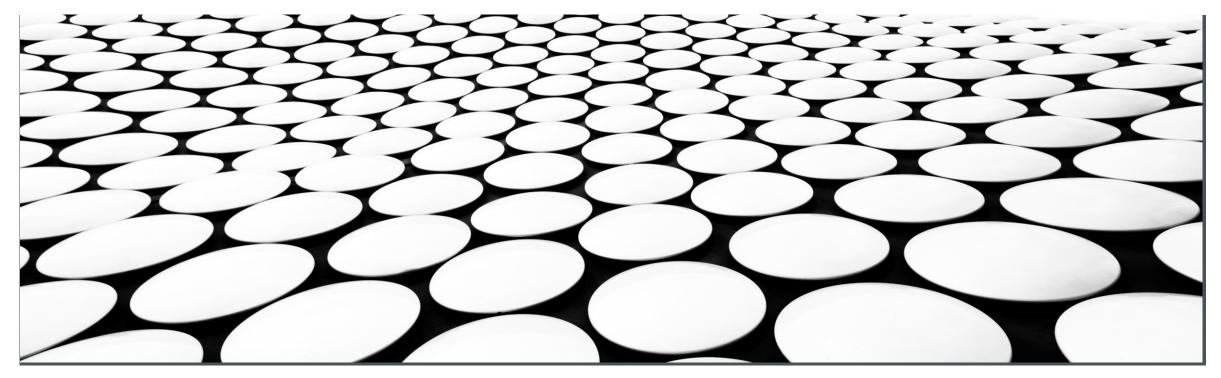
FINANCE FOR NON-FINANCE – MODULE V STRATEGIC COST MANAGEMENT

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FINANCE FOR NON-FINANCE - MODULE V

Strategic Cost Management

According to Cooper and Slagmulder (1998), strategic cost management is "the application of cost management techniques so that they simultaneously improve the strategic position of a firm and reduce costs".

☐ They suggest three sorts of cost management initiatives, based on whether the impact on the organization's competitive position is positive, negative, or neutral.

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Illustration I

A hospital enhances its Revenue Cycle Management by redesigning patient admission procedure at the registration desk, so it becomes more efficient and easier for patients. The hospital will become known for its easy admission procedure so more people will come to that hospital if the patient has a choice. The strategic position of the hospital has just been increased over its competitors.

Illustration II

A medical insurance company decides to re-evaluate its accounts payable system to make it more efficient. The evaluation has no positive benefits to the insurance company in the external market. The objective of the change is to make the organization more profitable. Since this is an internal back-office change it does not create any strategic impact on the world at large, except that internally it helps improves cash management.

Illustration III

A large airline company only has two desks for administering and selling tickets. This set-up induces long queues for the airline customer which can ultimately result in high dissatisfaction and a bad reputation for the airline. This may reduce the amount of ticket sales when compared with the airline's competitors. Even though having only two desks available for customers may initially be cost-effective, in the long run, it harms the company. This is a strategic intent that negatively impacts the organization.

According to Michael Porter, a firm has a choice of three generic strategies to achieve a sustainable competitive advantage. They are *cost leadership*, *differentiation*, and *focus*. Where cost leadership is selected Porter advocates the use of strategic cost analysis.

☐ Hence it is evident that an organization must compete in the areas of cost, quality, customer service, and flexibility with any cost reduction efforts contributing to an improved strategic position and here financial analytics plays a very critical role.

- □Pillars of Strategic Cost Management which are:
 - Conventional costing
 - Activity-based cost management
 - Target costing
 - Lifecycle costing
 - Kaizen costing
 - Total Quality Management
 - Use of marginal costing in decision-making area

□ Conventional costing

- Conventional costing attempts to work out the cost of producing an item incorporating the costs of resources that are currently used or consumed.
- ➤ Therefore, for each unit made the classical variable costs of material, direct labour, and variable overheads are included (the total of these is the marginal cost of production), together with a share of the fixed production costs.
- The fixed production costs can be included using a conventional overhead absorption rate or they can be accounted for using activity-based costing (ABC). ABC is more complex but almost certainly more accurate. However, whether conventional overhead treatment or ABC is used the overheads incorporated are usually based on the budgeted overheads for the current period.
- ➤ Once the total absorption cost of units has been calculated, a mark-up (or gross profit percentage) is used to determine the selling price and the profit per unit. The mark-up is chosen so that if the budgeted sales are achieved, the organization should make a profit.

□ Shortcomings of Conventional costing

- The product's price is based on its cost, but no one might want to buy at that price. The product might incorporate features that customers do not value and therefore do not want to pay for, and competitors' products might be cheaper, or at least offer better value for money. This flaw is addressed by *Target costing*.
- The costs incorporated are the current costs only. They are the marginal costs plus a share of the fixed costs for the current accounting period. There may be other important costs that are not part of these categories, but without which the goods could not have been made.
- Examples include the research and development costs and any close down costs incurred at the end of the product's life. Why have these costs been excluded, particularly when selling prices have to be high enough to ensure that the product makes a profit? To make a profit, total revenue must exceed total costs in the long term. This flaw is addressed by *lifecycle costing*.

□ Activity based Cost Management

- The use of ABC as a costing tool to manage costs at the activity level is known as Activity Based Cost Management (ABM).
- ➤ It is a discipline that focuses on the efficient and effective management of activities as the route to continuously improving the value received by customers.
- ➤ ABM utilizes cost information gathered through ABC.
- ➤ It determines what drives the activities of the organization and how these activities can be improved to increase profitability.

□ Key attributes of Activity based Cost Management

- a) Cost object: It is an item for which cost measurement is required. e.g. a product or a customer
- b) Cost driver: It is a factor that causes a change in the cost of the activity. There are two categories of cost drivers:
 - I) Resource cost driver it is a measure of the number of resources consumed by an activity. It is used to assign the cost of a resource to an activity or cost pool
 - II) Activity cost driver It is a measure of the frequency and intensity of demand, placed on activities by cost objects. It is used to assign activity costs to cost objects

☐ Stages of Activity based Cost Management

The stages of activity-based costing are:

- ➤ Identification of the activities that have taken place in the organization
- > Assigning costs to cost pool for each activity
- > Spreading of support activities across primary activities
- > Determining cost driver for each activity
- Assigning the costs of activities to products according to product demand for activities

- □ Business Applications of Activity based Cost Management
 - Cost reduction
 - Activity-based budgeting
 - Business Process re-engineering
 - Benchmarking
 - Performance management

□ Target Costing

■ Target costing is defined as "a structured approach to determining the cost at which a proposed product with specified functionality and quality must be produced to generate a desired level of profitability at its anticipated selling price".

• It is an important part of a comprehensive management process aimed at helping an organization to survive in an increasingly competitive environment.

□ Features of Target Costing

- The features of target costing are as under:
 - > Target costing is viewed as an integral part of the design and introduction of new products
 - For any given product, a target selling price is determined using various sales forecasting techniques
 - Integral to setting the target selling price is the establishment of target production volumes, given the relationship between price and volume
 - > The next stage of the target costing process is to determine cost reduction targets
 - ➤ It should be noted that a fair degree of judgment is needed where the allowable cost and the target cost differ.
 - The total target is split into various components, each component is studied and opportunities for cost reductions are identified. These initiatives are often alluded to as *Value Engineering* and *Value Analysis*.
- Target costing is a marketing approach to costing.

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☐ Target Costing and impact on Profitability

- > Target costing improves profitability in two ways:
 - It places such a detailed continuing emphasis on product costs throughout the life cycle of every product that it is unlikely that a company will experience runaway costs;
 - It improves profitability through precise targeting of the correct prices at which the company feels it can field a profitable product in the marketplace that will sell in a robust manner.
 - Instead of starting with the cost and working to the selling price by adding on the expected margin, target costing will start with the selling price of a particular product and work back to the cost by removing the profit element. This means that the company has to find ways of not exceeding that cost.

☐ Target Costing and its emphasis on decision stage

- The emphasis is on the planning and design stage.
- This becomes very important to the cost of the product because if something is designed such that it is needlessly expensive to make, it does not matter how efficient the production process is, it will always be a struggle to make satisfactory profits.
- ➤ Powerful discipline imposed on the company especially on the establishment of multifunctional teams consisting of marketing people, cost accountants, production managers, quality control professionals, and others.
- These teams are vital to the design and manufacturing decisions required to determine the price and feature combinations that are most likely to appeal to potential buyers of products.

☐ Target Costing and some decision enablers

- the features of the product
- how to avoid 'over design'
- the number of components needed
- whether the components are standard or specialized
- the complexity of machining and construction
- where the product can be made
- what to make in-house and what to sub-contract
- the quality of the product
- the batch size in which the product can be made

☐ Life cycle costing

- As mentioned in earlier slides, target costing places great emphasis on controlling costs by good product design and production planning, but those upfront activities also cause costs.
- There might be other costs incurred after a product is sold such as warranty costs and plant decommissioning.
- When seeking to make a profit on a product it is essential that the total revenue arising from the product exceeds total costs, whether these costs are incurred before, during, or after the product is produced.
- This is the concept of *life cycle costing*, and it is important to realize that target costs can be driven down by attacking any of the costs that relate to any part of a product's life.

☐ Life cycle costing

The cost phases of a product can be identified as:

| Phase | Examples of types of cost |
|-------------|---|
| Design | Research, development, design, and tooling |
| Manufacture | Material, labor, overheads, machine set up, inventory, training, production machine maintenance, and depreciation |
| Operation | Distribution, advertising, and warranty claims |
| End of life | Environmental clean-up, disposal, and decommissioning |

☐ Life cycle costing – Essential premises

There are four principal premises to be learned from lifecycle costing:

- All costs should be taken into account when working out the cost of a unit and its profitability.
- Attention to all costs will help to reduce the cost per unit and will help an organization achieve its target cost.
- Many costs will be linked. For example, more attention to design can reduce manufacturing and warranty costs. More attention to training can machine maintenance costs. More attention to waste disposal during manufacturing can reduce end-of life costs.
- Costs are committed and incurred at very different times. A committed cost is a cost that will be incurred in the future because of decisions that have already been made. Costs are incurred only when a resource is used.

Illustration IV

A company is planning a new product. Market research information suggests that the product should sell 10,000 units at Rs.21.00/unit. The company seeks to make a mark-up of 40% product cost. It is estimated that the lifetime costs of the product will be as follows:

- (i) Design and development costs Rs.50,000
- (ii) Manufacturing costs Rs. 10/unit
- (iii) End of life costs Rs.20,000

The company estimates that if it were to spend an additional `15,000 on design, manufacturing costs/units could be reduced.

Required

- (a) What is the target cost of the product?
- (b) What is the original lifecycle cost per unit and is the product worth making on that basis?
- (c) If the additional amount were spent on design, what is the maximum manufacturing cost per unit that could be tolerated if the company is to earn its required mark-up?

Illustration IV

Solution

The target cost of the product can be calculated as follows:

(a) Cost + Mark-up = Selling price 100% 40% 140% Rs.15 Rs. 6 Rs.21

(b) The original life cycle cost per unit = $(Rs.50,000 + (10,000 \times Rs.10) Rs.20,000)/10,000 = Rs. 17$

This cost/unit is above the target cost per unit, so the product is not worth making.

(c) Maximum total cost per unit = Rs.15. Some of this will be caused by the design and end of life costs:

```
(Rs.50,000 + Rs.15,000 + Rs.20,000)/10,000
= Rs.8.50
```

Therefore, the maximum manufacturing cost per unit would have to fall from Rs.10 to (Rs.15 - Rs.8.50) = Rs.6.50.

□ Kaizen Costing

- Kaizen costing is a process wherein a product undergoes cost reduction even when it is already in the production stage. Cost minimization can include strategies ineffective waste management, continuous product improvement, or better deals in the acquisition of raw materials.
- Yashihuro Moden defines kaizen costing as "the maintenance of present cost levels for products currently being manufactured via systematic efforts to achieve the desired cost level." The word *kaizen* is a Japanese word meaning *continuous improvement*.
- Moden has described two types of kaizen costing:
 - Asset and organization-specific kaizen costing activities planned according to the exigencies of each deal
 - Product model-specific costing activities carried out in special projects with added emphasis on value analysis

□ Kaizen Costing

- ➤ Kaizen costing is applied to products that are already in the production phase. Before kaizen costing, when the products are under development phase, target costing is applied.
- ➤ 'Kaizen costing is based on the belief that nothing is ever perfect, so improvements and reductions in the variable costs are always possible'

□ Total Quality Management

- ➤ Total Quality Management is a systematic process for identifying and implementing the solution and prioritize opportunities for improvement.
- The TQM approach highlights the need for a customer-oriented approach to management reporting, eliminating some of our more traditional reporting practices.
- ➤ Performance measurement and quality management are not the sole domain of the manufacturing industry, but detailed applications of the new management accounting practices to the professional service environment.

□ Total Quality Management

- Features of TQM
 - **Commitment**
 - > Culture
 - > Continuous improvement
 - > Co-operation
 - > Customer focus
 - > Control

Illustration V

A company manufactures a component in batches of 2,000 each. Each component is tested before being sent to the agents for sales. Each component can be tested at the factory at a cost of Rs.25. If any component is found to be defective, it can be rectified by spending Rs.200. Because of the large demand for the components and the sophisticated system of manufacture, a proposal came up that the practice of pre-testing of the components to be dispensed with to save costs. In that event, any defective component is received back from the customer under warranty, the cost of rectification and re-dispatch will be Rs.400 per component.

State at what percentage of manufacture of components, the company will find it cheaper to pre-test each component.

Illustration V

Solution:

Let the defectives be d

To set $(2,000 \times 25) + 200d$

If defectives are rectified after return from customers from customers, the cost = 400d

At Cost indifference point:

$$(2,000 \times 25) + 200d = 400d$$

or,
$$200d = 50,000$$

or,
$$d=250$$

Percentage of defectives to total components = $250 \div 2,000 \times 100 = 12.5\%$

If defectives are more than 12.5%, pre-testing is advised.

□ Decision making using Strategic Cost Management

- Stock Management and Inventory Control Decisions,
- Plant Location Decisions,
- Machinery Replacement / Capital Budgeting Decisions,
- Sale at Split-off or Further Processing Decisions,
- Product Decisions Dropping or adding a product line,
- Marketing Decisions,
- Submitting Tenders and Quotations for new jobs based on relevant cost analysis,
- Acceptance of Incremental Orders in different situations like spare capacity, full capacity, etc,
- Make or Buy Decisions,
- Operate or Shut Down Decisions,
- Product Pricing Decisions Reduction or maintenance of price,
- Opening of new sales territory or branch,
- Intra-Company Transfer Pricing Decisions,
- Purchasing vs. Lease Financing Decisions.

THANK YOU!