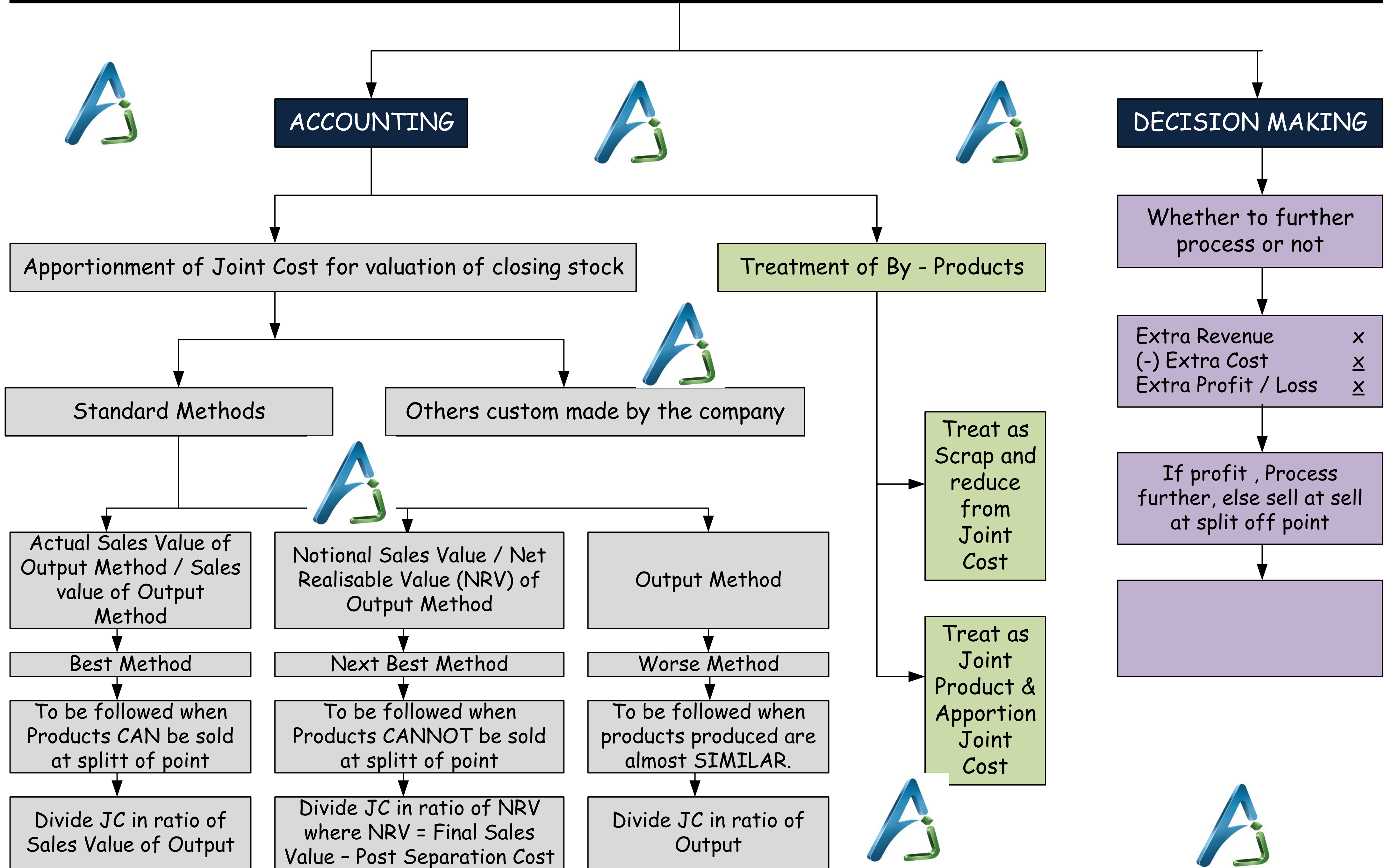
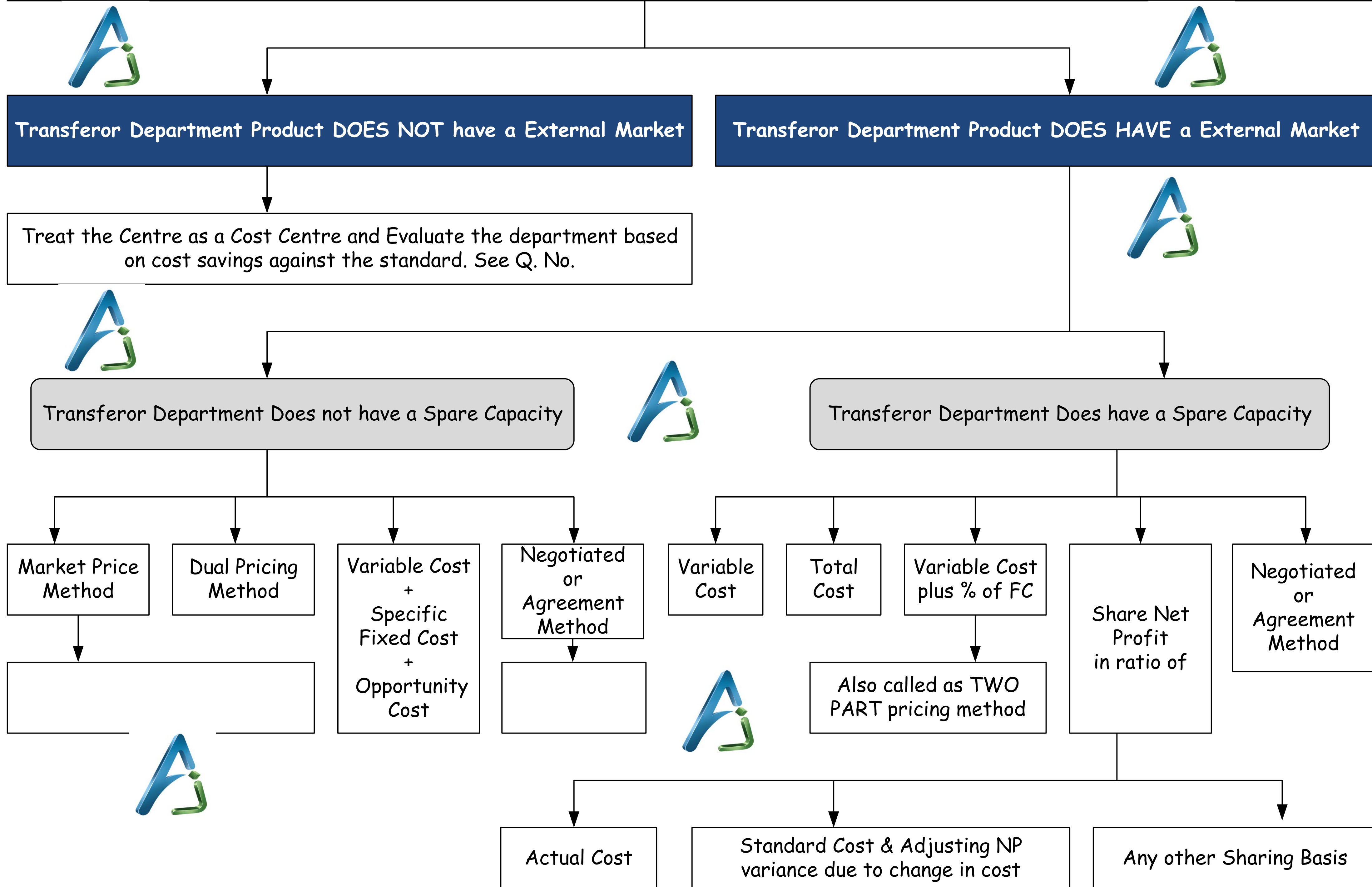
JOINT PRODUCTS / BY PRODUCTS



INTERNAL PRICING

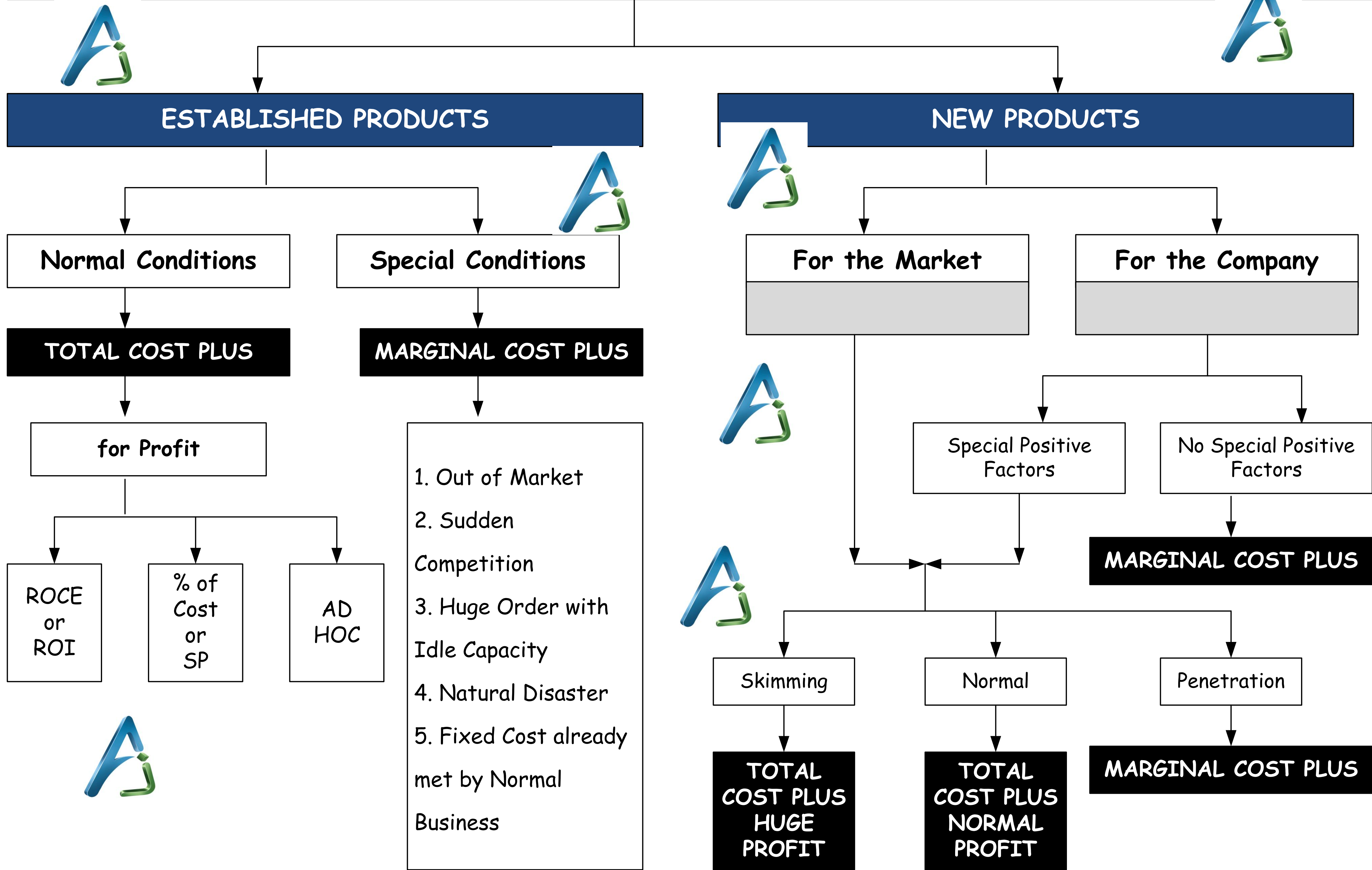


SECONDARY ACTIVITIES

(i)	**Procurement:**	Purchasing of Machines, Funds Procurement, Raw Material required as input for the Primary Activities.
(ii)	**Technological Development:**	Technical knowledge, equipment, hardware, software and any other knowledge which is used in the transformation of inputs to outputs.
(iii)	**Human Resource Mgt:**	Selection, recruitment, placement, training, appraisal, rewards and promotion; management development; and labour/ employee relations.
(iv)	**Firm Infrastructure:**	Planning, finance, accounting, legal, government affairs and quality management

PRIMARY ACTIVITIES

1. INBOUND LOGISTICS	2. OPERATIONS	3. OUTBOUND LOGISTICS	4. MARKETING & SALES	5. SERVICE
These are activities concerned with receiving, storing, and distributing the inputs (raw materials) to the production process. The relationship with suppliers is a key component in this process.	These activities involve transforming inputs into final product. Activities such as machining, packaging, testing and equipment maintenance form part of Operations.	These activities involve collecting, storing and distributing the products from the factory line to end consumers. This may include finished goods warehousing, delivery vehicle operation, order processing and scheduling..	Marketing and Sales provide the means by which the customers are made aware of the product. The activities include advertising, promotion, distribution channel selection, sales force management and pricing policy.	This includes activities related to after sales service like Installation, repair and parts replacement. It can also include on – call and providing online support.


EXTERNAL PRICING
ESTABLISHED PRODUCTS
NEW PRODUCTS
Normal Conditions
Special Conditions
TOTAL COST PLUS
MARGINAL COST PLUS
for Profit
ROCE
or
ROI
% of
Cost
or
SP
AD
HOC
1. Out of Market
2. Sudden
Competition
3. Huge Order with
Idle Capacity
4. Natural Disaster
5. Fixed Cost already
met by Normal
Business
For the Market
For the Company
Special Positive
Factors
No Special Positive
Factors
MARGINAL COST PLUS
Skimming
Normal
Penetration
TOTAL
COST PLUS
HUGE
PROFIT
TOTAL
COST PLUS
NORMAL
PROFIT
MARGINAL COST PLUS

ACTIVITY BASED COSTING

What is ABC or Cost Driver Analysis

It is defined as an approach to the costing and monitoring of activities which involves tracing resource consumption and costing final outputs. Resources are assigned to activities, and activities to cost objects based on consumption estimates using cost drivers.

Structural Cost Drivers: are the organisational factors which affect the costs of a firm's product. These factors drive costs of a organisation in varied ways. The scale and scope of operation of a company will impact the costs. A larger scale of operations is likely to give an advantage of economies of scale. The usage of technology and complexity of operations also determine the costs of various activities within a firm. The experience or learning curve also impacts the costs being incurred by a firm.
E.g. No of plants, scale, degree of work centralization

Executional cost drivers: are based on firm's operational decision on how the various resources are employed to achieve the goals and objectives. These cost drivers are determined by management style and policy.

E.g. The participation of workforce towards continuous improvement, importance of total quality management, efficiency of plant layout etc. are examples of executional cost drivers.

What is Activity Based Management

It is a method of identifying and evaluating activities that a business performs, using activity-based costing to carry out a value chain analysis or a re-engineering initiative to improve strategic and operational decisions in an organization.

Which Activities to Do?
Strategic ABM is about '*doing the right things*'. It uses ABC information to determine which products is to be manufactured and which activities is to be used.

This will result in Structural Cost Drivers.

How to Do those Activities?
Operational ABM covers the actions that increase efficiency, lower cost (i.e. reduce the cost driver rate of activities) and lead to higher revenue through better resources utilisation- in short, the action required to do things right. In other words, it is all about '*doing things right*',.

This will result in Executional Cost Drivers

ACTIVITY BASED BUDGETING

It is a process of planning & controlling the expected activities for the organisation to derive a cost-effective budget that meets forecast workload & agreed strategic goals. An activity based budget is a quantitative expression of the expected activities of the firm, reflecting management's forecast of workload & financial & non-financial requirements to meet agreed strategic goals and planned changes to improve performance.

WHICH ACTIVITIES TO PERFORM

Value-Added Activities: The VA activities are those activities which are indispensable in order to complete the process. The customers are usually willing to pay (in some way) for these services. For Example, polishing furniture by a manufacturer dealing in furniture.

Non-Value-Added Activities: The NVA activity represents work that is not valued by the external or internal customer. NVA activities do not improve the quality or function of a product or service, but they can adversely affect costs and prices. Non-Value Added activities create waste, result in delay of some sort, add costs to the products or services and for which the customer is not willing to pay. Moving materials and machine set up for a production run

INTRODUCTION TO STRATEGIC COST MANAGEMENT

TRADITIONAL COST MANAGEMENT

AIM

1. Cost Control
2. Comparing standards with actual

LIMITATIONS

1. Ignores competition, Market Growth & Requirements
2. Too much Reliance on Accounting Data
3. Short Term Outlook
4. Limited focus on Review and Improvisation
5. Excessive Focus on Cost Reduction
6. Reactive Approach

STRATEGIC COST MANAGEMENT

MEANING

achieve sustainable competitive advantage through product differentiation & cost leadership

FOCUS

on continuous improvement to deliver superior quality product to the customers

PROCESS (4 STAGES)

1. Formulating strategies
2. Communicating those strategies throughout the organization
3. Developing and carrying out tactics to Implement the strategies
4. Implementing Controls to monitor the success of objectives

SUPERIOR PERFORMANCE & COMPETITIVE ADVANTAGE

PRODUCT DIFFERENTIATION

1. Superior Quality
2. Superior Innovation
3. Superior Customer Responsiveness

LOW COST ADVANTAGE MODEL

1. Reduce costs by copying rather than creating designs, using cheaper materials and other cheaper resources, reducing labour costs & increasing labour productivity.

2. Attaining economies of scale by high-volume sales.

3. Use high-volume purchasing to get discounts

VALUE CHAIN FOR COMPETITIVE EDGE

Internal Cost Analysis

1. Identify the firm's value-creating processes.
2. Determine the portion of the total cost of the product or service attributable to each value creating process.
3. Identify the cost drivers for each process.
4. Identify the links between processes.
5. Evaluate the opportunities for achieving relative cost advantage.

Vertical Linkage Analysis

A company generates competitive advantage not only through linkages of internal processes within a firm but also through linkages between a firm's value chain and that of a suppliers or users. A vertical linkage analysis includes all upstream and downstream activities throughout the industry.

Internal Differentiation Analysis

1. Identify the customer's value creating processes.
2. Evaluate differentiation strategies for enhancing customer value.
3. Determine the best sustainable differentiation strategies.

COMPONENTS OF SCM

VALUE CHAIN ANALYSIS

MEANING

A chain of value added activities; products pass through the activities in a chain, gaining value at each stage

ACTIVITIES

PRIMARY ACTIVITIES
1. Inbound Logistics
2. Operations
3. Outbound Logistics
4. Marketing & Sales
5. After Sales Service

SECONDARY ACTIVITIES
1. Procurement
2. Human Resource
3. Technology
4. Firm Infrastruture

Strategic Framework for Value Chain

External / Industry Structure Analysis (PORTER'S 5 FORCES)
1. Bargaining power of buyers.
2. Bargaining power of suppliers.
3. Threat of Substitute products or services.
4. Threat of new Entrants.
5. Intensity of Competition / rivalry amongst firms.

Core Competency Analysis
1. Resources 2. Competency

Segmentation Analysis
Segment Analysis will reveal the competitive advantages or disadvantages of different segments. A firm may use this information to decide to exit the segment, to enter a segment, reconfigure one or more segments, or embark on cost reduction/ differentiation programs.

COST DRIVER ANALYSIS (ABC)

MEANING

It is defined as an approach to the costing and monitoring of activities which involves tracing resource consumption and costing final outputs. Resources are assigned to activities, and activities to cost objects based on consumption estimates using cost drivers.

Strategic Positioning Analysis

It is company's relative position within its industry matters for performance. Strategic positioning reflects choices a company makes about the kind of value it will create and how that value will be created differently than rivals.

FACTORS THAT AFFECT SPA

1. External Environment
2. Organisation Values, Culture & Systems
3. Internal Environment (Resources & Competencies)

Value Shop Model

This concept aims to serve companies from service sector. In value shop principle, no value addition takes place. It only deals with the problem, figure-out the main area requires its service and finally comes with the solution. This approach is designed to solve customer problems rather than creating value by producing output from an input of raw materials.

The model has the same support activities as Porter's Value Chain but the primary activities are described differently. In the value shop they are:

1. Problem finding and acquisition.
2. Problem solving.
3. Choosing among solutions.
4. Execution and control/evaluation.

MODERN BUSINESS ENVIRONMENT

Integrated and comprehensive system of planning and controlling all business functions so that products or services are produced which meet or exceed customer expectations

COST OF QUALITY

PRICE OF CONFORMANCE' / COST OF GOOD QUALITY'

Will Get INCURRED because of TQM

Prevention Cost

a. The costs incurred for preventing the poor quality of products and services may be termed as Prevention Cost.

b. They are planned and incurred before actual operation and are associated with the design, implementation, and maintenance.

1. Prevention Costs,
2. Quality planning & assurance
3. Supplier evaluation
4. New product review
5. Error proofing
6. Quality improvement projects
7. Quality education and training

Appraisal Cost

a. These are costs associated with measuring and monitoring activities related to quality. Appraisal Cost incurred to determine the degree of conformance to quality requirements (measuring, evaluating or auditing).
b. They are associated with the supplier's and customer's evaluation of purchased materials, processes, products and services to ensure that they are as per the specifications i.e. they are incurred after the RM is acquired or product is made.

1. Verification of RM & FG
2. Quality audits
3. Supplier rating
4. Checking & testing purchased goods & services

PRICE OF NON - CONFORMANCE' / COST OF BAD QUALITY'

Will Get SAVED because of TQM

Internal Failure Cost

a. These are costs that are caused by products or services not conforming to requirements or customer/user needs and are found before delivery of products and services to external customers.
b. Deficiencies are caused both by errors in products and inefficiencies in processes.

1. Wast, Scrap & Rework
2. Failure analysis—activity required to establish the causes of internal product or service failure
3. Delays
4. Re-designing
5. Shortages
6. Failure analysis
7. Re-testing
8. Downgrading
9. Downtime

External Failure Cost

a. External failure costs are incurred to medicate defects discovered by customers. These costs occur when products or services that fail to reach design quality standards are not detected until after transfer to the customer. After the product or service is delivered and then the defects is found then it is an external failure.
b. Further external failure costs are costs that are caused by deficiencies found after delivery of products and services to external customers, which lead to customer dissatisfaction.

1. Repairs and servicing
2. Warranty claims & Complaints
3. Returns & Complaints
4. Environmental costs

6 C's for implementation of TQM

1. Commitment
2. Culture
3. Continuous improvement
4. Co-operation
5. Customer focus
6. Control

CSF for Implementation of TQM

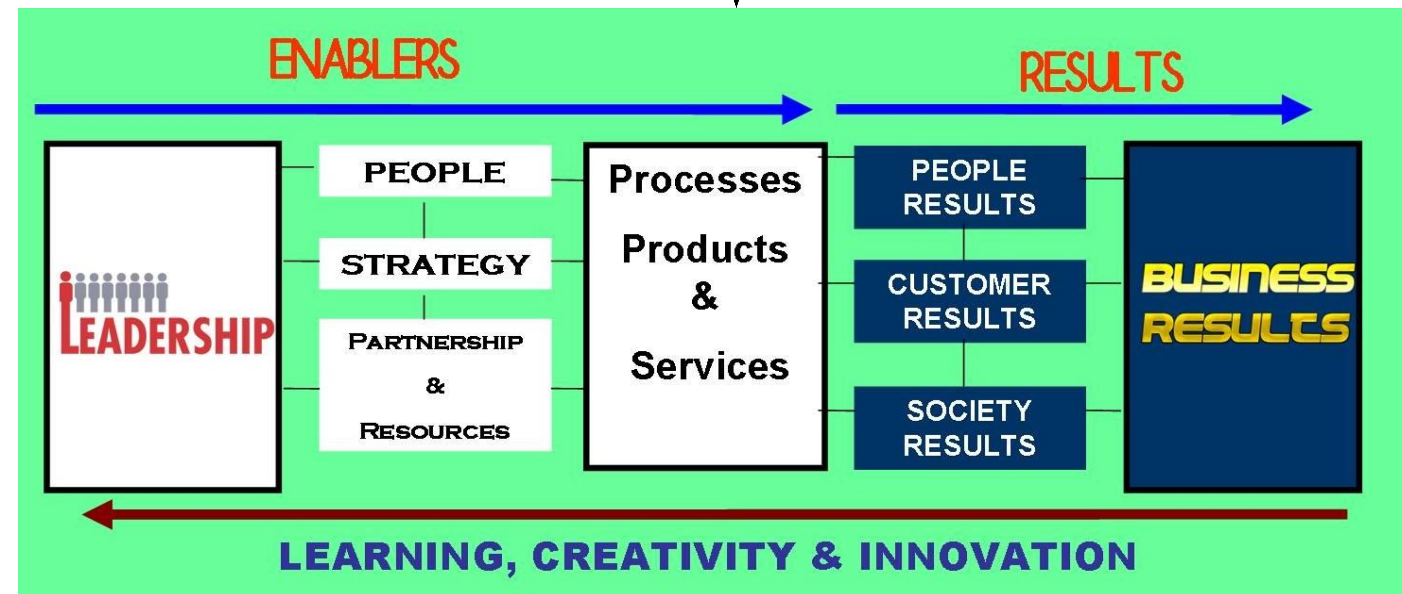
1.The focus should be on customer Needs.
2. Everyone within organization should be involved in TQM with appropriate training.
3. The focus should be on Continuous improvement.
4. The aim should be to design and produce Quality products.
5. Introduce an effective Performance measurement system that measures continuous improvements from the customer's perspective.

BUSINESS EXCELLENCE MODEL

Business models present a formal, standardized cause effect relationship between different operations (enablers) and their resultant consequences.

EFQM

Basic Principles
1. Developing Organizational Capability
2. Harnessing creativity and Innovation
3. Succeeding through the Talent of people
4. Sustaining outstanding Results:
5. Managing with Agility
6. Leading with vision, inspiration, and integrity
7. Adding Value to customers
8. Creating a sustainable Future



THEORY OF CONSTRAINTS

This approach advocates that bottleneck resources/ activities (*resources in short supply*) should be fully utilised while non-bottleneck resources/ activities should not be utilized to 100% of their capacity since it would result in increase in inventory.

3 Key Measures
1. Throughput i.e Contribution i.e. (Sales – Material Cost)
2. Investment
3. Operating Expense

How to manage Bottlenecks
1. Identifying the System Bottlenecks
2. Describe How to Exploit the Bottlenecks
3.Subordinate Everything Else to the Decision in Step-2
4.Elevate the System Bottlenecks or Increase Bottleneck Efficiency and Capacity.
5. Repeat the Process as a New Constraint Emerges.

TA Ratio=Throughput per Bottleneck Minute / FC per Bottleneck Minute

SUPPLY CHAIN MANAGEMENT

SCM can be defined as the management of flow of products, services and information, which begins from the origin of products and ends at the product's consumption at consumer's end.

Types of SCM
1. Push System
2. Pull System

UPSTREAM CHAIN MANAGEMENT

Management of transactions with suppliers are termed as upstream supply chain management.

I - RELATIONSHIP WITH SUPPLIERS

To possess a commendable influence on the whole upstream flow, organization has to build up a set of strategies which in turn results in control over suppliers. This strategy is likely to take account of matters such as the following:

(i) Location and availability of source of supplier
(ii) Number of Suppliers.
(iii) Cost, Quality, and Speed of Delivery

II - USE OF INFORMATION TECHNOLOGY.

(i) E-Sourcing.
(ii) E-Purchasing.
(iii) E-Payment.

DOWNSTREAM CHAIN MANAGEMENT

Management of transactions with consumers or customers are termed as downstream supply chain management.

I RELATIONSHIP MARKETING
(i) Internal Markets (ii) Referral Markets
(iii) Influence Markets (iv) Recruitment's Markets
(v) Supplier's Markets (vi) Customer's Markets

II CUSTOMERS RELATIONSHIP MANAGEMENT
(i) Analysis of Customers and their Behavior.
(ii) Customers Account Profitability (CAP).
(iii) Customer Life time value (CLV).
(iv) Customer's Selection, Acquisition, Retention and Extension.
 (i) Customer Selection
 (ii) Customer Acquisition
 (iii) Customer Retention
 (iv) Customer Extension

III THE USE OF INFORMATION TECHNOLOGY IN DOWNSTREAM SUPPLY CHAIN MANAGEMENT. In managing downstream supply chain organizations link their sales system to the purchasing system of its customer through Electronic Data Change. Using E-Business, they sell products.
Intelligence gathering is used to monitor the online customer transactions. E-mail is the way through which organization keeps touch with customers. Use of IT results in quick action, reduction in associated cost and saving in time.

IV BRAND STRATEGY. Specially branding of product makes a huge difference in its appeal to customers. Branding can be usage of logo or specific colour or any other means, which makes the product or service distinctively visible among others.

LEAN SYSTEM & INNOVATION

Lean System is an organized method for waste minimization without sacrificing productivity within a manufacturing system. Lean implementation emphasizes the importance of optimizing work flow through strategic operational procedures while minimizing waste and being adaptable.

COST MANAGEMENT TECHNIQUES

Target Costing

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

Features

1. For any given product, a target selling price is determined using various sales forecasting techniques.
2. Integral to setting the target selling price is the establishment of target production volumes, given the relationship between price and volume.
3. Establishing Cost Reduction Targets.
4. Having achieved consensus about the product-level target cost, a series of intense activities commence to translate the cost challenge into reality. These activities continue throughout the design stage up until the point when the new product goes into production.

Two Compenents

Value Analysis
1. Indicates application on the product that is into manufacturing.
2. Workers, subcontractors and engineers come together to make a team with experience and knowledge
3. May change the present stage of the product or operation.
4. Worked out mostly with the help of knowledge and experience

Value Engineering
1. Indicates application on the product at its design stage
2. Done by a specific product design team (Engineers)
3. Changes are executed at the initial stages only.
4. Requires specific technical knowledge

Where is Target Costing Used

1. Assembly-oriented industries, as opposed to repetitive-process industries that produce homogeneous products.
2. Involved heavily with the diversification of the product lines.
3. Use technologies of factory automation, including computer-aided design, flexible manufacturing systems, office automation, and computer-aided manufacturing.
4. Must develop systems for reducing costs during the planning, design and development phases of a product's life cycle;

Life Cycle Costing

4 Stages of Product life Cycle

Characteristics & Strategies of each stage

Sr.No.	Characteristics	Introduction	Growth	Maturity	Decline
1	Meaning	The new product is launched in the market. There is minimal awareness and acceptance of it.	Sales begin to expand rapidly because of greater customer awareness.	Sales continue to increase, but at a decreasing rate.	Demand for product disappears.
2	Objectives	Create awareness	Maximise market Share	Maximise profits while defending market share	Reduce expenditures & milk the brand
3	Sales	Low sales	Rapidly rising	Peak sales	Declining sales
4	Costs per Customer	High cost per customer	Average cost per customer	Low cost per customer	Increasing cost / customer
5	Profits	Negative	Rising profits	High profits	Declining profits
6	Customers	Innovators	Early adopters	Middle majority	Laggards
7	Competitors	Few	Growing number	Steady number beginning to decline	Declining number
8	Product Strategies	Offer basic product	Offer product extensions, service & warranty	Diversify brands and models	Phase out weak items
9	Price Strategies	Cost plus Profit	Price to penetrate market	Price to match or beat competitors	Price cutting
10	Advertising Strategies	Build product awareness	Build awareness & interest in mass market	Stress on brand differences and benefits	Reduce level to keep hard core loyalty
11	Distribution Strategies	Build selective distribution	Build Intensive distribution	Build more Intensive distribution	Go selective: Phase out unprofitable outlets
12	Sales Promotion Strategies	Use heavy sales promotion to entice trial	Reduce to take advantage of heavy consumer demand	Increase to encourage brand switching	Reduce to minimal level

PARETO ANALYSIS

Pareto Analysis is a rule that recommends focus on the most important aspects of the decision making in order to simplify the process of decision making.
WHAT IS IMPORTANT AND WHAT IS NOT

APPLICATIONS

PRICING OF THE PRODUCT
1. 80% of Sales comes from 20% Products
2. 80% of Prodit comes from 20% Products

Top management should concentrate on these 20% products and leave rest for lower management

CUSTOMER PROFIT ANALYSIS
80% of Profit comes from 20% Customers

Top management should concentrate on these 20% customers and provide them wit the best services

STOCK ANALYSIS
80% of Value of all stocks is held in 20 % of the products

Top management should concentrate on controlling these 20% products as they are 80% in value

ACTIVITY BASED COSTING
80% of ALL cost is incurred of all stocks is held in 20 % of the products

Top management should concentrate on controlling these 20% activities

QUALITY CONTROL
80% of ALL defects are due to 20% reasons.

Top management should try to eliminate these 20% reasons.

Environmental Management Accounting (EMA)?

1. EMA identifies and estimates the costs of environment-related activities and seeks to control these costs.
2. The focus of EMA is not on financial costs but it also considers the environmental cost or benefit of any decisions made.
3. EMA is an attempt to integrate best management accounting thinking with best environmental management practice.

CLASSIFICATION OF ENVIRONMENTAL COST

1. **Environmental Prevention Costs:** Those costs associated with preventing adverse environmental impacts.

2. **Environmental Appraisal Costs:** The cost of activities executed to determine whether products, process & activities are in compliance with environmental standards, policies and laws.

3. **Environmental Internal Failure Cost**s incurred from activities that have been produced but not discharged into the environment.

4. **Environmental External Failure Costs:** Costs incurred on activities performed after discharging waste into the environment. These costs have adverse impact on the organisation's reputation and natural resources.

REASONS FOR CONTROLLING ENVIRONMENTAL COST

1. A 'carbon footprint' measures the total greenhouse gas emissions caused directly and indirectly by a person, organization, event or product.

2. Environmental costs are becoming huge for some companies, particularly those operating in highly industrialized sectors such as oil production. Such significant costs need to be managed.

3. Regulation is increasing worldwide at a rapid pace, with penalties for non-compliance also increasing accordingly.

Management techniques for the Identification and Allocation of Environmental Costs i.e. which costs to control

1. Input-Output Analysis
2. Flow Cost Accounting
3. Life Cycle Costing
4. Activity Based Costing (ABC)

Which are the Environmental Cost that company should control

1. Waste
2. Water
3. Energy
4. Transport and Travel
5. Consumables and Raw Materials

COSTING OF SERVICE SEVTOR

POWER SECTOR

Key Risks:
1. Highly Capital Intensive
2. Lot of Coal is required for power generation.
3. Electricity Distribution is a Complex Network.

Features
1. Limited number of suppliers of electricity.
2. Tariff determination is based upon the rationality to determine the cost incurred at various points of operation.
3. Stakeholders are existing & future consumers, industries, government, regulators, and investors.
4. Continuous growing demand of electricity.
5. Distribution loss & inefficiency gaps between generation & consumption of electricity.
6. In-disciplined consumer.
7. Mostly public sector undertakings closely regulated by government.
8. Energy subsidies having direct impact on national treasury affecting long term growth potential of the economy.

Application of Cost Management Techniques
1. For determining prices and regulating tariffs.
2. Developing a flexible cost allocation.
3. Distribution loss and inefficiency gap analysis.
4. Multi-dimensional costing calculations.
5. Powerful analysis and reporting.

VALUE CHAIN

I	GENERATION & TRADING:	1. Virtual Power Plants 2. Remote Monitoring & Control of decentalised Generation 3. Digital Supply Chain 4. Realtime Energy Trading/ Straight through Processing
II	TRANSMISSION	1. Condition Monitoring 2. Grid Stability Based Mgt of Renewable Generation
III	Distribution and Metering	1. Smart Metering and Variable Energy Tariffs 2. Smart Grids 3. Condition Based Maintenance 4. Digital/ Mobile Workforce
IV	Storage:	Integration of Decentralised Storage Facilities
V	Marketing, Sales & Service	1. Self Service Portals 2. Social Media Marketing 3. App Based Mobile Service 4. Analytics Based Customer Segmentation and Pricing 5. Performance Marketing
VI	Customer	1. Smart Home 2. Demand Response Management 3. Cross Energy Mgt/Data Mining Based Energy Eff Analysis

AGRICULTURAL SECTOR

In relation to the agricultural sector, the Activity Based Costing technique is being increasingly accepted for the purpose of cost management. Large scale enterprises engaged in the agriculture sector that are engaged in the investment of high scale capital expenditure require efficient utilization of technology as well as the efficient use of production technology that are available at their disposal.

Minimum Support Price (MSP) was introduced by the Govt to protect farmers against sharp dip of agricultural prices, which was usually observed during the harvest seasons. The harvest seasons are associated with huge supply, which overshadows the demand, and hence, in most cases the commodity prices hit the bottom. This forces the farmers, in necessity of money for repayment of debts, in selling their produce at losses or very little profits. Thus, the government fixes the MSP and for farmers selling at MSP ensures profit margins for farmers and avoids distress selling situations.

Features

1. Industry is fragmented and unorganized
2. Lack of understanding of costs
3. Understanding the potential of working collaboratively
4. Use of target costing techniques for price determination
5. Imbalance of power across the supply chain

Benefits of using ABC for cost management

1. Adjustable costing technique
2. Faster and more accurate
3. Enables carrying out a more detailed cost analysis

INFORMATION TECHNOLOGY SECTOR

There are a number of challenges associated with the management of the costs associated with the Information Technology expenditures incurred by the Multi-National corporations. Thus, the complexity of the operating structure and the difficulty seen in the implementation of the cost allocation models, it is seen that in order to manage the IT costs, most organizations tend to develop centralized IT departments acting as cost centers for the purpose of managing the IT budgets as well as allocation of costs associated with along with the charging back of expenses that are incurred by the business units.

4D IT Cost Optimization Framework (whether organisation should have their OWN IT department or should outsource it)

1. **Defining Organization Vision:** Any amount of spending carried out in relation to the Information Technology requirements of the organization needs to be aligned to the organizational vision and long term objectives. Business owners should have a sense of ownership and thereby control the IT costs in an effective manner. The additional visibility through the model needs to determine the appropriate method of cost allocation in relation to the IT cost burden. Thus, the allocation model that is chosen needs to be both flexible and at the same time avoid being too complex in nature.

2. **Documentation of the current state:** The next step involves documentation of the current state of the IT department implemented within the organization in order to identify gaps and potential weaknesses identified in relation to the current state for the purpose of identification of the appropriate pain points as well as identification of areas for potential automation.

3. **Delineation of target business architecture:** Once the current state of the IT architecture has been documented, the next step is developing a target business architecture for the purpose of addressing the gaps and limitations identified and laying down the foundation with regards to the formation of the crux of the IT cost management framework.

4. **Decision: Build v/s Buy:** The last step understands whether the framework built is bought or custom built internally. The answer to the question involves a great amount of brainstorming and research taking into consideration the view point of all the strategic stakeholders involved.

DECISION MAKING

ACTIVITY BASED COSING

Break Even Point

FC + (Setup cost x Number of Setups) + (Engineering Cost x Number of Engineering Hours

SELLING PRICE – VARIABLE COST PER UNIT

When does a firm generally decides to outsource

1. If it costs less rather than to manufacture it internally;
2. If the return on the necessary investment to be made to manufacture is not attractive enough;
3. If the company does not have the requisite skilled manpower to make;
4. If the concern feels that manufacturing internally will mean additional labour problem;
5. If adequate managerial manpower is not available to take charge of the extra work of manufacturing;
6. If the component shows much seasonal demand resulting in a considerable risk of maintaining inventories;
7. If transport and other infrastructure facilities are adequately available;
8. If the process of making is confidential or patented;
9. If there is risk of technological obsolescence for the component such that it does not encourage capital investment in the component.

NON – FINANCIAL CONSIDERATIONS INDECISION MAKING

1. Quality
2. Employee Satisfaction
3. Customer Satisfaction
4. Corporate Social Responsibility
5. Environmental Factors
6. Intellectual Property
7. Intangible Assets
8. Competitor's Movements
9. Brand Name

ROLE OF ETHICS IN DECISION MAKING

Ethics are moral principles that guide the conduct of individuals. By their behaviour and attitude, managers set the company culture. Guideline for Ethical Conduct:

1. Identify an ethical decision by using personal ethical standards of honesty and fairness.
2. Identify the consequences of the decision and its effect on others.
3. Consider obligations and responsibilities to those that will be affected by decision.
4. Make a decision that is ethical and fair to those affected by it.
5. Some ethical problems can be can be avoided simply by using common sense and not focusing solely on the short term at the expense of long term.
6. Firms with a strong code of ethics can create strong customer and employee loyalty.
7. Furthermore, a firm that values people more than profit and is viewed as operating with integrity and honour is more likely to be a commercially successful business.

PRICING DECISIONS

PRICE UNDER DIFFERENT MARKET STRUCTURES

Type of Market	Meaning	Pricing	Strategies
Perfect Competition	Many Sellers selling a homogeneous product & Many Buyers.	Market Determined	Produce as long as MR > MC. Keep Cost as low as possible
Monopoly	One supplier and many buyers.	Firm is price setter but usually price is fixed based on demand elasticity.	Charge the Selling Price so as to get highest profit. Ensure monopoly remains
Monopolistic Competition	Many Buyers and Many Sellers NOT producing homogeneous products	Companies launching superior products can charge higher price till other companies also start to provide the same features.	Innovate new features every now and then
Oligopoly	Few Sellers selling homogenous products & Many Buyers	Sellers have to set the price keeping in mind the reactions from competitors. Customers prefer companies having least price.	Lower the price. Collide with rivals and raise prices together.

Set the Price Using PROFIT MAXIMISATION model (useful in Perfect Competition Market)

When will Profit be highest è Marginal Revenue = Marginal Cost
MR = a -2bQ
The price at which highest profit is P where P = a -bQ

a is the price at which demand is ZERO
b is slope of demand i.e. decrease in price / increase in units
Q is quantity demanded
P is the price

PRINCIPLES OF PRODUCT PRICING

I PRICE CUSTOMIZATION
1. Based on product line
2. Based on customer's past behaviour
3. Based on demographics
4. Based on time differential

II PRICE SENSITIVITY
1. Unique Value Effect
2. Substitute Awareness Effect
3. Difficult Comparison Effect
4. Total Expenditure Effect
5. End- Benefit Effect
6. Shared Cost Effect
7. Sunk Investment Effect
8. Price Quality Effect
9. Inventory Effect

DIFFERENT METHODS OF PRICING

I. COST-BASED PRICING METHOD

II. COMPETITION-BASED PRICING METHOD

1. Going Rate Pricing: Charge what others are charging in the market.

2. Sealed Bid-Pricing: These are like tender bids. If company quotes higher, it might get higher profit but chances of getting contract is lower. If company quotes very low based on MARGINAL COST PLUS, chances of getting contract are higher.

III Value- Based Pricing Method:

1. Objective Value or True Economic Value (TEV): This is a measure of benefits that a product is intended to deliver to the consumers relative to the other products without giving any regard whether consumer can recognize these benefits or not.

TEV = Cost of Next Best Alternative + or (-) Value of Performance Differential

2. Perceived Value: This is the value that consumer understands the product deliver to it. It is the price of a product that a consumer is willing to spend to have that product. At the time of fixing price, it is to be kept in the mind that any price which set below the perceived value but above the cost of goods sold give incentives to both buyers and the seller.

Selling below Total Cost

Pricing policy in periods of recession

Sell its articles at a price less than the total cost but above the marginal cost for a limited period.

Advantages

1. The firm can continue to produce and use the services of skilled employees who are well trained and will be difficult to re-employ later if discharged.

2. Plant and machinery can be prevented from deterioration through idleness.

3. The business would be ready to take advantage of improved business conditions later

SELL BELOW MARGINAL COST

1. Where materials are of perishable nature.
2. Where stocks have been accumulated in large quantities and the market prices have fallen. This will save the carrying cost of stocks.
3. To popularize a new product.
4. Where such reduction enables the firm to boost the sales of other products having larger profit margin.
5. Company want to eliminate competition

Pricing of New Products

1. Revolutionary Product: Premium price as a reward for its innovation and taking first initiative.

2. Evolutionary Product: A product introduces upgraded version with few additional characteristics of the product. The evolutionary products may be priced taking cost-benefit, competitor, and demand for the product into account.

3. Me-too Product: A product is said to be me-too product when its emergence is a result of the success of a revolutionary product. The me-too products are price takers as the price is determined by the market mainly by the competitive forces.

HOW TO ENTER THE MARKET

I. Skimming Pricing: High prices during the early period of a product's existence. Situations are

(i) The demand is likely to be inelastic in the earlier stages till the product is established in the market.

(ii) The change of high price in the initial periods serves to skim the cream of the market that is relatively insensitive to price. The gradual reduction in price in the later year will tend to increase the sales.

(iii) This method is preferred in the beginning because in the initial periods when the demand for the product is not known the price covers the initial cost of production.

(iv) High initial capital outlays, needed for manufacture, results in high cost of production.

II. Penetration Pricing: Low price in beginning. Situations are

(i) When demand of the product is elastic to price. In other words, the demand of the product increases when price is low.

(ii) When there are substantial savings on large scale production. Here increase in demand is sustained by the adoption of low pricing policy.

(iii) When there is threat of competition. The prices fixed at a low level act as an entry barrier to the prospective competitors.

Pricing Adjustment Policies

1. Distributor's Discounts
2. Quantity Discounts
3. Cash Discounts
4. Price Discrimination: is possible if the following conditions are satisfied:
(i) the maker must be capable of being segmented for price discrimination;
(ii) the customers should not be able to resell the product of the segment paying higher price; and

5. Geographic Pricing: In pricing, a seller must consider the costs of shipping goods to the buyer. These costs grow in importance as freight becomes a larger part of total variable costs.

PERFORMANCE MEASUREMENT AND EVALUATION

RESPONSIBILITY ACCOUNTING

Meaning

Collection, summarization, and reporting of financial information where individual manager is held accountable for certain costs, revenue, or assets of the firm.

Characteristics of a good performance measure.
1. Provide incentive to the divisional manager to make decisions which are in the best interests of the overall company (goal congruence).
2. Only include factors for which the divisional manager can be held accountable.
3. Recognise the long-term objectives as well as short-term objectives of the organisation.

How to measure FINANCIAL PERFORMANCE

THREE POPULAR MEASURES
1. Return on Investment (ROI) - expresses divisional profit as a percentage of the assets employed in the division. ROI is a common measure and thus is ideal for comparison across corporate divisions for companies of similar size and in similar sectors.
2. Residual Income (RI) - For evaluating the economic performance of the division, residual income (absolute profit) can be defined as divisional contribution les a cost of capital charge on the total investment in assets employed by the division. Not suitable where divisions are of different sizes.
3. Economic Value Added = ADJUSTED NOPAT – WACC% x ADJUSTED CAPITAL EMPLOYED

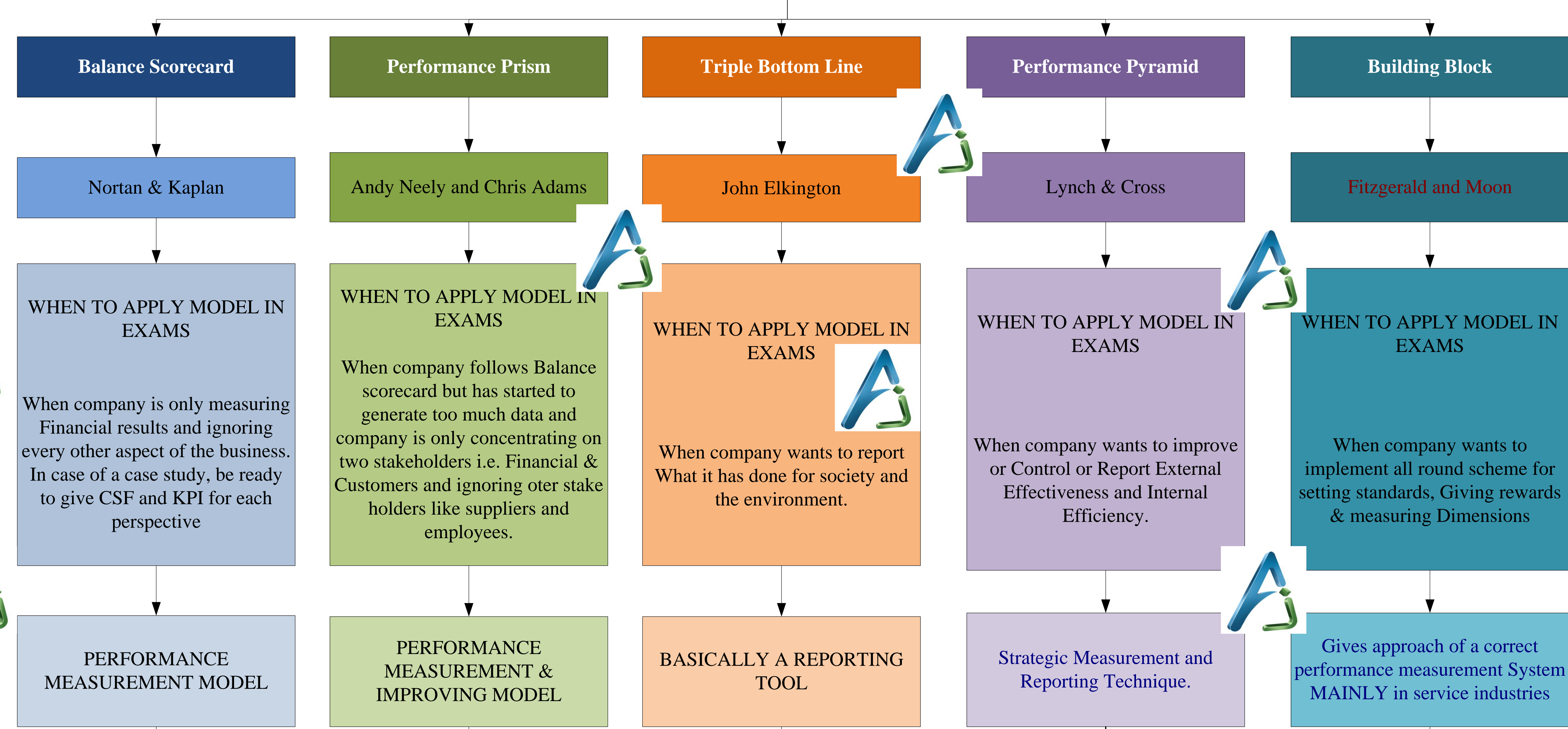
How to measure FINANCIAL PERFORMANCE based on type of centre

	Cost Centres	Revenue Centres	Profit Centres	Investment Centres
Responsibility	Control Cost	Increase Revenue	Increase Profit	Increase ROI
How to Judge Performance	Cost variances	Sales variances	Actual Profit against the budget	Actual ROI against the budget or compare with other departments or industry standards
Suitability	Where departments cannot market the products and are responsible only for producing	Where departments are only responsible for selling the product e.g. Marketing Departments	Where departments should control cost and sales	Where departments are given right to decide whether to purchase assets or not and when departments are of different sizes
Advantage				
Departments become Cost Conscious	✓		✓	✓
Try to increase Sales		✓	✓	✓
Will invest when required and will try not to waste the capital				✓
Dis - Advantage				
Try to Control cost and hence loose quality	✓		✓	✓
Might start to demand very high transfer prices		✓	✓	✓
Might not even invest even when it is good for the company as ROI might fall in short - run				✓

MODEL
Measurement of Performance across 4 areas

1. Financial Perspective: Financial perspective focuses on financial performance of the business and divisions. The various financial measures used by companies are profitability, revenue growth, cost control etc.
2. Customer Perspective: This perspective views organizational performance from the point of view the customer or other key stakeholders that the organization is designed to serve. These could include measures like customer satisfaction index, percentage of returns, percentage of goods delivered on time etc.
3. Internal Business Perspective: This perspective views organizational performance through the lenses of the quality and efficiency related to product or services or other key business processes. The measures under internal business perspective could be number of defective products produced, production performance per unit of time etc.
4. Training and Development/ Learning and Growth Perspective: This perspective views organizational performance through the lenses of human capital, infrastructure, technology, culture and other capacities that are key to breakthrough performance. The key measures could be number of new products produced, amount invested in training and development etc.

PERFORMANCE MEASUREMENT MODELS – FINANCIAL AND NON FINANCIAL



1. Stakeholder Satisfaction: The first facet of prism focusses on stakeholder's satisfaction. Though balanced scorecard also focusses on stakeholder's satisfaction, it is primarily concerned with the shareholders and customers and ignores other stakeholders. The company must identify all stakeholders and determine relative importance of each of the stakeholders. A stakeholder group which has high power and high interest (say a trade union) must be kept satisfied. The key stakeholders for a company are:
a. Investors - They want return on investment.
b. Customers - They want good quality products at cheap prices.
c. Suppliers - They want better price for products.
d. Government - They want revenues and development.
e. Society at large - They want employment opportunities.

2. Stakeholders Contribution: In the second facet of Performance Prism, the organisations identify the contribution required from the stakeholders. The organisations must then define ways to measure the contribution of stakeholders.

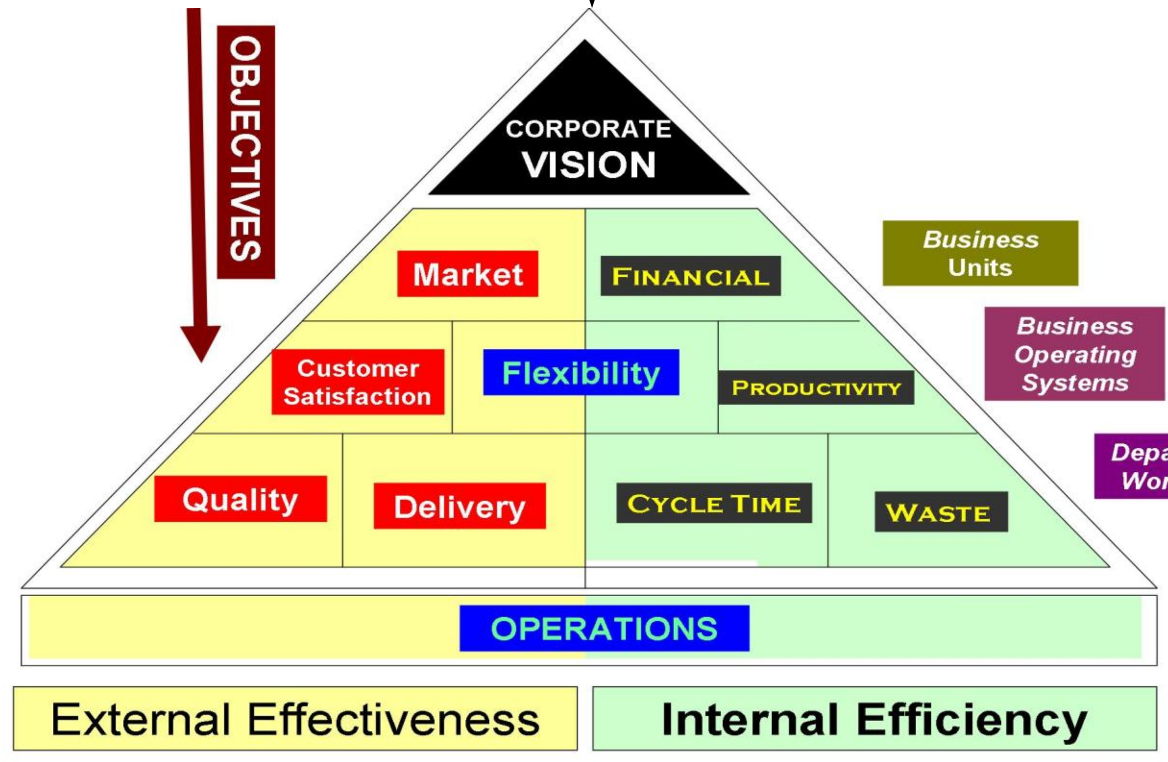
3. Strategies: In the strategies facet of the Prism, the organisation should identify those strategies which the organisation would adopt to ensure that -
a. The wants and needs of the stakeholders are satisfied
b. The organisation own requirements are satisfied by the stakeholders.

4. Processes: After identifying the strategies, organisations need to find out if they have the correct business processes to support the strategy.
5. Capabilities: Capabilities refers to the resources, practices, technology and infrastructure required for a particular process to work. The company must have right capabilities in order to support the processes.

1. Profit i.e. Economic - refers to measures maintaining or improving the company's success.

2. People i.e. Social - relates to corporate governance, motivation, incentives, health & safety, human capital development, human rights & ethical behaviour.

3. Planet i.e. Environmental - measures the impact on resources, such as air, water, ground and waste emissions.



I - DIMENSIONS: What to measure
(i) Quality
(ii) Flexibility
(iii) Innovation
(iv) Resource Utilization
(v) Financial Performance
(vi) Competitive Performance
II - STANDARD: Decide KPI for above areas to be measured. While setting the standards, adhere to 3 principles
a. Equity
b. Ownership
c. Achievable
III – REWARDS: Rewards scheme should have following characteristics
a. Motivation
b. Clear
c. Controllability

Benchmarking
Comparing performance

1. Competitive Benchmarking
2. Process Benchmarking
3. Strategic Benchmarking
4. Global Benchmarking
5. Functional Benchmarking:
6. Internal Benchmarking
7. External Benchmarking

NON PROFIT ORGANISATION

Need for Measuring performance
1. Benefits cannot be quantified
2. Benefits may accrue over a longer term
3. Measurement of utilisation of funds & expenditure
4. Multiple objectives.

VALUE FOR MONEY FRAMEWORK
1. Effectiveness: Whether the organisation has achieved its desired mission and objectives?
2. Efficiency: Whether the resources and funds available to the organisation has been utilised efficiently i.e, maximum output has been obtained with minimum input.?
3. Economy: Whether the desired output has been obtained using the lowest cost? It must be noted that use of lowest cost approach should not compromise quality.

CHARACTERSTICS OF GOOD TRANSFER PRICE: (i) Simple to calculate (ii) Robust (not requiring frequent adjustment) (iii) Fair (hence motivating to both parties) (iv) Profit maximizing (for the company as a whole)

Different Basis of Transfer Price

Transfer at MARKET PRICE or ADJUSTED MARKET PRICE

(adjusted market price Normal Market price less any expenses like packing which will not be incurred if transferred internally)

Advantages

a. Since demand and supply determine market price, it is likely to be unbiased.

b. Market prices are less ambiguous compared to cost-based pricing. They cannot be manipulated.

c. Since the pricing is competitive, divisional performance can be linked more objectively to its contribution to the company's overall profits.

Disadvantages

a. Market price may not be completely unbiased, if a competitive environment does not exist. Examples could be a distress sale market or manipulative pricing strategies (like price discrimination) that could distort the market price.

b. May not be suitable when market prices can fluctuate widely or quickly.

c. Goods that are transferred may be at an intermediate stage in the production process. At times market price may not be available for such intermediate goods.

Divide the profit among the two departments in the ratio of Cost i.e. Value addition

Advantages

a. Performance can be benchmarked to internal cost targets (budgets).

b. Information is more easily available as compared to market price. While evaluating performance, cost components can be broken down further for internal analysis. Hence, the basis for transfer pricing is more clearly defined as compared to market price, which may be subject to the vagaries of demand and supply.

Disadvantages

a. The cost basis on which transfer pricing is used can be subjective since there can be multiple ways of interpreting costs. Variable cost, standard cost, full cost are some of those methods. Managers may not always agree on the basis to be followed, since each will try to use the one most beneficial to their division.

b. Since cost is passed on to another division, there may be instances when managers of the supplying division may find little incentive to lower the cost of production by adopting cost efficient methods.

TRANSFER BASED ON COST

Transfer at Cost plus a Mark-up Based Transfer Price

Advantage: Since the supplying division makes a profit, this method address the disincentive problem discussed above in the full cost method.

Disadvantage: Since the transfer price under this method could closely approximates its market price, the purchasing division may bear a share of the selling expenses although none was incurred for such internal sales. Again, this could distort the performance of purchasing division. Therefore, it is essential to adjust the transfer price for such cost savings.

Transfer at Negotiated Price

Advantage: Managers are given autonomy to decide whether to purchase (or sell) from its sister unit or source then from (or to) external market.

Disadvantage: This method requires sufficient external information to be available regarding the external market price, terms of trade etc. Internal cost information must also be shared in order to negotiate a reasonable price.

Transfer at Marginal Cost

Advantage: Useful when the supplying division has excess capacity. The method ensures that the supplying division recoups the cost of internal transfer, while the purchasing division enjoys the benefit of a lower price compared to the market.

Disadvantage: No fixed cost or mark-up is allowed to be charged to the purchasing division. Each unit of internal sale will hence result in a loss at approximately fixed cost per unit.

Transfer at Standard Cost

Advantage: Performance evaluation can be done against budgeted cost targets. Facilitates better understanding of costs through variances. This enables the manager to take measures to improve performance.

Disadvantage: Profit performance measurement is centralized and cannot be measured for individual divisions.

Transfer at FULL Cost

Advantage: Full cost of goods transferred is recovered hence the supplying division will not show a loss.

Disadvantage: Since mark-up cannot be charged on internal transfers, the supplying division does not record any profit on these sales. This is a disincentive for the supplying division.

Methods to Resolve the Conflicts

1. Dual Rate Transfer Pricing System: The supplying division records transfer price by including a normal profit margin thereby showing reasonable revenue. The purchasing division records transfer price at marginal cost thereby recording purchases at minimum cost. This allows for better evaluation of each division's performance. It also improves co-operation between divisions, promoting goal congruence and reduction of sub-optimization of resources.

Drawbacks of Dual Pricing include:

(i) It can complicate the records, thereby may result in errors in the company's overall records.

(ii) Profits shown by the divisions are artificial and need to be used only for internal evaluations.

Two Part Transfer Pricing System: This pricing system is again aimed at resolving problems related to distortions caused by the full cost based transfer price.

Here, Transfer price = Marginal cost of production + a lump-sum charge for FC

While marginal cost ensures recovery of additional cost of production related to the goods transferred, lump-sum charge enables the recovery of some portion of the fixed cost of the supplying division. Therefore, while the supplying division can show better profitability, the purchasing division can purchase the goods a lower rate compared to the market price.

STRATEGIC ANALYSIS OF INCOME STATEMENT

Format of STRATEGIC PROFITABILITY ANALYSIS
To know where company has done good or bad

PROFIT OF YEAR 1 (TAKE IT AS STANDARDS)		x
(a) Growth Component		
Revenue Component		x
Cost Component	Material	x
	Labour	x
	Overheads	x
(b) Price Recovery Component		
Revenue Component		x
Cost Component	Material	x
	Labour	x
	Overheads	x
(c) Productivity Component.		
Cost Component	Material	x
	Labour	x
	Overheads	x
PROFIT OF YEAR 2 (TAKE IT AS ACTUAL DATA)		x

Customer Profitability Analysis
Find out profit earned from each customer by use of Activity based Costing

Benefits of Customer Profitability Analysis

1. It helps the supplier to identify which customers are eroding overall profitability and which customers are contributing to it.
2. It can help to provide a basis for constructive dialogue between buyer and seller to improve margins.

Direct Product Profitability (for a Retail Sector)

Aim: to find out Direct Profit instead of Gross Profit and while do so, we divide cost based of variables like time required to move goods. Space occupied, Required Cold storage or not etc

Direct Product Profit can be derived as shown below:

Sales	XX
Less: Cost of Goods Sold	XX
Gross Margin	XX
Less: Direct Product Costs (Warehouse, Transportation, Store etc.)	XX
Direct Product Profit	XX

1. Better cost analysis.
2. Better pricing decisions.
3. Better management of stores and warehouse space.

ACTIVITY BASED COSTING

What is ABC or Cost Driver Analysis

It is defined as an approach to the costing and monitoring of activities which involves tracing resource consumption and costing final outputs. Resources are assigned to activities, and activities to cost objects based on consumption estimates using cost drivers.

Structural Cost Drivers: are the organisational factors which affect the costs of a firm's product. These factors drive costs of a organisation in varied ways. The scale and scope of operation of a company will impact the costs. A larger scale of operations is likely to give an advantage of economies of scale. The usage of technology and complexity of operations also determine the costs of various activities within a firm. The experience or learning curve also impacts the costs being incurred by a firm.
E.g. No of plants, scale, degree of work centralization

Executional cost [illegible] e based on firm's operational decision on how the [illegible] ources are employed to achieve the goals and objecti [illegible] cost drivers are determined by man [illegible] style and policy.

E.g. The participation of workforce towards continuous improvement, importance of total quality management, efficiency of plant layout etc. are examples of executional cost drivers.

What is Activity Based Management

It is a method of identifying and evaluating activities that a business performs, using activity-based costing to carry out a value chain analysis or a re-engineering initiative to improve strategic and operational decisions in an organization.

Which Activities to Do?
Strategic ABM is about '*doing the right things*'. It uses ABC information to determine which products is to be manufactured and which activities is to be used.

This will result in Structural Cost Drivers.

How to Do those Activities?
Operational ABM covers the actions that increase efficiency, lower cost (i.e. reduce the cost driver rate of activities) and lead to higher revenue through better resources utilisation- in short, the action required to do things right. In other words, it is all about '*doing things right'*,.

This will result in Executional Cost Drivers

ACTIVITY BASED BUDGETING

It is a process of planning & controlling the expected activities for the organisation to derive a cost-effective budget that meets forecast workload & agreed strategic goals. An activity based budget is a quantitative expression of the expected activities of the firm, reflecting management's forecast of workload & financial & non-financial requirements to meet agreed strategic goals and planned changes to improve performance.

WHICH ACTIVITIES TO PERFORM

Value-Added Activities: The VA activities are those activities which are indispensable in order to complete the process. The customers are usually willing to pay (in some way) for these services. For Example, polishing furniture by a manufacturer dealing in furniture.

Non-Value-Added Activities: The NVA activity represents work that is not valued by the external or internal customer. NVA activities do not improve the quality or function of a product or service, but they can adversely affect costs and prices. Non-Value Added activities create waste, result in delay of some sort, add costs to the products or services and for which the customer is not willing to pay. Moving materials and machine set up for a production run

ACTIVITY BASED MANAGEMENT

Applications of ABM

1. Cost Reduction
2. Activity Based Budgeting
3. Business Process Re-engineering
4. Benchamarking
5. Performance Measure

Benefits of Activity Based Cost Management

1. Provision of excellent basis and focus for cost reduction.
2. Provides operational management with a clear view of HOW to implement an Activity Based Budget?
3. Provision of clear understanding of the underlying causes of business processing costs.
4. Provision of excellent basis for effectiveness of management decision making.
5. Identification of key process waste elements, permit management prioritisation and leverage of key resources.

BUDGETARY CONTROL

Budget is an estimation of revenues and expenses over a specified future period of time which needs to be compiled and re-evaluated on a periodic basis based on the needs of the organisation.

Budgetary Control is the process by which budgets are prepared for the future period and are compared with the actual performance for finding out variances, if any. In other words, Budgetary Control is a process with the help of which, managers set financial and performance goals, compare the actual results with the budgets, and adjust performance, as it is needed.