# Cost Management

# **Pricing Decision**

Introduction:

Pricing decision is one of the most difficult decisions, affecting the long term life of any enterprise.

# Cost plus pricing

Price = Cost + profit margin

# Advantages of cost plus pricing

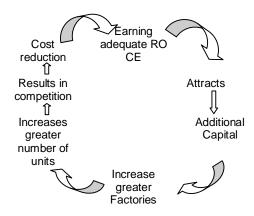
- a. Price covers cost, so no risk
- b. Uncertainty eliminated

## Disadvantages of cost plus pricing

- a. It ignores buyer's need, willingness to pay
- b. Fails to reflect competitions
- c. Allocation of common cost jeopardizes price
- d. Only incremental costs are relevant, total costs are to be ignored.
- e. Incentive for cost reduction is absent

## Rate of return pricing

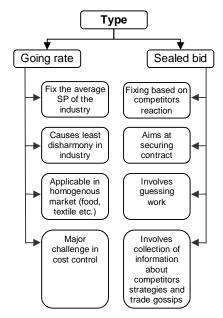
- Do not fix arbitrary rate of mark up.
- Determine average mark up to get desired ROI.



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## Competitive pricing



# **Incremental Pricing**

- → Considers only incremental costs
- → Considers even opportunity cost
- > reckons the presence of uncertainty
- → Ensures the short term & Long term impacts.

# **Skimming Pricing**

- → Fixing high price when a product is introduced afresh
- > High promotional expenditure is required

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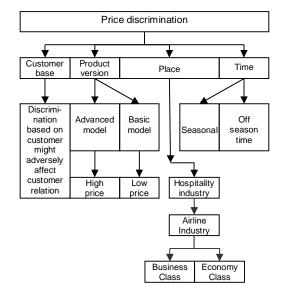
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- → High initial outlay needed for manufacture results in high cost of production
- This strategy is preferred as it covers the cost.
- Provides scope for reduction in price which results in increase in demand

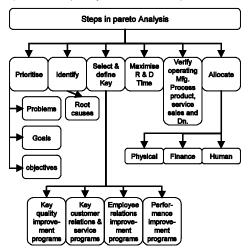
# Penetration pricing

- Fix low price to capture the market (eg. Air Deccan) (opposite to Skimming)
- → It intends to penetrate mass market quickly
- → Early stages low/no profits, later on profit will improve upon demand picking up
- → Aims at eliminating competition



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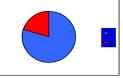
Pareto Analysis ( Like ABC (Always Better Control)



Pricing 20% of the product generates 80% of the revenue

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## Volume

Revenue

20% volume, 80% valued items management should hold key decision making with remaining should be delegated to lower levels of management.

	20%	80%
a) Price	Volume	Revenue
		(Price)
b) Profit	Customer	Profit
c) Stock	Quantity	Value
d) Activity Based	Cost drivers	Cost
costing		
e) Quality control	Causes	Problem

# Target costing - Introduce through contrast

	Cost plus pricing	Target costing
a) First step	Ascertainment	Ascertainment of selling price
b) Margin fixation	As a % of cost (add to cost)	As a % on SP (deduct from SP)
c) Result	Setting price (a + b)	Target cost (a - b)
d) Market of operation	Monopolistic	Competitive
e) Direction	Forward	Retrograde (reverse)
f) Cost reduction	Absent	Attempted
f) Cost classification	No attempt is made	Value added non-value

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		added
g) Fixation of SP	By enterprise	By Market force

## Advantage in Target costing

- → Reinforces top-to-bottom commitment to process, product innovation and is aimed at identifying issues to resolve in order to achieve real competitive advantage.
- → Creates competitive future with market driven management for designing and manufacturing products that meet the price required for market success.
- → Uses management control systems to support and implement manufacturing strategies and spot market opportunities into real saving to achieve best value rather than simply the lowest cost.

## Steps in target costing process

Establish cost

reduction targets using

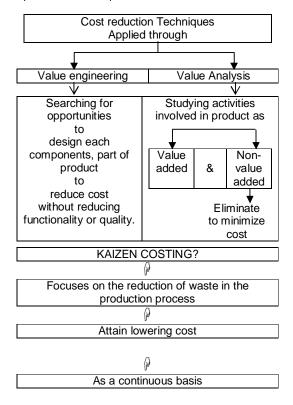
Determine Target price for the proposed
product/service
( <del>)</del>
Deduct the target profit per unit based on long term profit objective
(v)
Determine target (allowable) cost per unit
$\wp$
Compare
Target cost (vs) current cost

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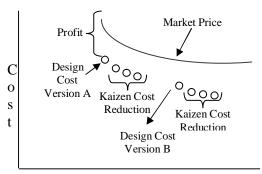
Value engineering & value Analysis

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In case current cost > target cost with no reduction possible, compromise on the profit if possible or else quit the market.



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Time

# Improves profitability in two ways

- a. No cost overruns as monitoring in carried out from the design stage itself.
- b. Price fixation to effect a competitive setting.

# Steps involved in implementing Target Costing System

- → Describe the goals to be achieved.
- → Seek management support
- → Seek formal allocation of money to achieve the goals
- → Develop a strong team and a captain
- → Engage fully committed members
- → Use management tools

# **Life Cycle Costing**

- → Introduction
- → Characteristics
- → Phases of product size cycle.
- → Importance of product life cycle

## Introduction

It tracks all costs attributable to each product or services from start to finish, i.e., from cradle to grave womb to tomb.

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# Phases of product life cycle



## Characteristics

- → Varying speeds of generation of profits representing various phases eliminated
- → Varying profits per unit through life cycles→ Each phase gives different opportunities & threats giving rise to different strategic action
- Varying emphasis at various stages such as

Development stage → R&D emphasis Decline Stage → Cost control emphasis

→ Tapping new users of products/services extends the life of the product

# Stages of product life cycle

Market		S	pecification	Design		
research						
1	1		2	3		
Prototypes		Development		Tooling		
Manufacture	S					_
4		5		6		
Manufacture	S	ell Distribute		Product		
				support		
7	•	8	9	10		
Decommissioning or replacement						
11						

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# Importance of Life Cycle Costing

- → Financial accounting ignores capital items spent in the arrival of profit.
- → Life cycle costing never discriminates capital & Revenue.
- → Cause and effect study in R & D spending vs customer support cost through the life of the product can be made. Useful analysis such as lesser spending at R & D stage would result in greater expenses for customer support, can be attempted. This sort of analysis never been the focus of financial accounting.
- → Better decision would follow for new products to be introduced.

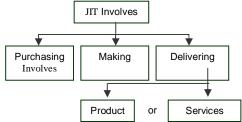
## Just in time approach

- → Philosophy
- → JIT
  - (Overhead costs
  - ( Product prices
  - (Other costs
- → Performance measures

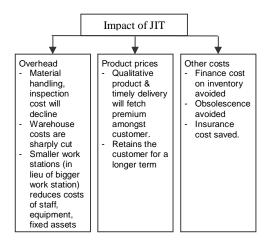
# **Philosophy**

Aimed at reducing associated (carrying) costs of inventories, JIT was attempted.

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'Just' when required (only)



## Performance measurements in JIT

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	Prior to JIT	On account of JIT
High Machine utilization	Good performance measure	Not an yardstick
Piece rate payment of wages	Greater no. of units produced greater wages	Shift in qualitative output
Labour efficiency measurements	Tracking variances is one of the main activity.	Track is non- value added job. Advocates complete elimination of all variances.

## Other measures of performance evaluation

- → High turnover is the indicator of low stock levels for sizable sales effected.
- → Smaller work stations result in reduction in setup time
- → Least no. of customer complaints.
- → Lower scrap levels of materials.
- → Better customer service
- → Ideas (better ideas) implemented to generate proportions to be stepped up.

# Back flushing is the accounting process recommended for JIT system

# Problems in applying back flush costing system

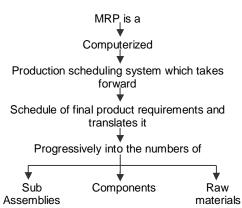
- → Production tracking should be accurate but inventories show different balance than the real figures.
- → Scrap reporting should be diligently captured or else the benefits of JIT will not be achieved.

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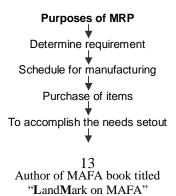
- → Lot tracing of units manufactured can be made possible if appropriate software is used.
- → Inventory tracking is the most difficult job if lots of items are involved.

## Material requirement planning (MRP)

## **Definition**



Required at each stage of manufacturing style.



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in master production schedule

Ensures required quantities

Made available

At requested time

as given in master production schedule

→ Output of MRP → input information for manufacturing executives.

# Data requirements to operate MRP

Master production schedule (Quantity of Finished goods required)

Bills of Materials file (Quantity of sub-assemblies, components etc)

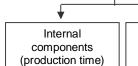
Inventory file

(Quantity of sub-assemblies in hand)

Routing file

(Sequence of operation required to manufacture)

Master parts file Contains



External Components (Lead time)

## Method of operation of MRP system

- a. Pre-requisite information
- b. System input
- c. System processing d. System output

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# Cost Management Pre requisites for successful operation of MRP

- i) Strict adherence to the schedule
- ii) Accurate data base

# **Enterprise Resource Planning - ERP**

It is a system software which integrates all functions of an enterprise. It avoids duplicity, wastage of time etc.

### Main features of ERP

- → Covers all functions of an enterprise
- Enables enterprises to concentrate core activities.
- > Communication gap is eliminated
- Avoids duplication of data entry
- Sharing of information across all levels in an enterprise and across various companies under same management.
- → Enhances better project management
- Adoption of latest technology possible such as video conferencing, ecom etc.,
- → Eliminates trivial issues like material shortage, quality problems etc.

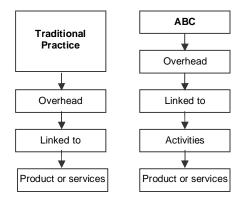
## Benefits of ERP

- \* Integration of financial and Cost accounting enables better product costing.
- Since ERP is versatile in its execution, an enterprise having global presence can integrate all its activities for review and immediate decision making process.
- \* Complicated logistics can be handled smoothly.
- \* E commerce enabled
- \* Automatic quality control is assured
- \* Ensures better service after sales
- \* It improves production planning
- Enables quick response to change in business operation and market conditions.
- \* Helps the enterprise to hold competitive edge over others.

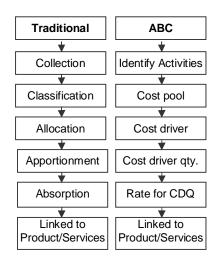
## **ABC Management**

# Cost Management

## Introduction



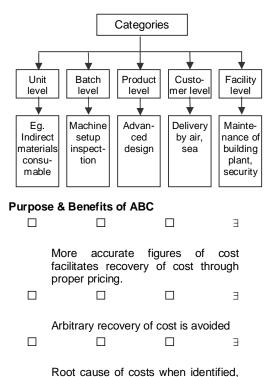
# Linkage of overhead to product/services



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# **Categories of Activities**



cost reduction is possible

Accurate information about costs improve budgets and measures of department and division performance.

# Prerequisites of successful ABC implement-tation

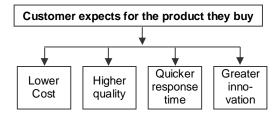
- Staff training
- Process specification

# **Cost Management**

- Activity definition
- Selection of driver
- Costing

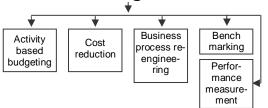
# Activity Based Cost Management (ABM) understanding through comparison.

ABC		ABM
Identification	of	Same as in ABC with
activities		additional steps as
		Activities
		Value Non-Value
		Added added
Coot Dool		
Cost Pool		Identify opportunities to enhance VA activities
CD		- Reduce/eliminate non
		VA activities
CD Qty.		
Rate		
Link to product		



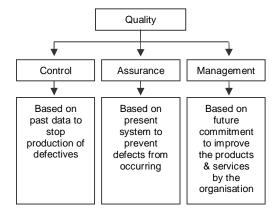
To satisfy their expectations company should carryout ABM in the following business applications.

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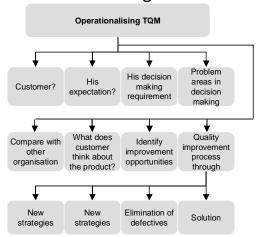


# **Total Quality Management - TQM Introduction**

- Quality is often associated with manufacturing process.
- → TQM extends the concept of quality even to service sector also.



# **Cost Management**

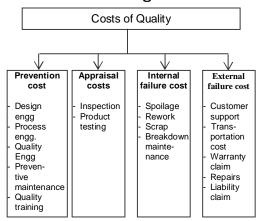


# Operationalising TQM

# Essential requirements for the successful implementation of TQM

- ✓ Commitment from all concerned
- ✔ Culture & attitude towards quality
- ✓ Continuous improvement
- ✓ Co-operation
- Customer focus
- ✔ Control

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# Fundamental principles of Quality Improvement

- a) People engaged are to be oriented positively
- b) Process suggested shall facilitate all possible alternatives before a meaningful decisions are taken.
- Problems are to be segmented to find immediate results for adoption and evaluation.
- d) Preparations would involve appropriate training and dissemination of knowledge about manufacturing complexities

## Value Chain Analysis Learning objectives

- 1. Meaning of Value Chain
- 2. Meaning of competitive advantage
- 3. Value Chain steps for assessing competitive advantage
- 4. Strategic framework for Value Chain Analysis
- 5. Traditional Management ACC vs Value Chain Analysis

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	Traditional Management Accounting	Value Chain Analysis in the Strategic Framework
Focus	Internal	External
Perspective	Value added	Entire set of linked activities from suppliers to end-use customers
Cost Driver Concept	Single cost driver (cost is function of volume)  Application at the overall firm level (cost- volume-profit analysis)	Multiple cost drivers (Structural drivers (e.g. scale, scope, experience, technology and complexity) (Executional drivers (e.g., participative manage-ment, total quality management and plant layout) A set of unique cost drivers for each value activity.
Cost Containment Philosophy	"Across the board" Cost reduction	View cost containment as a function of the cost drivers regulating each value activity. Exploit linkages with suppliers Exploit linkages with customers Exploit process linkages with

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	St Manage	
		customers exploit process linkages within the firm "Spend to save".
Insight for Strategic Decisions	Somewhat limited	Identify cost drivers at the individual activity level, and develop cost/differentiatio n advantage either by controlling those drivers better than competitors by reconfiguring the value chain (e.g., Federal Express in mail delivery, and MCI in long distance telephone) For each value activity, ask strategic questions pertaining to * Make versus buy * Forward/backward integration Quality and assess "Supplier power" and "buyer power." And exploit linkages with suppliers and buyers.

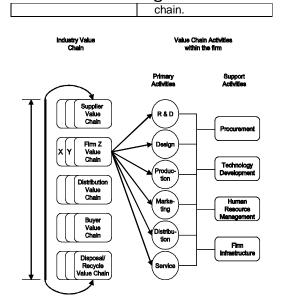
# Limitations of Value Chain Analysis Meaning of Value Chain

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Value Chain is an organization's set of interlimited, value-creating activities, ranging from
securing basic raw-materials and energy to
ultimate delivery of products and services.

Types of Va	lue Chain
Industry Value Chain	Organisation/firm Value Chain
1. Starts with value creating activities of suppliers of raw material and components and ends with disposal/re- cycling of the final product in that industry	1. Refers to activities of a particular company performs to design, produce, market, delivery and support its product.
2. Industry value chain inter-links activities performed by different company's operating at various stages of economic process within the same industry.	Firm value chain inter-links activities performed by a particular company internally
3. Example: Interlinkage of activities of Supplier → Manufacturer → wholesaler → retailer	3. Example: Interlinkage of activities of R & D; design; production; marketing; distribution and service departments of a company
<ol><li>Super-sect to firm value chain.</li></ol>	Super-sect of industry value

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# II. Meaning of Competitive Advantage

# Competitive Advantage

Differentiation	Low-Cost		
Advantage	Advantage		
1. Customer	1. Cost of the		
perceives a	company's		
company's	product is lower		
product superior	than that of		
to competitors	competitor's		
product.	product of the		
·	same quality		
2. Differentiation	2. Low-cost advantage		
advantage can	can also be		
be exploited in	exploited in		
two ways"	2 ways		
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		Price the	Main-
Increase	Price	product	tain the
the price	below	at lower	same
&	the "full	level and	price
maintain	premium	increase	but
current	level"	marketing	earn
market	and	share	more
share	build		margin
	market		
	share.		

# Competitive advantage through low cost and/or differentiation

Relative Differen- tiation Position	Superior	Differentia- ton Advantage	Differentia tion with Cost Advantage
	Inferior	Stuck-in- the-Middle	Low-Cost Advantage

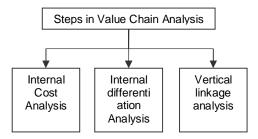
Inferior

Superior

# III Value Chain approach for assessing competitive cost advantage

Companies can use value chain approach to understand which segment in the value chain, what type of product differentiation of which method of cost reduction will yield maximum competitive advantage to the company and strategically position itself towards achievement of such competitive advantage.

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Internal Cost Analysis: Objectives: Low cost advantage

# Identify firm's value creating process:

A firm has to first identify all those processes which culminates in final product's production (eg) Procurement, material handling, production, packing, warehousing etc.

### 2. Ascertainment of proportion:

The next step is to trace the cost spent on each value creating process and ascertain the proportion of each value creating process cost to the total cost. For example R&D Cost/Total Cost, Manufacturing Cost/Total Cost, Marketing cost/Total Cost etc. The total cost to be considered here is the life cycle cost of the product.

# 3. Identify cost derivers

Each value creating process comprises of a set of activities (eg.) Procurement of raw material involves activities like ordering, evaluating supplier, receiving, inspection etc. Every activity results in cost incurrence of each activity cost are influenced by different cost drivers. The identification

## Cost Management

of cost drivers is key to cost reduction measures.

# 4. Identify links between value creating processes.

Individual process are not independent. They are interlinked and inter-dependent. Cost improvement in one value chain process may lower cost in another. Thus understanding linkages is very essential to understand impact of cost reduction programmes.

# 5. Evaluate opportunities to achieve cost advantage:

Cost advantage could be achieved through cost reduction programmes. Generally companies make across the board cost reduction (eg.) eliminate 10% cost of all the departments. This system often does not provide desired result, because time and efforts are wasted in cost reduction of insignificant activities, which could have been channelized to better meet customers demands. Value Chain Analysis helps to understand the value creating processes, their proportioned cost-drivers and leads to a prioritized cost reduction programme under 80:20 value (i.e.,) 20% of value creating process accounts for 80% of total cost.

## Internal differentiation Analysis Objective: Differentiation Advantage

 Identify the differentiation opportunities that exist. A superior differentiation strategy is one which enhances customer utility. A superior functional design (or) aesthetic appeal will increase customer satisfaction.

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Differentiation need not be only on product features but also can be in relation to responsiveness, timeliness, convenience, after-sales service etc.

- Evaluate the differentiation opportunities in terms of the extra cost involved and incremental value addition.
- 3. Select the best sustainable differentiation strategy based on the cost-benefit information obtained in Step 2.

# Value Linkage Analysis Objective: Competitive advantage through inter-firm value analysis

Linkages among value creating process do not and with the activities within a firm. The greatest competitive advantage comes out of linkages between firm's value creating activities and those of its suppliers, distributors (or) users vertical linkage analysis = Internal cost analysis + differentiation analysis done for the firm's value creating activities and the up-stream and down stream value creating activities throughout the industry. The steps for vertical linkage analysis is as follows:

- 1. Identify Industry value chain
- Assign cost, asset and revenue to all value creating process in the industry value chain.
- 3. Identify and diagnose cost derivers of the value creating process.
- Evaluate opportunities for sustainable competitive advantage. It may be either low cost advantage (or) different advantage.

# IV Limitation of Value Chain Analysis

- 1. Non-availability of data
- 2. Difficulty in identification of stages