs of different strategic decisions. A low-volume product line requires significantly more support cost than a high-volume line.

**4. Non-Value Added Analysis:** Non-value added activities result in profitless expense of time, money,and resources and add unnecessary cost to the products. A non-value added analysis identifies activities that can be eliminated with no deterioration of enterprise performance (cost, function, quality, perceived value). Non-value added analysis highlights wasteful activities.

**5. Best-Practice Analysis:** A best-practice analysis compares activity cost and performance between different departments, divisions, suppliers, and/or competitors to identify the most efficient way to perform an activity. Once, the activities with lowest cost and highest performance are identified, they can be analysxed to identify the source of excellence. The results of the analysis can then be shared with other groups within the company that perform the activity to determine the applicability to their operations.

**6. Activity Target Cost Analysis:** Activity target cost analysis determines activity cost and

performance goals based on market demand for a product. Target costs are derived by estimating the market price necessary to capture a certain market share and then subtracting the desired profit margin.

**7. Activity Strategic Analysis:** Activity strategic cost analysis uses activity cost and performance

data to develop enterprise strategies. Strategic cost analysis evaluates a company’s activities, from design to distribution, and determines where value to the customer can be enhanced or costs lowered.

**Management of Value Chain**

Value chain analysis (VCA) is a process where a firm identifies its primary and support activities that add value to its final product and then analyze these activities to reduce costs or increase differentiation.

Value chain represents the internal activities a firm engages in when transforming inputs into outputs.

 Value chain analysis is a strategy tool used to analyze internal firm activities. Its goal is to recognize, which activities are the most valuable (i.e. are the source of cost or differentiation advantage) to the firm and which ones could be improved to provide [competitive advantage](https://strategicmanagementinsight.com/topics/competitive-advantage.html). In other words, by looking into internal activities, the analysis reveals where a firm’s competitive advantages or disadvantages are. The firm that competes through differentiation advantage will try to perform its activities better than competitors would do. If it competes through cost advantage, it will try to perform internal activities at lower costs than competitors would do. When a company is capable of producing goods at lower costs than the market price or to provide superior products, it earns profits.

M. Porter introduced the generic value chain model in 1985. Value chain represents all the internal activities a firm engages in to produce goods and services. VC is formed of primary activities that add value to the final product directly and support activities that add value indirectly.

Porter’s Value Chain Model



Primary Activities



|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Inbound |  | Operations | Outbound | Marketing | Service |  | P |
| Logistics | Logistics | & Sales |  |
|  |  |  | R |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | O |
| Firm Infrastructure |  |  | Human Resource Management |  | F |
|  |  |  | I |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | T |
|  | Procurement |  |  |  | Technology |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

Support Activities

Although, primary activities add value directly to the production process, they are not necessarily more important than support activities. Nowadays, competitive advantage mainly derives from technological improvements or innovations in business models or processes. Therefore, such support activities as ‘information systems’, ‘R&D’ or ‘general management’ are usually the most important source of differentiation advantage. On the other hand, primary activities are usually the source of cost advantage, where costs can be easily identified for each activity and properly managed.

Firm’s VC is a part of a larger industry's VC. The more activities a company undertakes compared to industry's VC, the more [vertically integrated](https://strategicmanagementinsight.com/topics/vertical-integration.html) it is. Below you can find an industry's value chain and its relation to a firm level VC.



**Using the tool**

There are two different approaches on how to perform the analysis, which depend on what type of [competitive advantage](https://strategicmanagementinsight.com/topics/competitive-advantage.html) a company wants to create (cost or differentiation advantage). The table below lists all the steps needed to achieve cost or differentiation advantage using VCA.

**Cost Advantage**

To gain cost advantage a firm has to go through 5 analysis steps:

Step 1. Identify the firm’s primary and support activities. All the activities (from receiving and storing materials to marketing, selling and after sales support) that are undertaken to produce goods or services have to be clearly identified and separated from each other. This requires an adequate knowledge of company’s operations because value chain activities are not organized in the same way as the company itself. The managers who identify value chain activities have to look into how work is done to deliver customer value.

Step 2. Establish the relative importance of each activity in the total cost of the product. The total costs of producing a product or service must be broken down and assigned to each activity. Activity based costing is used to calculate costs for each process. Activities that are the major sources of cost or done ineﬃciently (when benchmarked against competitors) must be addressed first.

Step 3. Identify cost drivers for each activity. Only by understanding what factors drive the costs, managers can focus on improving them. Costs for labor-intensive activities will be driven by work hours, work speed, wage rate, etc. Different activities will have different cost drivers.

Step 4. Identify links between activities. Reduction of costs in one activity may lead to further cost reductions in subsequent activities. For example, fewer components in the product design may lead to less faulty parts and lower service costs. Therefore identifying the links between activities will lead to better understanding how cost improvements would affect he whole value chain. Sometimes, cost reductions in one activity lead to higher costs for other activities.

Step 5. Identify opportunities for reducing costs. When the company knows its ineﬃcient activities and cost drivers, it can plan on how to improve them. Too high wage rates can be dealt with by increasing production speed, outsourcing jobs to low wage countries or installing more automated processes.

**Differentiation advantage**

VCA is done differently when a firm competes on differentiation rather than costs. This is because the source of differentiation advantage comes from creating superior products, adding more features and satisfying varying customer needs, which results in higher cost structure.

Step 1. Identify the customers’ value-creating activities. After identifying all value chain activities, managers have to focus on those activities that contribute the most to creating customer value. For example, Apple products’ success mainly comes not from great product features (other companies have high-quality offerings too) but from successful marketing activities.

Step 2. Evaluate the differentiation strategies for improving customer value. Managers can use the following strategies to increase product differentiation and customer value:

Add more product features;



Focus on customer service and responsiveness;



Increase customization;



Offer complementary products.



Step 3. Identify the best sustainable differentiation. Usually, superior differentiation and customer value will be the result of many interrelated activities and strategies used. The best combination of them should be used to pursue sustainable differentiation advantage.

|  |  |  |
| --- | --- | --- |
|  | Step 4 - Links between activities |  |

1. High-quality assembling process reduces defects and costs in quality control and dealer support activities.

2. Locating plants near the cluster of suppliers or dealers reduces purchasing and distribution costs.

3. Fewer model designs reduce assembling costs.

4. Higher order sizes increase warehousing costs.

Step 5 - Opportunities for reducing costs

1. Create just one model design for different regions to cut costs in designing and engineering, to increase order sizes of the same materials, to simplify assembling and quality control processes and to lower marketing costs.
2. Manufacture components inside the company to eliminate transaction costs of buying them in the market and to optimize plant utilization. This would also lead to greater economies of scale.

**Tools of Cost Management**

**1. Activity Based Costing (ABC) :**

Activity-based costing (ABC) is an accounting method that identifies and assigns costs to overhead activities and then assigns those costs to products. An activity-based costing (ABC) system recognizes the relationship between costs, overhead activities, and manufactured products, and through this relationship, it assigns indirect costs to products less arbitrarily than traditional methods.

Some costs are difficult to assign through this method of cost accounting. Indirect costs, such as management and office staff salaries, are sometimes difficult to assign to a product. For this reason, this method has found its niche in the manufacturing sector.

ABC is a primary source of information for Activity Based Management (ABM). ABM is basically a top down approach wherein the top management exploits information derived from ABC and passes the decision to the operational level towards continuous improvement and excellence.

**2. Target Costing (TC) :**

Target costing can be viewed as a proactive cost management tool used to reduce the total cost of the product, over its complete lifecycle, through production, engineering, research and design. It helps the firm in managing the business in reaping profits in the extremely competitive market.

**Target Cost = Anticipated selling price – Desired profit**

Target Cost refers to an estimate of product cost reached by deducting a desired profit margin from the competitive market price.

Target cost means an estimation of total cost to win in the competition in terms of quality, cost and productivity. It is not a method or technique of costing. But, it is a **management technique used to survive under the increasing competitive environment**.

**3. Bench Marking :**

Benchmarking is the process of determining who is the very best, who sets the standard, and what that standard is. In other words, Benchmarking refers to the search for the best practices that yields the benchmark performance, with emphasis on how you can apply the process to achieve superior results.

Often Benchmarking is used to evaluate performance. Benchmarking represents **“best practice”** available inside or outside the organisation.

Benchmarking improves performance by identifying and applying best demonstrated practices to operations and sales. Managers compare the performance of their products or processes externally with those of competitors and best-in-class companies, and internally with other operations that perform similar activities in their own firms. The objective of Benchmarking is to find examples of superior performance and understand the processes and practices driving that performance. Companies then improve their performance by tailoring and incorporating these best practices into their own operations—not by imitating, but by innovating.

**4. Just in time (JIT)** **Approach** :

 Just-in-time inventory system is one of the recently development inventory management concepts, which assumes that the purchase of inventory has to be just in time of use.

Jit refers to process of acquiring material (inventory) as they are needed. Jit reduces inventory by purchasing and storing lower quantities of inventories as much as possible.

The objective of jit is to maintain inventory as low as possible. Sometimes, it may even be at zero level. Thus, under jit, the inventories are received in time or purchased in time of use.

 It is only possible when the supplier can be relied from making the delivery of goods on time without compromising the quality. Generally, in developed countries where communication and transportation system are very efficient, the use of jit is common.

**5.Kaizan Costing :**

Kaizan refers to continual and gradual improvement through small betterment activities, rather than large or radical improvement made through innovation or large investment in technology. It is the process of cost reduction during the manufacturing phase of an existing product. Kaizen costing is most consistent with the saying “slow and steady wins the race.”

A process wherein a product undergoes cost reduction even when it is already on the production stage. The cost minimization can include strategies in effective waste management, continuous product improvement or better deals in the acquisition of raw materials.

**6. Total Quality Management (TQM) :**

TQM is a set of management practices throughout the organisation, geared to ensure that the organization consistently meets or exceeds customer requirements. TQM places strong focus on process measurement and controls as means of continuous improvement.

Total Quality is a people-focused management system that aims at continual increase in customer satisfaction at continually lower real cost. In a TQM effort, all members of an organisation participate in improving processes, products, services and the culture in which they work.

**7. Life Cycle Costing (LCC) :**

A life cycle cost analysis calculates the cost of a system or product over its entire life span. This also involves the process of Product Life Cycle Management so that the life cycle profits are maximized.

The analysis of this system includes cost for planning, research & development, production, operation, maintenance, cost of replacement and disposal or salvage. This concept provides important information for pricing and also helps in managing cost incurred throughout lifecycle of a system or product.

Life-Cycle Costs are all the costs associated with the product for its entire life cycle. Product life cycle costing traces costs and revenues of each product over several calendar periods throughout their entire life cycle.

**8. Activity Based Management (ABM) :**

Activity-based management (ABM) is a management strategy in which [business processes](https://searchcio.techtarget.com/definition/business-process) are evaluated and adjusted for their cost efficiency using [activity-based costing](https://whatis.techtarget.com/definition/ABC-costing-activity-based-costing).

ABM is used to evaluate business processes. If a business process loses the company money, it is examined to see if its efficiency can be increased or if the process can be eliminated. While it is most common in the enterprise, ABM is also used in non-profits, schools, government and non-government organizations ([NGOs](https://whatis.techtarget.com/definition/NGO-non-governmental-organization)) as well.

The term activity based management (ABM) or activity based costing management (ABCM) are used to describe the cost management applications. To complement an ABM system only first three stages of the five stages for designing an activity-based product costing system are required.

**9. Value Analysis:**

Value Analysis is one of the major techniques of cost reduction and control. It is a disciplined approach which ensures the necessary functions for the minimum cost without diminishing quality, reliability, performance and appearance.

It is a creative approach to eliminate the unnecessary costs which add neither to quality nor to the appearance of the product. It is a systematic application of techniques to identify the functions of a product or a component and to provide the desired function at the lowest total cost.

These are the days of providing the customer with really best quality products at least cost which is possible through value analysis which proves wrong rightly “Best and Cheap” or “Best is never cheap” or “Cheap is Costly”.

**10. Variance Analysis :**

**Definition:**Variance analysis is the study of deviations of actual behaviour versus forecasted or planned behaviour in budgeting or management accounting. This is essentially concerned with how the difference of actual and planned behaviours indicates how business performance is being impacted.

**11. Learning Curve Analysis :**

A learning curve is a concept that graphically depicts the relationship between the cost and output over a defined period of time, normally to represent the repetitive task of an employee or worker. The learning curve was first described by psychologist Hermann Ebbing haus in 1885 and is used as a way to measure [production efficiency](https://www.investopedia.com/terms/p/production_efficiency.asp) and to [forecast](https://www.investopedia.com/terms/f/forecasting.asp)costs.

In the visual representation of a learning curve, a steeper slope indicates initial learning translates into higher cost savings, and subsequent learnings result in increasingly slower, more difficult cost savings.

In any environment if a person is assigned to do the same task, then after a period of time, there is an improvement in his performance. If data points are collected over a period of time, the curve constructed on the graph will show a decrease in effort per unit for repetitive operations. This curve is very important in cost analysis, cost estimation and efficiency studies. This curve is called the learning curve.

“**The learning curve shows that if a task is performed over and over than less time will be required at each iteration**.”Historically, it has been reported that whenever there has been instanced of double production, the required labor time has decreased by 10 or 15 percent or more.

**Learning curves are also known as experience curve, cost curves, efficiency curves and productivity curves**. These curves help demonstrate the cost per unit of output decreases over time with the increase in experience of the workforce. Learning curves and experience curves is extensively used by organization in production planning, cost forecasting and setting delivery schedules.

**Product Costing System**

Product costing is a methodology associated with managerial accounting, i.e., accounting intended to serve management in an operational context rather than to measure corporate performance as such, although, of course, any kind of cost accounting, including product costing, contributes to overall results. More specifically product costing is intended accurately to determine the cost of a unit of production (or of a service delivered) by study of every resource used in its creation. The activity is only in part motivated by obtaining an accurate final cost that incorporates all contributing streams. In part it is a way of identifying cost components that can be addressed specifically in order to take cost out of the product by purchasing, redesign, reengineering, retooling, packaging, and other interventions by management at whatever stage.

Product costing evolved in an environment of mass production in the second half of the 20th century as ever more managerial attention was focused on optimizing the production function. Traditional financial accounting approaches have been—and continue to be—based on measurements of fairly rough granularity. For determining corporate profitability, it is sufficient generally to track raw materials, labor, tooling, and energy inputs and to sum these into production costs. Pricing of different products, of course, necessitated finer distinctions so that costs associated with classes of products would be available as a basis for differential pricing. Closer attention to the costs of, for instance, low-, medium-, and high-end models of a vehicle or a device then proliferated "downward." The costing of composite products required costing of their components. In turn operations on each component might vary. Some might require more or less strength and hence heavier forgings; these in turn might need more or less additional machining. Some components could be attached mechanically, others had to be welded. These operations could be measured in time, time in dollars. A systematic analysis of how a product came to be, the inputs costed as received and then the operations performed on them individually estimated, produced the final cost of production from which receipts from sale of scrap would be deducted to get a net cost. Product costing evolved further from this point by assigning an appropriate percentage of total overhead and also measuring additional costs upstream—such as packaging, warehousing, and delivery to the ultimate buyer.

The analytical resources made available by such detailed information have made product costing a routine aspect of most significantly-sized manufacturing operations. Product costing data act as feedback to designers, are used in manufacturing management to identify ideal workflow, influence the purchase of tooling, and are used in precise pricing of goods. Product costing is used in most routine production activities, including service occupations, although the level of detail sought is variable and usually determined by the size of the operation. Even in quite small businesses, some level of product costing is practiced in that managements usually know the costs associated with important functions identified with different products.

In recent years product costing has given rise to Activity Based Costing (ABC). The subject is covered in more detail elsewhere in this volume. ABC is based on the notion that costs arise in various activities. The concept is well-summarized by John Stark Associates, a management consulting group, as follows: "The Activity Based Costing paradigm is based on the principle that it is not the products that a company produces that generate costs, but rather the activities that are performed in planning, procuring and producing the products. It is the resources that are necessary to support the activities performed during the course of business that result in costs being incurred. Product costs should therefore be calculated by determining the extent to which each product makes use of the activities being performed. Products 'consume' activities and activities 'consume' costs." ABC may be a more refined method for precisely capturing inputs that, in many operations, are associated with overhead functions, such as engineering and design.

UNIT-2

**Activity Based Costing (ABC)**

**Introduction**

A powerful tool for measuring performance, Activity-Based Costing (ABC) is used to identify, describe, assign costs to, and report on agency operations. A more accurate cost management system than traditional cost accounting; ABC identifies opportunities to improve business process effectiveness and efficiency by determining the “true” cost of a product or service. Activity Based Costing is a method for developing cost estimates in which the project is subdivided into discrete, quantifiable activities or a work unit. ABC systems calculate the costs of individual activities and assign costs to cost objects such as products and services on the basis of the activities undertaken to produce each product or services. It accurately identifies sources of profit and loss.

**Need for ABC**

Traditional product costing systems were designed when company’s manufactured narrow range of products. Direct material and direct labour were dominant factors of production and Overheads were relatively small and distortions due to inappropriate treatment were not significant. Cost of processing information was high. Today companies produce a wide range of products. Overheads are significant in value. Simple methods of apportioning overheads on direct labour or machine hours basis is not justified. Non volume related activities like material handling, set up etc. are important and their costs cannot be apportioned on volume basis.

Manufacturing organizations need ABC for product costing where:

1. Production overheads are high in relation to direct costs.

2. There is great diversity in the product range.

3. Products use very different amounts of the overhead resource.

4. Consumption of overhead resources is not primarily driven by volume.

**Purposes and benefits of ABC:**

1. To link the cost to its causal factor – i.e. the Cost Driver

2. To identify costs of activities rather than cost centres

3. To ascertain product costs with greater accuracy by relating overheads to activities

4. To overcome the inherent limitations of traditional absorption costing and use of blanket overhead rates.

**Activity-Based Costing:**

The concepts of ABC were developed in the manufacturing sector of the United States during the 1970s and 1980s.It is a practice in which activities are identified and all related costs of performing them are calculated, providing actual costs chargeable. The focus of activity based costing is activities. Thus identifying activities is a logical first step in designing an activity based costing. An activity is an event, task or unit of work with a specified purpose. For example; designing products, setting up machines, operating machines and distributing products.

Turney defines ABC as “a method of measuring the cost and performance of activities and cost objects. Assigns cost to activities based on their use of resources and assigns cost to cost objects based on their use of activities. ABC recognizes the causal relationship of cost drivers to activities.” ABC can be defined by the following equation:

C/A=HD+M+E+S

Where C/A = Estimated cost per activity

H = Number of labor hours required to perform the activity one time

D = Wages per labor hour

M = Material costs required to perform the activity one time

E = Equipment costs to perform the activity one time

S = Subcontracting costs to perform the activity one time

The total cost for performing the activity will be based on the number of times the activity is performed during a specific time frame. An activity based costing system first traces costs to activities and then to products and other cost objects. The following figure diagrammatically explains the basic flow of Activity-Based Costing.

**Important Terms in Activity Based Costing**

The operation of the ABC system involves the use of the following terms:

**Activity**: An activity means an aggregate of closely related tasks having some specific functions whichare used for completion of goal or objectives. For example, customer order processing is an activity. It includes receiving order from customers, interacting with production department regarding capacity to produce and giving commitment to the customer regarding delivery time. Other activities may be assembling, packaging, advertising etc.

**Resource** : Resources are elements that are used for performing the activities or factors helping in theactivities. For example, order receiver, telephone, computers etc. are resources in customer order processing activity. It may include material, labour, equipment, office supplies etc.

**Cost** : Cost is amount paid for resource consumed by the activity. For example, salaries, printingstationary, telephone bill etc. are cost of customer order processing activity. It is also known as activity cost pool.

**Cost object**: It refers to an item for which cost measurement is required. e.g. a product, a service, or acustomer.

**Cost pool**: A cost pool is a term used to indicate grouping of costs incurred on a particular activitywhich drives them.

**Cost driver**: Any element that would cause a change in the cost of activity is cost driver. Actuallycost drivers are basis of charging cost of activity to cost object. Cost drivers are used to trace cost to product by using a measure of resources consumed by each activity. For example, frequency of order, number of order etc. may be cost driver of customer order processing activity. Cost driver may be involved two parts: Resource cost driver and Activity cost driver.

A resource cost driver is a measure of the quantity of resources consumed by an activity. An activity cost driver is a measure of the frequency and intensity of demand, placed on activities by cost objects.

|  |  |  |  |
| --- | --- | --- | --- |
| **Activities** | **Resources** | **Cost pools** | **Cost driver** |
| Consulting | Consultant, | Employee cost, | Level of consultant, time |
|  | computer | maintenance cost | spent |
| Laser printing | Printing staff, printer | Colour cost, maintenance | No. of pages printed, font |
|  |  | cost, printing stationary |  |
| Accounting | Administration staff | Salaries | No. of times account |
| administration |  |  | produced |
| Customer service | Telephone, staff | Telephone bill, salaries | Frequency of order, no. of |
|  |  |  | order, time spent in servicing, |
|  |  |  | no. of service calls |
| Research | Staff, equipment, | Salaries, maintenance | No. of research projects, time |
| development | material | cost, material cost | spent on a project, technical |
|  |  |  | complexities of project |

The cost drivers for various functions i.e., production, marketing, research, and developments are given below.

|  |  |
| --- | --- |
| Production | Number of units |
|  | Number of set-ups |
| Marketing | Number of sales personnel |
|  | Number of sales orders |
| Research& development | Number of research projects |
|  | Personnel hours spend on projects |
|  | Technical complexities of the projects |
| Customer service | Number of service calls |
|  | Number of products serviced |
|  | Hours spend on servicing products |

**Identification of activities for ABC :**

**Meaning of Activities:** Activities comprise of units of work or tasks. For example, purchase of materials is an activity consisting a series of tasks like purchase requisition, advertisement inviting quotations, identification of suppliers, placement of purchase order, follow-up etc.

**Types of Activities:** Activities basically fall into four different categories, known as the manufacturing cost hierarchy. The categories are:

**Unit level activities:** These are activities for which the consumption of resources can be identified with the number of units produced. The costs of some activities (mainly primary activities)are strongly correlated to the number of units produced. Examples are Use of indirect materials / consumables, Inspection or Testing etc.

**Batch level activities:** The costs of some activities (mainly manufacturing support activities)

are driven by the number of batches of units produced. These are activities related to setting

up of a batch or a production run. The costs of such activities vary with the number of batches

made, but is fixed for all units within that batch.

Examples are like

* Material ordering-where an order is placed for every batch of production.
* Machine set-up costs-where machines need resetting between each different batch of production.
* Inspection of Products-where the first item in every batch is inspected.

**Product level activities:** The costs of some activities (often once only activities) are driven by

the creation of a new product line and its maintenance. These are activities performed to

Support different products in the product line. Examples are like

* Designing the product.
* Producing parts specifications and keeping technical drawings of products up-to-date.
* Advertising of individual products rather than company’s name.

**Facility Level Activities:** These are activities necessary for sustaining the manufacturing

Process and cannot be directly attributed to individual products. examples are like

* Ground Maintenance
* Plant Security
* Production Manager’s Salary

**Steps involved in the installation of an Activity Based Costing System :**

**1. Specification of Objectives:** The motives for pursuing an ABC system must be established at the outset, Generally, the objectives are:

(a) To improve product costing where a belief exists that existing methods under cost some products and over cost others; or

(b) To identify non-value adding activities in the production process which might be a suitable focus for attention or elimination.

2. **Identification of Costs for ABC:** Direct costs, like materials and direct labour, are easily assigned directly to products. Some indirect costs that are product specific (e.g. specific advertising, dealer’s commission) may be directly assigned to the product. Hence, the remaining indirect costs form the focus of ABC. Such costs are indirectly assigned to the cost object (i.e. product) via Cost Pools and Activity Drivers.

3. **Process Specification:** This involves identification of different stages of the production process, the commitment of resources to each processing times and bottlenecks. This will provide a list of transactions which may or may not be defined as ‘activities’ at a subsequent stage.

4. **Activity definition:** The list of transactions as identified in the previous stage is analysed. This ensures aggregation or grouping of common activities and elimination of immaterial activities. Activities are categorized into Primary Activities and Support Activities. The resultant costs pools will likely-have-a number of different events or drives, associated with their incurrence.

5. **Activity driver selection:** Activity cost drivers used to relate the overheads collected in the cost pools to cost objects (products) should be determined. This is based on the factor that drives the consumption of the activity, i.e. the answer to the question; What causes the activity to incur costs? Generally a single Driver is selected for every activity even though multiple and inter related activity drivers exist.

6. **Costing:** A single representative activity driver can be used to assign costs from the activity

pools to the cost objects. Such linking of total Costs to Cost objects is generally based on the activity cost driver rate.

7. **Staff Training:** The co-operation of the work force is critical to the successful implementation of ABC. Staff training should be oriented to create an awareness of the purpose of ABC. The need for staff co-operation in the concerted team effort for mutual benefit must be emphasized throughout the training activity.

8. **Review and Follow-up:** The actual operation of the ABC system should be closely monitored.

Periodic Review and Follow-up action is necessary for successful implementation of the system.

**Significance of Activity Based Costing**

The following list reflects the results of several surveys of practice in the United States, the United Kingdom, and Canada to determine why companies choose ABC.

1. Cost Reduction: ABC measures how much activities that are costly and then take steps to reduce their costs by changing the productions process or outsourcing those activities.
2. Product pricing and decisions of whether to continue producing a product or keeping a particular customer. ABC implementers generally believe that ABC provides more accurate cost information than conventional costing does. Management can use this information to negotiate price increases with customers or to drop unprofitable products.
3. Budgeting and performance measurement: Management can use more accurate cost information to improve budgets and measures of department and division performance.

**Advantages of ABC analysis:**

**a. Reduction in investment:** under ABC analysis, the materials from group 'A' are purchase in lower quantities as much as possible. With this, the effort to reduce the delivery period is also made. These in turn help to reduce the investment in material.

**b. Strict control:** under ABC analysis, strict control can be exercised to the materials in group 'A' that have higher value.

**c. Minimum storage cost:** since, the ,material from group 'A' are purchase in lower quantities as much as possible, it reduce the storage cost as well.

**d. Saving in time**: since a signification effort is made for management of the material from group 'A', it helps to save time as well.

**e. Economy:** this method is economical, since equal time and labor is not needed for all types of materials.

**Disadvantage of ABC analysis:**

• ABC analysis will not be effective if the material are not classified into the groups properly.

• It is not suitable for the organization where the costs of materials do not very significantly.

• There is no any scientific base for the classification of material under ABC analysis.

• The classification of the materials into different groups may lead to extra cost. Hence, it may not be suitable for small organization.

**Traditional Costing:**

The traditional method of cost accounting refers to the allocation of manufacturing overhead costs to the products manufactured. The traditional method (also known as the conventional method) assigns or allocates the factory's indirect costs to the items manufactured on the basis of volume such as the number of units produced, the direct labour hours, or the production machine hours. We will use machine hours in our discussion.

By using only machine hours to allocate the manufacturing overhead to products, it is implying that the machine hours are the underlying cause of the factory overhead. Traditionally, that may have been reasonable or at least sufficient for the company's external financial statements. However, in recent decades the manufacturing overhead has been driven or caused by many other factors. For example, some customers are likely to demand additional manufacturing operations for their diverse products. Other customers simply want great quantities of uniform products.

**Limitations of Traditional Costing System:**

The cost of product arrived in traditional accounting system is not so accurate due to following reasons :

• The present Costing system has developed convenient overhead recovery basis and blanket

overhead recovery are acceptable when valuing stocks for financial reporting, but they are

inappropriate when used for decision making and typical product strategy decisions. Such

decisions have implications over 3-5 years and over this period many fixed costs become variable.

• The traditional fixed verses variable cost split is often unrealistic since, as business grows they often become more complex.

• In case of companies manufacturing and selling multiple products usually make decisions

on pricing, product-mix, process technology etc., based on distorted cost information due to

difficulties in traditional costing system in collection, classification, allocation and recovery of

overheads to individual products.

• The cost structure is changing especially when making direct labour component to small proportion.

• Traditional accounting was confined merely to furnishing information at product level. The new

manufacturing technology demands the feed back of performance while production is still in

progress rather than history.

• There is also an urgent need to integrate the activity measurement and financial measurement.

**Difference between Traditional Costing and Activity Based Costing**

|  |  |
| --- | --- |
| **Traditional Costing** | **Activity Based Costing** |
| Overheads are first related to departments cost centres (Production and Service Cost Centres) | Overheads are first related to activities or grouped into Cost Pools. |
| Only two types of activities viz. Unit Level Activities and Facility Level Activities are identified. | All levels of activities in the manufacturing cost hierarchy viz. Unit Level, Batch Level, Product Level and Facility Level are identified. |
| This method relates overheads to cost centres i.e. locations. It is not realistic of the behaviour of costs. | This method relates overheads to the causal factor i.e. driver. Thus, it is more realistic of cost behaviour. |
| Overhead Rates can be used to ascertain cost of products only. | Activity Cost Driver Rates can be used to ascertain cost of products and also cost of other cost objects such as customer segments, distribution channels etc. |

**Target costing**

Target costing is a pricing method used by firms. It is defined as "a cost management tool for reducing the overall cost of a product over its entire life-cycle with the help of production, engineering, research and design". A target cost is the maximum amount of cost that can be incurred on a product and with it the firm can still earn the required profit margin from that product at a particular selling price.

In the traditional cost-plus pricing method materials, labor and overhead costs are measured and a desired profit is added to determine the selling price. Target costing involves setting a target cost by subtracting a desired profit margin from a competitive market price.

A lengthy but complete definition is "Target Costing is a disciplined process for determining and achieving a full-stream cost at which a proposed product with specified functionality, performance, and quality must be produced in order to generate the desired profitability at the product’s anticipated selling price over a specified period of time in the future."

This definition encompasses the principal concepts: products should be based on an accurate assessment of the wants and needs of customers in different market segments, and cost targets should be what result after a sustainable profit margin is subtracted from what customers are willing to pay at the time of product introduction and afterwards. These concepts are supported by the

**Four Basic Steps of Target Costing:**

 (1) Define the Product

(2) Set the Price and Cost Targets

(3) Achieve the Targets

(4) Maintain Competitive Costs.

**Definition, Explanation and Formula of Target Costing:**

**Target costing** is the process of determining the maximum allowable cost for a new product and thendeveloping a prototype that can be profitably made for that maximum **target cost** figure. A number of companies--primarily in **Japan**--use target costing, including Compaq, Culp, Cummins Engine, Daihatsu Motors, DaimlerChrysler, Ford, Isuzu Motors, ITT, NEC, and **Toyota** etc.

All acceptable definition of target costing does not exist, following important definitions have been given :

“Target costing can be defined as a cost management tool for reducing the overall cost of a product over its entire life cycle with the help of production engineering, research and design, marketing and accounting departments.” ----------- Samurai.

“In reality, target costing is not a quantification technique, but rather a complete cost reduction programme starting even before the first drawings of the product have been prepared. It is an approach aimed at reducing the cost of new products throughout their life cycle, while meeting customer requirements in terms of quality and reliability among others, examining all conceivable ideas relating to cost reduction at the planning development and prototyping stages. Target costing is not a simple

cost reduction technique but a complete profit management system.” ------------------------ Kato.

The target costing for a product is calculated by starting with the product's anticipated selling price and then deducting the desired profit. Following **formula or equation** further explains this concept:

**Target Cost = Anticipated selling price – Desired profit**

The product development team is then given the responsibility of designing the product so that it can be made for no more than the target cost.

## Target Costing Principles

* Price-led costing
* Cross functional teams
* Customer focus
* Focus on product design and process
* Lifecycle cost reduction
* Value Chain involvement

## Features of Target Costing:

1. It is a part of management process used for the cost reduction and cost management.

2. It gives much importance to customers views, market conditions and profitability.

3. It is considered as an integral part of product design and introduction of new product.

4. It emphasized the earning of at least target profit margin from each product at any cost.

5. Under the target costing process, the target selling price is fixed on the basis of various sales forecasting techniques.

6. The fixing of selling price is based on the fixing of target production volumes since there is a relationship between price and volume.

7. The required profit margin is included in the target selling price.

**Bench Mark Costing**

**Definition and Meaning**

Dictionary defines a benchmark as “a standard or a point of reference against which things may be compared and by which something can be measured or judged”.

Benchmarking is defined “as the continuous, systematic process of measuring one’s output and/or work processes against the toughest competitors or those recognized best in the industry.”

Benchmarking is the process of identifying and learning from the best practices anywhere in the world. It is powerful tool for continuous improvement in performance. It involves comparing firm’s products, services or activities against other best performing organization, either internal or external to the firm. The objective is to find out how the product, service or activity can be improved and ensure that the improvements are implemented. It attempts to identify an activity that needs to be improved and finding a non-rival organization that is considered to represent world-class best practice and studying how it performs the activity.

Benchmarking is an approach of setting goals and measuring productivity based on best industry practices. Benchmarking helps in improving performance by learning from best practices and the processes by which they are achieved. It involves regularly comparing different aspects of performance with the best practices, identifying gaps and finding out novel methods to not only reduce the gaps but to improve the situations so that the gaps are positive for the organization. Benchmarking is periodical exercise for continuous improvement within the organization so that the organization does not lag behind in the dynamic business environment.

Benchmarking should not be treated as just comparison. It is necessary to have a point of reference to know how well one is doing. In a business environment with cut-throat competition it is necessary to gain edge over their competitors. Benchmarking helps organization to get ahead of competition.

Comparing the results with a competitor helps the management to get a goal that is both desirable and achievable but provides no clue on how the goals are to be achieved. It is a comparison of work progress that tells us how the competitor follows a process which produce outstanding results and this is the essence of benchmarking.

**Evolution of Benchmarking Concept**

Benchmarking is a systematic and continuous measurement process. It is a process of measuring and comparing an organization’s business processes against business process leaders anywhere in the world, to gain information which will help the organization to improve its performance. It is basically a quality practice. Companies choose to benchmark excellent companies whose business processes are analogous to their own. Benchmarking identifies practices that have enabled the successful company’s superior performance and that can be adopted to the benchmarking company’s business. This process results in two types of outputs; benchmarks or measures of comparative performance, and enables or practices that lead to exceptional performance. Often, benchmarking has been equated to copying or imitating and it is said that benchmarking is ‘stealing shamelessly’. Benchmarking was originated in Japan during the early 1960s due to the Japanese curiosity and fondness for imitation. Benchmarking has evolved through a process which has resembled the classic ‘art-transitioning-to-science’ model for the emergence of new management discipline.

The above Figure reveals the evaluation from first generation reverse engineering to the fifth generation global benchmarking which is in the emergent stage. The benchmarking practice has started with product-oriented reverse engineering or competitive product analysis. The former involved a tear-down and evaluation of technical product characteristics. While the later was market-oriented and evaluate the relative capabilities of the competitive product offerings. Strategic benchmarking is similar to process benchmarking in nature but differs in scope and depth. It involves a systematic process by which a company identifies and evaluates alternatives, implements strategies and improves overall performance levels by incorporating successful strategies from companies engaged with it in a strategic alliance. The issues addressed in this process include building core competence to sustain competitive advantage, targeting specific shifts in strategy -such as entering a new market or developing a new product, making acquisition and creating a learning and adaptive organization. The future generation will be in global benchmarking through which distinctions in international culture, business processes and trade practices across companies are bridged and their ramifications for business process improvements are understood and utilized.

**Types of Benchmarking :**

**Internal Benchmarking -** It involves looking within the organization to determine other departments,locations and projects which have similar activities and then defining the best practices amongst them. It involves seeking partners from within the same organization. For example, from business units located in different areas. The main advantages of internal benchmarking are that access to sensitive data and information are easier; standardized data is often readily available; and usually less time and resources are needed. There maybe fewer barriers to implementation as practices maybe relatively easy to transfer across the same organization. However real innovation may be lacking and best in class performance is more likely to be found through external benchmarking.

**External Benchmarking -** External benchmarking involves seeking help of outside organizations that areknown to be best in class. External benchmarking provides opportunities of learning from those who are at the leading edge, although it must be remembered that not every best practice solution can be transferred to others. In addition, this type of benchmarking may take up more time and resource to ensure the comparability of data and information, the credibility of the findings and the development of sound recommendations.

**Generic Benchmarking -** Generic benchmarking involves comparing with organizations that have similarprocesses. It involves the comparison of an organization’s critical business processes and operations against best practice organization that performs similar work or deliver similar services. For example, how do best practice organization process customers orders. It extends the benchmarking process outside the organization and its industry to get inspiration from organizations in dissimilar industry.

**Functional Benchmarking-** This type of benchmarking is used when organizations look to benchmark withpartners drawn from different business sectors or areas of activity to find ways of improving similar functions or work processes. This sort of benchmarking can lead to innovation and dramatic improvements.

**Competitive Benchmarking -** It involves examining the products, services and processes of competitorsand then comparing them with their own. It involves the comparison of competitors’ products, process and business results with own. It requires that the company perform a detailed analysis of its competitors’ products, services, and processes. Benchmarking partners are drawn from the same sector. However to protect confidentiality it is common for the companies to undertake this type of benchmarking through trade associations or third parties.

**Compatible Industry Benchmarking -** Compatible industry will include those companies that are notdirectly competing for the same customer. It make comparisons within A general industry category. For example, a company, which is manufacturing automobile spare parts, compares itself with another company which is manufacturing automobile accessories.

**Strategic Benchmarking -** It is similar to the process benchmarking in nature but differed in its scope anddepth. It involves a systematic process by which a company seeks to improve their overall performance by examining the long-term strategies. It involves comparing high-level aspects such as developing new products and services, core competencies etc.

**Global Benchmarking -** It is a benchmarking through which distinction in international culture, businessprocesses and trade practices across companies are bridged and their ramification for business process improvement are understood and utilized. Globalization and advances in information technology leads to use this type of benchmarking.

**Stages in the process of Benchmarking**

**Stage 1: Planning**

**(a)Determination of benchmarking goal statement**

(b) **Identification of best performance**: The next step is seeking the best. To arrive at the best is both expensive and time consuming, so it is better to identify a company, which has recorded performance success in a similar area.

(c) **Establishment of the benchmarking or process Improvement team:** This should include persons who are most knowledgeable about the internal operations and will be directly affected by changes due to benchmarking.

(d) **Defining the relevant benchmarking measures:** Relevant measures will not include the measures used by the organization today but they will be refined into measures that comprehend the true performance differences. Developing good measurement is key to successful benchmarking.

**Stage 2: Collection of data and information:**

This involves the following steps

(a) Compile information and data on performance. They may include mapping processes.

(b) Select and contact partners

(c) Develop a mutual understanding about the procedures to be followed and, if necessary,

Benchmarking Protocol with partners.

(d) Prepare questions

(e) Distribute schedule of questions to each partner

(f) Undertake information avid data collection by chose method for example, interview, site- visits,telephone, fax and e-mail.

(g) Collect the findings to enable analysis.

**Stage 3: Analysis of findings:**

(a) Review the findings and produce tables, charts and graphs to support the analysis

(b) Identify gaps in performance between our organization and better performers.

(c) Seek explanations for the gaps in performance. The performance gaps can be positive negative or zero.

(d) Ensure that comparisons are meaningful and credible. Communicate the findings to those who are affected.

(e) Identify realistic opportunities for improvements. The negative performance gap indicates an undesirable competitive position and provides a basis for performance improvement. If there is no gap it may indicate a natural position relative to the performance being benchmarked. The zero position should be analysed for identifying means to transform its performance to a level of superiority or positive gap.

**Stage 4: Recommendations:**

I. **Making recommendations:**

(a) Deciding the feasibility of making the improvements in the light of the conditions that apply within own organization.

(b) Agreement on the improvements that are likely to be feasible

(c) Producing a report on the Benchmarking in which the recommendations are included.

(d) Obtaining the support of key stakeholder groups for making the changes needed. Developing action plans for implementation.

II. **Implementing recommendations:**

(a) Implement the action plans

(b) Monitor performance

(c) Reward and communicate successes

(d) Keep key stakeholders informed of progress.

**Stage 5: Monitoring and reviewing:**

This involves:

(a) Evaluating the benchmarking process undertaken and the results of the improvement against objectives and success criteria plus overall efficiency and effectiveness.

(b) Documenting the lessons learnt and make them available to others

(c) Periodically re-considering the benchmarks for continuous improvement.

**Pre-requisites for successful benchmarking :**

1. **Commitment:** Senior managers should support benchmarking and must be committed to continuous improvements.

2. **Clarity of Objectives:** The objectives should be clearly defined at the preliminary stage.

Benchmarking teams have a clear picture of their organization’s performance before approaching

others for comparisons.

3. **Appropriate Scope:** The scope of the work should be appropriate in the light of the objectives

resources, time available and the experience level of those involved.

4. **Resources:** Sufficient resources must be available to complete projects within the required time scale.

5. **Skills:** Benchmarking teams should have the right skills and competencies.

6. **Communication:** Stakeholder, particularly staff and their representatives are to be kept informed of the reasons for benchmarking.

**Difficulties in implementation of Benchmarking:**

1. **Time consuming:** Benchmarking is time consuming and at times difficult. It has significant requirement of staff time and company resources. Companies often waste time in benchmarking non-critical functions.

2. **Lack of Management Support:** Benchmarking implementation require the direct involvement of the senior manager etc. The drive to be best in the industry or world cannot be delegated.

3. **Resistance from employees:** It is likely that there may be resistance from employees.

4. **Paper Goals:** Companies can become pre occupied with the measure. The goal becomes not to improve process but to match the best practices at any cost.

5. **Copy-paste attitude:** The key element in benchmarking is the adaptation of a best practice to tailor it to a company’s needs and culture. Without that step, a com company merely adopts another company’s process. This approach condemns benchmarking to fail.

**Benchmarking Code of Conduct**

To contribute to efficient, effective, and ethical benchmarking, individuals agree for themselves and their organization to abide by the following principles for benchmarking with other organizations.

1. **Principle of Legality**: Avoid discussion or actions that might lead to or imply an interest in restraint of trade; market or customer allocation schemes, price fixing dealing arrangements bid rigging, bribery or misappropriation. Do not discuss costs with competitors if costs are an element of pricing.

2. **Principles of Exchange**: Be willing to provide the same level of information that you request in

any benchmarking exchange.

3. **Principle of Confidentiality**: Treat benchmarking interchange as something confidential to the

individuals and organizations involved. Information obtained must not be communicated outside the partnering organization without prior consent of participating benchmarking partners. An organization’s participation in a study should not be communicated externally without their permission.

4. **Principle of Use:** Use information obtained through benchmarking partnering only for the purpose of improvement of operations with the partnering companies themselves. External use or communications of a benchmarking partner’s name with their data of observed practices requires permission of that partner. Do not, as a consultant of client, extend one company’s benchmarking study findings to another without the first company’s permission.

5. **Principle of First Party Contact:** Initiate contacts, whenever possible, though a benchmarking

contact designated by the partner company. Obtain mutual agreement with the contact on any hand off of communication or responsibility to other parties.

6. **Principle of Third Party Contact:** Obtain an individual’s permission before providing their name in response to a contact request.

7. **Principle of Preparation:** Demonstrate commitment to the efficiency and effectiveness

benchmarking process with adequate preparation at each process particularly, at initial partnering contact.