Product Management

Product economy analysis and description

Lecture 12

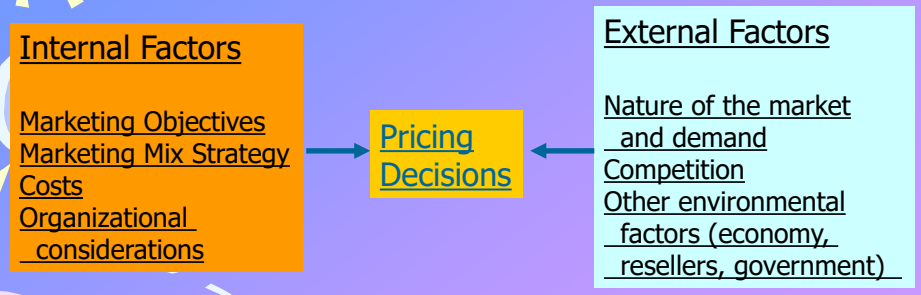
Pricing Decisions

- Price factors
- Costs
- Product costs
- Price decision
- Price strategy

Price

- Price is the sum of all the values that consumers exchange for the benefits of having or using the product or service.
- Price has been the major factor affecting buyer choice; nonprice factors have become increasingly important in buyer-choice behavior.
- Price is the only element in the marketing mix that produces revenues; all others represent costs.

Factors Affecting Price Decisions



Internal Factors Affecting Pricing Decisions: Marketing Objectives

Marketing Objectives

Survival
Low Prices to Cover Variable Costs and Some Fixed Costs to Stay in Business.

Current Profit Maximization
Choose the Price that Produces the Maximum Current Profit, Etc.

Market Share Leadership
Low as Possible Prices to Become the Market Share Leader.

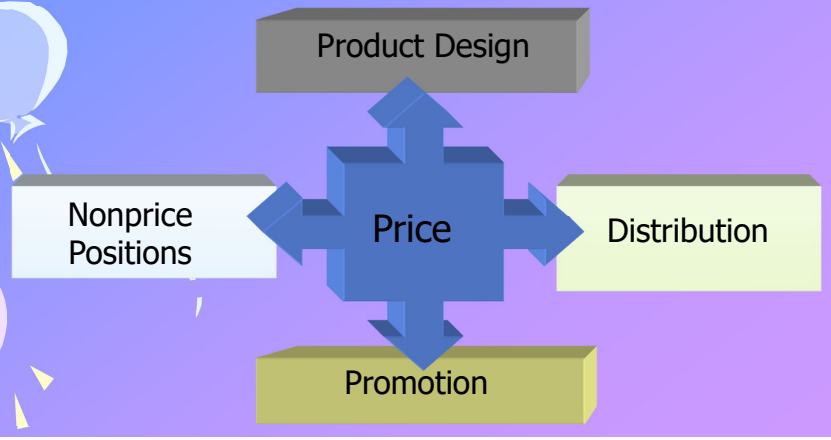
Product Quality Leadership
High Prices to Cover Higher Performance Quality and R & D.

Internal Factors Affecting Pricing Decisions: Marketing Objectives

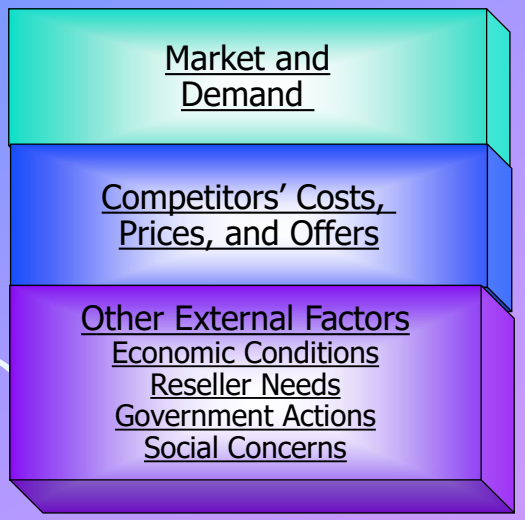
- Other specific objectives include:
  - Set prices low to prevent competition from entering the market,
  - Prices might be reduced temporarily to create excitement or draw more customers.
- Nonprofit and public organization may have other pricing objectives such as:
  - University aims for partial cost recovery,
  - Hospital may aim for full cost recovery,
  - Theater may price to fill maximum number of seats.

Internal Factors Affecting Pricing Decisions: Marketing Mix

Customers Seek Products that Give Them the Best Value in Terms of Benefits Received for the Price Paid



External Factors Affecting Pricing Decisions



Market and Demand Factors Affecting Pricing Decisions

Pricing in Different Types of Markets

Pure Competition
Many Buyers and Sellers Who Have Little Effect on the Price

Pure Monopoly
Single Seller

Monopolistic Competition
Many Buyers and Sellers Who Trade Over a Range of Prices

Oligopolistic Competition
Few Sellers Who Are Sensitive to Each Other's Pricing/ Marketing Strategies

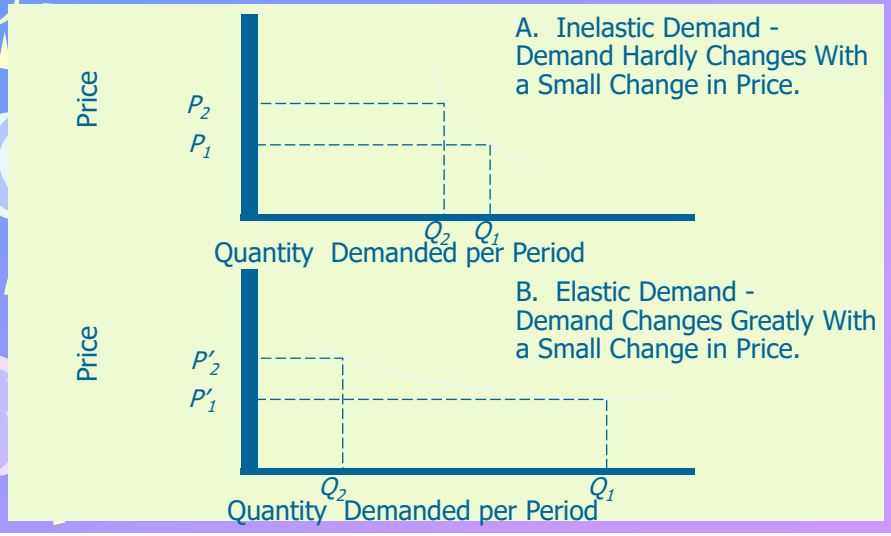
Demand Curves and Price Elasticity of Demand

A Demand Curve is a Curve that Shows the Number of Units the Market Will Buy in a Given Time Period at Different Prices that Might be Charged.

Price Elasticity Refers to How Responsive Demand Will be to a Change in Price.

$$\text{Price Elasticity of Demand} = \frac{\%\ \text{Change in Quantity Demanded}}{\%\ \text{Change in Price}}$$

Price Elasticity of Demand



Types of Cost Factors that Affect Pricing Decisions

Fixed Costs (Overhead)
Costs that don't vary with sales or production levels.

Executive Salaries, Rent

Variable Costs

Costs that do vary directly with the level of production.

Raw materials

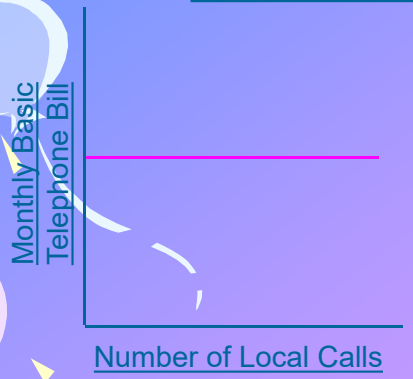
Total Costs
Sum of the Fixed and Variable Costs for a Given Level of Production

Cost Classifications for Predicting Cost Behavior

Behavior of Cost (within the relevant range)		
Cost	**In Total**	**Per Unit**
Variable	**Total variable cost changes as activity level changes.**	**Variable cost per unit remains the same over wide ranges of activity.**
Fixed	**Total fixed cost remains the same even when the activity level changes.**	**Fixed cost per unit goes down as activity level goes up.**

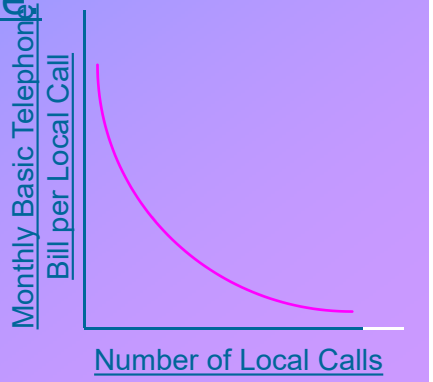
Total Fixed Cost

Your monthly **basic telephone bill** probably does not change when you make more local calls.



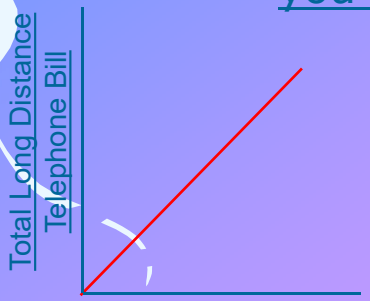
Fixed Cost Per Unit

The average cost **per local call** decreases as more local calls are made.



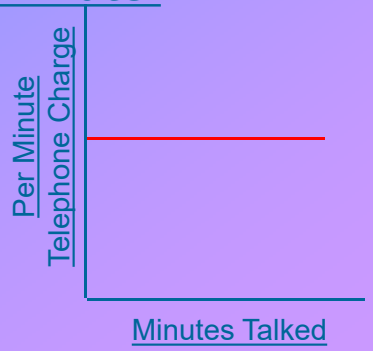
Total Variable Cost

Your **total long distance** telephone bill is based on how many minutes you talk.



Variable Cost Per Unit

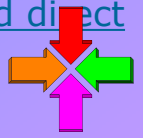
The **cost per long distance minute** talked is constant. For example, 10 cents per minute.



Direct Costs and Indirect Costs

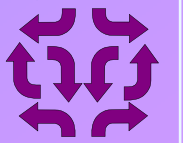
Direct costs

- Costs that can be easily and conveniently traced to a unit of product or other cost objective.
- Examples: direct material and direct labor



Indirect costs

- Costs cannot be easily and conveniently traced to a unit of product or other cost object.
- Example: manufacturing overhead



Opportunity Costs

The potential benefit that is given up when one alternative is selected over another.
Example: If you were not attending college, you could be earning $15,000 per year. Your opportunity cost of attending college for one year is $15,000.

Sunk Costs

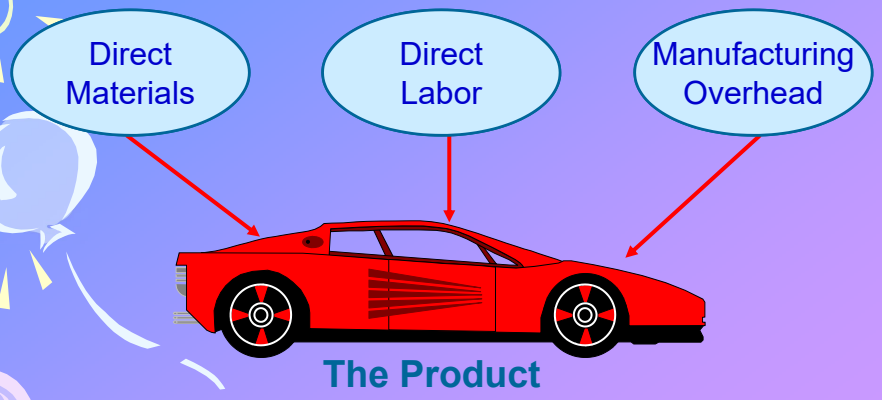
Sunk costs cannot be changed by any decision. They are not differential costs and should be ignored when making decisions.

Example: You bought an automobile that cost $10,000 two years ago. The $10,000 cost is sunk because whether you drive it, park it, trade it, or sell it, you cannot change the $10,000 cost.

Manufacturing costs

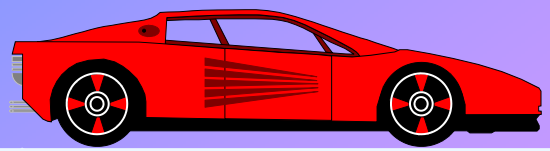
- All manufacturing costs, other than direct material and direct labour costs
- Production costs which cannot be traced to individual products
- Support (or service) departments
- Indirect materials
- Indirect labour

Manufacturing Costs



Direct Materials

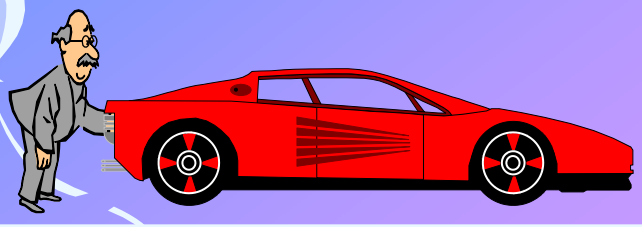
Those materials that become an integral part of the product and that can be conveniently traced directly to it.



Example: A radio installed in an automobile

Direct Labor

Those labor costs that can be easily traced to individual units of product.



Example: Wages paid to automobile assembly workers

Manufacturing Overhead

Manufacturing costs that cannot be traced directly to specific units produced.

Examples: Indirect labor and indirect materials

Wages paid to employees who are not directly involved in production work.

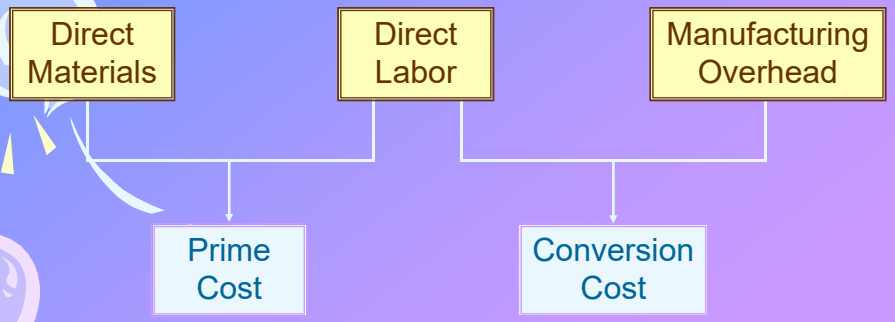
Examples: maintenance workers, janitors and security guards.

Materials used to support the production process.

Examples: lubricants and cleaning supplies used in the automobile assembly plant.

Classifications of Costs

Manufacturing costs are often combined as follows:



Nonmanufacturing Costs

Marketing and selling costs . . .

- Costs necessary to get the order and deliver the product.

Administrative costs . . .

- All executive, organizational, and clerical costs.

Non-manufacturing costs

- Costs incurred outside of manufacturing
  - upstream costs
    - research and development and product design costs
  - downstream costs
    - selling, distribution and customer support costs

What are overhead costs?

- Product costing perspective
  - indirect manufacturing costs, or
  - all indirect costs
- Responsibility centre perspective
  - indirect costs of responsibility centres

Allocating indirect costs: general principles

- Using cost pools
  - direct costs can be *traced directly* to cost objects
  - indirect costs are *allocated* to cost objects
- Cost pools are often used to simplify the allocation process
  - a collection of costs that are to be allocated to cost objects, with a common allocation base

Cont.

Allocating indirect costs: general principles

- Determining cost allocation bases
  - cost allocation base - some factor or variable that is used to allocate costs in a cost pool to cost objects
  - should be selected on cause-and-effect grounds: a cost driver
  - costs should at least show strong correlation between the costs and the allocation base

Allocating overhead costs to products

- Reliable product costs are important to many decisions
- Three approaches to allocating overhead costs to products
  - plantwide approach
  - departmental overhead rates
  - activity-based costing

Plantwide approach

- All manufacturing overhead costs form a single cost pool and one overhead rate is calculated for the entire production plant
  - step 1 - identify the overhead cost driver
  - step 2 - calculate an overhead rate per unit of cost driver
  - step 3 - apply manufacturing overhead costs to products using a predetermined overhead rate

Departmental overhead rates

- Two-stage cost allocation process
  - overhead costs allocated to production departments, by
    - tracing and allocating all manufacturing overhead costs to production and support departments
    - reassigning all support department costs to production departments
  - separate manufacturing overhead rates are calculated for each production department, using different cost drivers

Activity-based costing (or ABC) system

- Focuses attention on the costs of activities required to produce a product or service
  - overhead costs are assigned to activities
  - activity costs are applied to products using a rate, based on the activity cost per unit of cost driver
- Activities
  - a unit of work done within the business

Departmental overhead rates vs activity-based costing

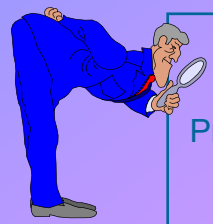
- Departmental
  - stage 1 - allocation bases used are ideally determined by causal relationships
  - stage 2 - one cost driver per department, with cost drivers being measures of production
- Activity-based costing
  - focuses on costs of activities
  - many cost drivers which may be volume or non-volume related

Costs and benefits of alternative approaches

- Plantwide and departmental overhead costing systems tend to overcost high-volume relatively simple products and undercost low-volume complex products
- ABC systems using multiple cost drivers and overhead rates are more complicated and costly to operate, but produce more accurate information for decision making

Manufacturing Cost Concepts

Our focus changes from financial statement costs to product costs



Financial Accounting

Cost is a measure of resources used or given up to achieve a stated purpose.

Managerial Accounting

Product costs are the costs a company assigns to units produced.

Types of Cost Factors that Affect Pricing Decisions

- As a firm gains experience in production, it learns how to do it better.
- The experience curve (or the learning curve) indicates that average cost drops with accumulated production experience.
- Strategy: company should price products low; sales increases; costs continue to decrease; and then lower prices further.
- Risks are present with this strategy.

Cost-Based Pricing

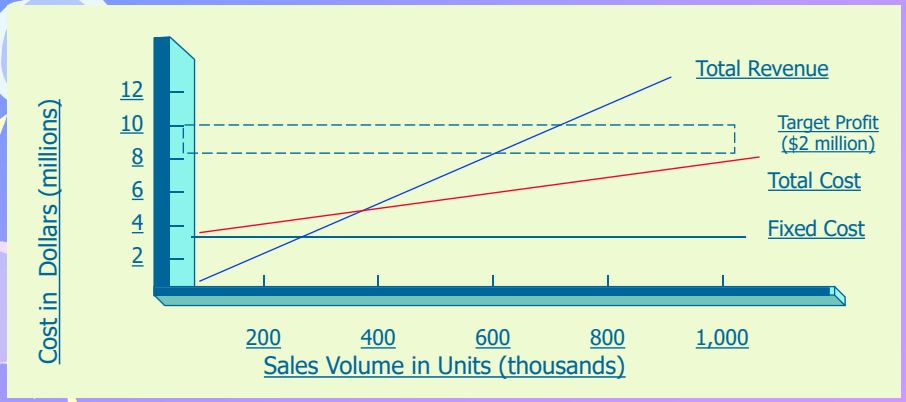
- Certainty About Costs
- Pricing is Simplified
- Price Competition Is Minimized
- Much Fairer to Buyers & Sellers

Cost-Plus Pricing is an Approach That Adds a Standard Markup to the Cost of the Product.

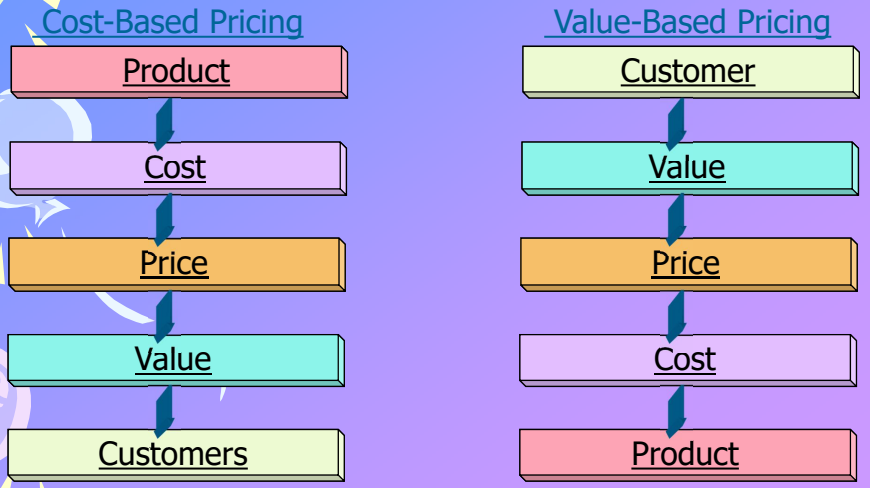
- Simplest Pricing Method
- Ignores Current Demand & Competition

Breakeven Analysis or Target Profit Pricing

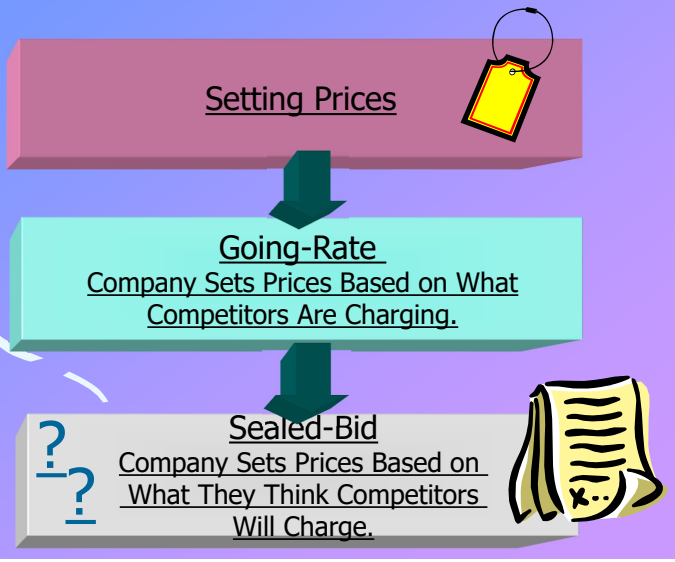
Tries to Determine the Price at Which a Firm Will Break Even or Make a Certain Target Profit.



Cost-Based Versus Value-Based Pricing



Competition-Based Pricing



Pricing strategies

- Premium pricing
  - Uses a high price, but gives a good product/service exchange
- Penetration pricing
  - offers low price to gain market share - then increases price
- Economy pricing
  - placed at 'no frills', low price,
- Price skimming
  - where prices are high - usually during introduction
  - e.g new albums or films on release
  - ultimately prices will reduce to the 'parity'

Specific pricing strategies

- Psychological pricing
  - to get a customer to respond on an emotional, rather than rational basis
  - .e.g 99c not €1.01 'price point perspective
- Product line pricing
  - rationale of a product range
  - e.g. MARS 32c, Four-pack 99c, Bite-size €1.29
- Pricing variations
  - 'off-peak' pricing, early booking discounts,etc
  - e.g Grundig offers a 'cash back' incentive for expensive goods
- Optional product-pricing
  - e.g. optional extras - BMW famously under-equipped

Specific pricing strategies

- Captive product pricing
  - products that complement others, e.g Gillette razors (low price) and blades (high price)
- Product-bundle pricing
  - sellers combine several products at the same price, e.g software, books, CDs.
- Promotional pricing
  - BOGOF e.g. toothpaste, soups, etc
- Geographical pricing
  - different prices for customers in different parts of the world, e.g.Include shipping costs, or place on PLC
- Value pricing
  - usually during difficult economic conditions, e.g. Value menus at McDonalds

Ten ways to 'increase' prices without increasing price according Winkler

- Revise the discount structure
- Change the minimum order size
- Charge for delivery and special services
- Invoice for repairs on serviced equipment
- Charge for engineering, installation

Ten ways to 'increase' prices without increasing price - Winkler

- Charge for overtime on rushed orders
- Collect interest on overdue accounts
- Produce less of the lower margin models in the line
- Write penalty clauses into contracts
- Change the physical characteristics of the product