King Fahd University of Petroleum and Minerals College of Industrial Management Department of Accounting & MIS ACCT 510: Managerial Accounting MBA Program

Chapter 2 (Lecture Notes)

Cost Management Concepts and Cost Behavior

What Does Cost Mean?

There is no single definition of "cost" for two reasons:

- 1. costs are developed and used for some specific purpose
- 2. the way costs is to be used will define the way it should be computed
- e. different costs for different purposes
 - stock valuation
 - Abandoning or discontinuing a product/ accepting order
 - a cost for a prospective price

When the purpose is to Compute the Cost of Something:

1. Definition of cost: "the amount of expenditure (actual or notional) incurred on, or attributable to a cost object, a specified thing/ unit/ service or activity.

2. Cost units/ objects: e.g. a product, a product line, a shipping dept, canteen meal, kilowatt-hours, patient treated

<u>Direct cost</u>: A cost of a resource or activity that is acquired for or used by a single cost object e.g. cost of a test machine bought for testing the quality of a specific product.

Indirect Cost: The cost of a resource that is to be used by more than one cost object e.g. supervision costs for different types of products.

Organizing Costs Based on the Way They are Created (How Costs arise?)

Flexible Resources and Flexible Cost

- Flexible Resources: Resources whose costs are proportional to the amount of the resource used e.g. wood used to make furniture.
- Flexible costs: The costs associated with flexible resources e.g. costs of wood.

Note: flexible costs are always regarded as direct costs. However, when it is only a small part of the total costs e.g. cost of glue used to make a dining room table then it is treated as indirect cost.

Capacity-Related Resources and Costs:

- Capacity-Related Resources: Resources that are acquired and paid for in advance of when the work done e.g. plant machinery.
- Capacity-Related Costs: The costs associated with capacity –related costs.

How the Use of Cost Information Defines its Focus and Form

<u>Using Cost Information outside the Organization and Generally Accepted</u> <u>Accounting Principles</u>

GAAP and Cost for External Reporting: GAAP prescribe rules and guidelines for determining the costs of a product produced or a service delivered.

GAAP defines costs as the amount paid for a resource and converts that cost to an expensed when the resource is used.

<u>Classification of costs by Type</u>:

- Product costs: Manufacturing costs incurred to produce the volume and mix of products made during the period e.g. material costs, labor costs, manufacturing overheads.
- Period Costs: The costs related to non-manufacturing costs, including administrative and marketing costs.

Classification of costs by Function:

GAAP uses two broad functional cost classifications:

- Direct Manufacturing Costs: Manufacturing costs that can be traced to a single cost object e.g. Direct labor and direct material costs.
- Indirect Manufacturing Costs: Manufacturing costs that are related to more than one cost object e.g. costs of equipment, utility expenses, supervision
- Non-Manufacturing Costs:
 - Distribution costs
 - Selling costs
 - Marketing costs

- After-sales costs
- Research and Development costs
- General and administrative

Using Costs Information inside the Organization

• Planning purpose e.g. product costs to determine the price for a prospective product e.g. cost-plus price and penetrating price, skimming price

Other examples include short-term financial planning and Cost-Volume-Profit Analysis and Break-Even Analysis see pp. 38-42.

Variable Costs: Costs vary with output or volumeFixed Costs: Costs remained constant within a relevant range.

Break-Even Chart



Number of Units (in thousands)

B.E = <u>Fixed Costs</u>

Contribution Margin per Unit

CMU = Selling Price- Variable Cost Per Unit Margin of Safety = Projected Sales – B.E Sales

<u>Opportunity costs</u>: The sacrifices incurred when using resources for one purpose instead of another

See the case of Mount Pleasant Plastics (p.82)		
	Plastic crate	Plastic Container
Profit	\$8	\$5
Time to make	1 minute	0.5 minute

The only constraint limiting production is machine time

Which one you would make?

Profit per machine minute \$8 \$10

Flexible

Capacity Related

Direct Cost Indirect Cost

Long-Run and Short-Run Costs

Short-run: the period over which a decision maker can not adjust capacity

- Capacity-related costs is fixed
- The only costs that vary in the short-run are those that vary in proportion to production, i.e. flexible costs
- Long-run costs: are the sum of flexible and capacity related costs associated with a cost object
- Important for planning purposes
- The price charged for a product must cover its long-run costs for the organization to replace the capacity used to make the product

<u>Life-cycle costing</u>: The process of studying the cost behavior over all stages of a product's life.

- Deciding whether to introduce a new product.
- It is a planning tool

A typical product's life cycle has five distinct stages:

1. The product development and planning stage:

- The product development and planning phase: the organization incurs significant R & D costs and product testing costs. Traditional costing systems often regard them as general overheads.
- Introduction phase: the organization incurs significant promotional costs as the new product is introduced to the market place. At this level the product's revenue will not often cover flexible and capacity related costs.
- Growth phase: The product's revenue begin to cover flexible and capacity related costs incurred to produce, market and distribute the product. There is often little or no competition.

- Product maturity phase: Price competition becomes intense and product margins begin to decline (still the product is profitable, but profitability is declining). Need undertake intense efforts to reduce cost to compete.
- Product decline and abandonment phase: product begins to be unprofitable and competitors begin to drop out. When the organization abandons the product, they incur abandonment costs.