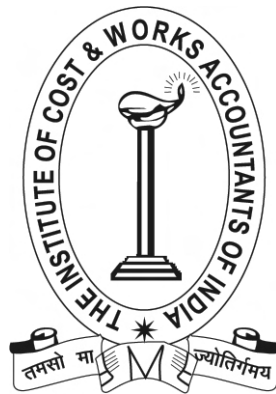


# **MANAGEMENT ACCOUNTING STRATEGIC MANAGEMENT**

**FINAL : PAPER - 13**

**GROUP - III**

**STUDY NOTES**



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# SYLLABUS

## OBJECTIVES

To understand the importance of strategic and risk management, and to be a facilitator and build tools for effective evaluation and controls, for strategies formulated. Also the ability to understand the risks both internal and external and build capabilities to manage risks appropriately and efficiently.

## Learning aims

- ◆ Understand the process of strategic management
- ◆ Ability to analyze the performance of the organization vis a vis business environment
- ◆ Ability to formulate the strategy and techniques for implementation
- ◆ Understand the role with regard to internal control and risk management.
- ◆ Identify and define the risks of a business organization and evaluate & recommend alternatives strategies and identify ways of managing risks

## Skill set required

Level C: Requiring all six skill levels - knowledge, comprehension, application, analysis, synthesis, and evaluation

## SECTION I : STRATEGIC MANAGEMENT (60%)

### 1. Introduction to Business Strategy (10%)

- ◆ Meaning and implications of corporate planning, long range planning, business policy planning and strategic planning; strategic management processes; meaning and use of mission, goals, objectives and targets, profit gap, sales gap, risk gap and other strategies;
- ◆ SWOT analysis; target selling strategy formulation and implementation, monitoring mechanism, strategies for stagnation versus growth, strategies for growth through expansion versus diversification & diversification vs core competency.
- ◆ Acquisition and merger strategy, strategy of joint venture both in India and abroad.
- ◆ Marketing strategy as a part of corporate strategy, growth under inflation and protection of shareholder, real capital.
- ◆ Financial objectives, non- financial objectives, resources analysis and evaluation.

### 2. Forecasting and planning for strategy (10%)

- ◆ Forecast trend and changes – social, political, legal and technological impacts.
- ◆ Distribution channels and competitive forces. Government policies, economic growth and government expenditure.
- ◆ Public and private sector investments,
- ◆ International trade practices and government policies for capacity expansion, new industries, subsidiaries and substitutes

### 3. Model Building and models (10%)

- ◆ Strategies in the development of models, Delphi Model, econometric, mathematical programming, budgetary and heuristic model.
- ◆ Sensitivity analysis and the characteristics of models.
- ◆ Limitations in model building vis- a-vis simulation techniques.
- ◆ Life cycles, Porters generic strategic, Ausoj's model, BCG matrix and other models

4. Marketing strategy (10%)

- ◆ Production orientation versus market orientation, marketing objectives, framework and management of marketing mix.
- ◆ Linkage between strategic planning and marketing strategy-both forward and backward.
- ◆ Research and intelligence- source for the techniques for acquiring information necessary for marketing decision-making market shares.

5. Application of management accounting in strategic management (20%)

- ◆ Marketing strategy: analysis of marketing costs and profitability, product development policy & strategy, pricing policies and strategies, budgetary control in marketing, evaluation and control of sales activities;
- ◆ Operations Management Strategy: process, technology and logistic strategies, inventory policies and strategies, Human Resource Management policies and strategies,
- ◆ Financial Strategies and Strategic Total Cost Management

**SECTION II : RISK MANAGEMENT (40%)**

6. Risk Measurement and Management (15%)

- ◆ Introduction, Risk and Risk Management,
- ◆ Objectives of Risk Management,
- ◆ Risk Measurement and Pooling, Total Loss Distribution,
- ◆ Pooling and Diversification,
- ◆ Ruin Probability

7. Risk Insurance: (10%)

- ◆ Insurability of Risk and Insurance Contracts,
- ◆ Insurance Pricing, Analysis Tools, Demand for Risk Management (Utility Theory),
- ◆ Legal Liability, Corporate Liability, Liability Issues,
- ◆ Insurance case study: Auto Insurance (or such other insurance industry segment as may be notified)
- ◆ Commercial Insurance.

8. Corporate Risk Management: (15%)

- ◆ Risk Management and Shareholders,
- ◆ Risk Retention / Reduction,
- ◆ Financial Risk Management,
- ◆ Futures and Options,
- ◆ Asset / Liability Management,
- ◆ Project risk management, Enterprise Risk Management

**Paper 13**  
**MANAGEMENT ACCOUNTING—STRATEGIC MANAGEMENT**

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## INTRODUCTION

Corporate Business presupposes continuity and the activities always have eventful yesterday, today and tomorrow. In other words the concept of 'Ongoing Business' implies fourth dimensional thinking, a space-time continuum. According to Indian Ethos the name is available in the concept of Desha, Kala, Vartamana – Space, Time, and Environment. Thus, management of a corporate business necessarily entails looking into the future. In the Indian scenario after the liberalization of the Indian Economy and opening the global market in the early 90s of the 20<sup>th</sup> Century, the Economy has evinced a sustained growth with a gross domestic product (GDP) of above 8.5% annually with a possible upturn to 10% GDP per annum with aggressive reforms. With this rapid transformation the formation of Security Exchange Board of India (SEBI) became necessary to protect the Investor and also regulate the capital markets. Transparency and greater disclosures of corporate performance on a quarterly basis with the annual report documenting not only the annual performance but also the future outlook, plans for expansion / diversification scanning the environment and cautionary statements have become necessary inputs of the published data. For this information to be provided to the shareholder it has become essential for any corporate body to comprehend existing rivalry, potential competitors, and technological changes, bargaining power with both the suppliers and customers apart from the changing environment. The collation of such data and development of a meaningful approach and programme for the profitability, solvency growth and sustainability of the company would necessitate strategic management.

Strategic Management is a two word phrase made up of Strategic and Management, the word strategic derives out of the Greek word 'STRATEGIA' which means a military general or a commander. As wars had to be waged strategies had to be devised and as such wars and strategies become inseparable.

### **Examination of a simple exhibit to understand impact of War on Business Strategies**

Business wars are some times as fierce as the wars fought in the actual battlefield. Today's successful business strategies can be traced back to military strategies that have been used effectively from ancient Greece to Desert Storm. Strategic principles remain unchanged through time and context. The strategies can be identified as:

1. 'Attack Strength' strategy: Attacking the enemy in his stronghold is the aim here. The Japanese attack on Pearl Harbor is an example of this strategy. Similarly, a decade ago, Lexus (Toyota) fought Cadillac (GM) and Lincoln (Ford) in the U.S. luxury car market that was a comfortable duopoly for its rivals. In 1999, Lexus surpassed both Cadillac and Lincoln in sales.
2. 'Attack Weakness' strategy: The American attack against Germany in Morocco during the Second World War, is an example of this strategy. The Nazis ignored the impending US attack on Morocco, thinking that Morocco was hardly worth defending. The successful American attack on Morocco opened up the way for the ultimate defeat of Hitler in the Second World War. Sam Walton, the founder of Wal-Mart, executed this strategy in the early 1960s by opening retail stores in small towns ignored by the then giant – Sears.

3. **Bringing Change to a failing company:** When Moses freed the Hebrews from slavery under Rameses II, he did not hesitate to strike down those who were recalcitrant. This was part of the change he needed to bring about, for the construction of a new Israel. In the corporate world, when Jack Welch took over as CEO of GE in 1981, he foresaw the potential problems that lay ahead for GE and instituted an aggressive strategy aimed at a complete overhaul. His detractors called him “Neutron Jack” for his ruthless change strategies. Welch continued with the implementation of his plans. The result – when Jack Welch left the company in 2001, GE was the company with the highest profits in the world.
4. **Concentration of Forces:** This strategy is most relevant in today’s business scenario. Organizations should coordinate their resources and concentrate on the areas where the competition is most intense. Using this strategy, in ancient times, generals like Caesar and Genghis Khan overwhelmed rivals with much bigger armies. Companies like Nike, Nokia and FedEx excel because of their concentration strategy.
5. **Forging a Strategic Alliance:** The alliance among the US, the UK and the USSR overcame Nazi Germany in the Second World War. This underlines the importance of strategic alliances. Similarly, in today’s highly competitive business environment, organizations are increasingly entering into alliances to take advantage of various synergistic benefits.
6. **Patience and Time:** When the rival is blundering, a well-run organization should not attack it but wait patiently for the rival’s self destruction. Napoleon’s failed invasion of Russia is a classic illustration of this strategy. Companies such as Yahoo and Boeing practice this strategy.
7. **Control the Choke Point:** The Spartans, with the army of three hundred soldiers blocked the Persian Army with 4,00,000 soldiers at a narrow pass in northern Greece called Thermopile. At this geographic choke point, the Spartans killed 15,000 Persians, before themselves being overrun and killed. The blocking of the Persian army gave other Greek states the time to prepare for war and to defeat the Persians ultimately. At one time, the AOL portal with its 26 million-person service that links the customer and the Internet was a perfect example of the strategy used at Thermopile. Any organization that hoped to reach potential customers online was forced to use the AOL portal.
8. **Containment is Good Enough:** The Cold War between the US and the erstwhile USSR during the later half of the 20th century is an example of containment strategy. In business, when there is competition between two organizations of equal size, if one organization tries to eliminate the other, then both firms will end up with shattered profit margins and mountains of debt, and, in the end, bankruptcy. So, containment is often preferred.
9. **A Combat-ready Company:** Netscape was an early entrant on the Internet. However, Microsoft took only six months to develop a competitive product. Cisco, which went on an acquisition spree in order to strengthen its technology, displays impressive battle-readiness too. These companies learnt from the example of the American defense forces, in always being ready to face attack.

Source: Dennis Laurie, From Battlefield to Boardroom

## **Strategic Management Process**

Management includes planning, organization, motivation and Control. So, strategic management can be divided broadly into two parts, strategy formulation and strategy implementation. The formal strategic management process has the following steps:

### **Strategy Formulation**

- Develop Corporate Vision
- Develop Corporate Mission
- Develop Corporate Goals / Strategic Objectives  
Commission SWOT Analysis – External Analysis of Opportunities and Threats and Internal Analysis of Strength and Weaknesses
- Develop there from Functional Level Strategy, Business Level Strategy, Global Strategy and Corporate Level Strategy.
- Initiate Planning Process – Corporate Planning, Long Range Planning, Business Policy Planning.

### **Strategy Implementation:**

- Lay Down Principles For Corporate Performance, Governance and Ethics
- Operationalising Strategy
- Execute the Strategy using various tools
- Introduce Controls
- Detect Variance, Measure Variance, Match against Control & Initiate Feed Back for Revision if Necessary



# STUDY NOTE - 1

## STRATEGY FORMULATION

**This Study Note includes:**

- **Corporate Vision and Mission**
- **Corporate Goals / Strategic objectives**
- **SWOT analysis**
- **Alternative and Level strategies**
- **Planning pr**

### STEP 1: DEVELOP CORPORATE VISION

Vision statements are often considered as a brief answer to the question “What do we want to become?” It is a corporate dream which will have to be achieved over a long time horizon. Normally vision statements are contained in a single sentence. Former President of India, Mr. Abdul Kalama’s vision for India has been “That India should become a Super Power by 2020”, Fortune 500 Indian company, I O C, a public sector company has its vision as “A major diversified, transnational, integrated energy company, with national leadership and a strong environment conscience, playing a National Role in Oil Security and Public Distribution”. A non profit making organization like American Institute of Management Accountants has projected a Vision as “Global leadership in education, certification and practice of management accounting and financial management”.

Thus it will be seen that the corporate dream envisages an all embracing statement of the corporate ambition to excel in the defined areas.

### STEP 2: DEVELOP CORPORATE MISSION

While the vision statements are qualitative it becomes necessary to identify the underlying purpose of the vision statement, quantify the targets to be achieved in a defined period. Such a statement is a mission statement derived from a vision statement. Key authors like Chander, Ansoff and Porter from the classic school believed that the interaction between environment and organization needs to be analyzed in a thorough manner with a planning perspective on maximizing profit. The evolutionary school authors like Hannen & Freeman however felt that such an analysis of the Environment *versus* the Organization is not full susceptible for analysis and forecasting. The Processuan School authors like Cyert, Marsh, Mintzberg and Pettigrew believed that the objectives of an organization are not always likely to be well defined as the outcomes are arrived at by internal political process of bargaining and learning. The systemic school introduced the importance of influence of culture and social processes. Authors like Granovetter and Marris advocated this approach. Another author Lynch as late as 2003 identified the steps for formulation of a mission statement:

1. Identification of the Nature of the Organizational Business
2. Identify the responses from the customers to the organizational business



## STRATEGY FORMULATION

3. The basic values and beliefs of the organization
4. Reflect the element of sustainable competitive advantage distinctive to the organization; and finally
5. The mission statement should emphasize on team effort and mutual respect between individuals

This statement attempts to define a companies operations in product source service and market terms or in other words a good Mission statement delineates “What is our Business” and describes the values and priorities of an organization. A strategic Manager has to apply his mind about the nature and scope of the present operations and to assess the potential attractiveness of future business activities. For instance Mission Statement of Microsoft runs as follows:

“Microsoft’s mission is to create software for the personal computer that empowers and enriches people in the work place, at school and at home. Microsoft’s early vision of a computer on every desk and in every home is coupled today with a strong commitment to Internet-Related technologies that expand the power and reach of the Personal Computers and its users, as the world’s leading software provider Micro Soft strives to produce innovative products of our customers’ evolving needs and at the same time, we understand that long term success is about more than just making great products. Find out what we mean when we talk about Living Our Values” ([www. Microsoft. Com/MSCORP/](http://www.Microsoft.Com/MSCORP/)).

A corporate mission should make the fundamental and enduring purpose of an organization clear and differentiate it from the mission’s of other organizations of similar nature. A mission statement establishes the values beliefs and guidelines for business plans and operations. These statements are normally based on three main plans:

1. The history of the organization: The red letter events of the part and the tradition linking these events along with the cherished values and beliefs will help formulating a mission statement.
2. Organizations’ distinct competencies: Identifying the distinct competencies of an organization where the company has an edge over other organizations. This advantage should be reflected in the Mission Statement.
3. The environment: The mission statement should take into consideration the opportunities available and the threats posed by the environment in which the company has been or expected to operate.

In short a perfect Mission statement should include:

- Definition of the business in which the company would like to grow
- It sets apart the company from its competitors
- It is inclusive in that all the stake holders are covered
- The behavioral characteristics of the organization flowing out of values and beliefs
- The purpose for which the organization exists
- Clarify the same and
- The mission statement should be inspiring.

While developing a Mission statement assumptions should be clear in the following areas:

- Product or Service to provided
- Technology to be utilized
- Degree of customers satisfaction, i.e., customer needs, satisfaction and delight
- Business ethics and projecting the companies image
- Rewards to the stake holders
- An inclusive approach regarding organizational inputs and support from other external stake holders to achieve profitability; and
- A top down commitment for excellence to be communicated to all stake holders

### **STEP 3: DEVELOP CORPORATE GOALS /STRATEGIC OBJECTIVES**

To provide a specific direction to the company's mission statement would be to identify specific company goals. The four pillars of corporate performance, viz., profitability solvency, growth and sustainability will have to be quantified and targets set for the company the characteristics of the goals should be such that they are precise and can be measured, the goals should address essential issues and the time span required for such achievement. The salient features of goal setting a part of strategy are based on the following tenets:

- Financial as well as physical achievements
- These goals should be consistent and should not contradict; and
- As Lord Byron said "Our desire should extend our grasp or what else is heaven for", the goals should be set in such a way that they are not easily achievable and should harness the commitment and efforts fully.

Strategic objectives flowing out of mission statement in the broad areas of growth, quality, innovation and social responsibility have their own attributes and should be susceptible to measurement. The goal structure is pyramidal and is a top down flow:





These objectives perform five functions of the organization, viz.,

- Provide the frame work for planning
- Define responsibilities, vis-à-vis, the objectives at each layer of the organization and the responsibilities attached to these objectives
- The various objectives handed down to the different divisions, departments and sectors need to be coordinated and senior managers should ensure goal congruence through integration
- The objectives should cover all areas of the mission and must be spread over the entire organization. The objectives should also be both physical and financial, so that the entire organization as a team and as Individuals gets motivated
- Senior managers should continuously monitor and evaluate the performance of the various terms and individuals, through detection of deviation, measurement thereof, control and regulation.

### **Critical success factors**

The performance of objectives depends on certain critical factors. Rockert and Hoffman felt that “the limited number of areas in which results, if therefore satisfactory will enable successful competitive performance”. These critical success factors can help formulating key performance indicators. However, analysis of critical success factors needs to be methodically approached:

- Identify the critical success factors for the strategy adopted by a particular company.
- Identify the distinctive competences required to gain a competitive edge in each of the critical success factors.
- The list of distinctive competencies so identified must be validated for adequacy to gain competitive advantage.
- Develop performance indicator for each critical success factor in the form of targets to be achieved, measured and controlled.
- The competitive strategy so developed should be immune from competitors
- Keep a continuous pulse monitor on the competitors move to comprehend the impact of such moves on the critical success factors already enshrined in the company’s strategy

Some of the objectives identified by a company are:

- Maximization of shareholder wealth, this broad objective can be translated into financial objectives like EVA, EPS, Growth of Gross Assets, etc. Non financial objectives like monitoring consumer feedback in terms of consumer complaints, physical productivity targets, labor turnover, etc., can bolster the performance characteristics
- Achieve customer satisfaction through robust quality, through achievement of zero defects. This objective can be measured by financial parameters like cost of quality, broken up into prevention cost, appraisal cost, internal failure cost and external failure



cost. The non financial approach can be through the measurement of number of defects per 1000/units, number of repeat purchases, etc

- Social objective of the company can be based on elimination of discrimination due to race, religion and caste, reduce environmental pollution and provide a safety net. This objective can be measured through key performance indicator like work force composition, cubic meters of waste, particulate matter in atmosphere, etc

Developing objectives differs with the nature of the organization, viz., profit making corporations, public and private, non profit making organizations (NPO), etc. Non profit making organizations normally develop their objectives on the basis of the composition of the stake holders and the innate contradictions that prevail among them leads to a necessity for developing a consensus in setting strategic objectives through participation. Again the objectives are influenced by the fact that the fund providers are normally different from the beneficiaries of the NPO. Besides, the priorities of NPO also change due to exigencies of environment. However, the key performance indicators will be the effectiveness of the NPO in reaching out to the beneficiaries, efficiency of the NPO in speedy, timely delivery of service. The Third indicator is economy or the cost of operation of the NPO evaluated on the basis of Unit Cost.

### **Resolving conflicting objectives**

Existence of a corporate body in an environment bounded by social, political, economic and technological developments is bound to have competing objectives arising out of the following:

- Balancing between profit maximization and social responsibilities
- Incongruence between goals of different stake holders
- Mismatch of Internal Goals.

These problems are usually resolved by adopting the following techniques:

**Ranking:** Managements can rank the various priorities and try to achieve a balance through setting particular levels of achievement, e.g., a target level for ROCE, as against a target for pollution control expenditure to meet their social responsibilities to the society.

**Weightage:** The above ranking can be made more meaningful by according different weights to the priorities, and the weighted score can be compared.

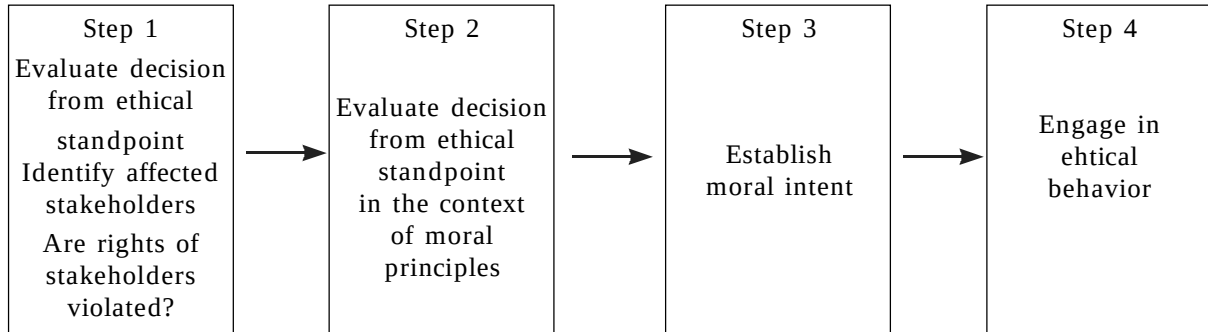
**Composite Measures:** Effective tools like balancing score card can be used to gauge the impact of performance both physically and financially.

Formulation of goals should also take into account following responsibilities arising out of: ethical, discretionary, legal and economic areas. The ethical approach dictates what the company should do while the discretionary approach leaves enough elbow room. The legal responsibility lays down what the company has to do. While the economic obligations determine “the must do objectives”.





### A Model of Ethical Decision Making



Source: Charles WL Hill and Gareth R Jones, Strategic Management – An Integrated Approach, Text and Cases, 4<sup>th</sup> Ed. 2002, p.62

## **STEP 4: COMMISSION SWOT ANALYSIS**

### **1. Environmental consciousness**

Business should be conducted in a way that preserves natural environment. For a good business it is fundamental to respond to the following factors:

1. Consumer Demand for environmentally safe products has become a necessity
2. There is a growing resistance against pollution of the environment from the society
3. This resistance is directed into environmental advocacy troops all over the world
4. Statutory regulations for preserving environment and pollution control are preserving environment and pollution controls are becoming more stringent
5. Funds providers are also particular about the environment liabilities of the company seeking loans
6. Stake holders hesitate to do business with environmentally weak firms
7. Litigations due to violations against statutory environmental requirements are on the increase. So many corporate bodies are becoming environmentally proactive which would mean that they integrate the factors and the limitations of the environment in their strategies for improving efficiency and effectiveness.

Earlier corporate bodies functioned under a reactive environmental policies leading to swelling pollution control costs facing liability suites. Latterly, a proactive policy is taking shape taking into consideration the pressure from the environmental groups, developing green products, converting waste into usable products, recycling, etc.

The purpose of SWOT Analysis is to define the approach to a strategy for the company to be formulated in such a manner the strategy fits the environment. In other words SWOT Analysis which embraces both external and internal analysis are attempted so that the corporate body is able to develop a strategy which is suitable and provide proper notes of music with the environment instead of creating noise.



The three major outcomes from such an analysis are:

- Matching the company strengths to take advantage of the opportunities in the market place E.g. Converting fast food stands to full time restaurants
- Converting threat or weakness into an advantage.
- Eliminate the weaknesses that expose the company to external threats.

Another alternative to SWOT Analysis is TOWS Analysis identified by Vweirich (1982). Strategic options are framed in the form of a matrix with 4 quadrants as below:

- S O Strategies: Matching the strengths to opportunities
- S T Strategies: Utilize company's strengths to mitigate threats
- W O Strategies: Exploit opportunities accepting weaknesses
- W T Strategies: A defensive approach to minimize weaknesses and threats

## **2. External analysis**

An analysis of opportunities and threats arising out of external environment is a must for developing a type of strategy a company should develop. As part of the SWOT analysis external analysis identified industries opportunities and threats while the internal analysis concerns itself with strengths and weaknesses.

Opportunities are created as a result of certain favorable conditions in the environment leading to greater profitability. Sudden demand for a particular product combined with sops from the government can be seen as an enormous opportunity for fresh enterprises to start producing that product. In the same manner threats can arise when excess capacity exists in an Industry creating a threat of price war due to decline in demand for the product.

For proper appreciation of opportunities and threats facing the Industry it is necessary to proceed methodically to analyze the industrial environment.

Firstly, its concepts and tools will have to be developed properly to explore the competitive structure of the industry for identifying opportunities and threats.

Secondly, analysis of the competitive strategies by different companies within the industry can be a pointer to future implications.

Thirdly, evolution of the Industry over the passage of time and the implication of changes which happened along side can project a future perspective.

Finally, the impact of macro environmental forces on the Industries structure needs to be examined for likely opportunities and threats.

Michael E.Porter's Five Forces Model is one of the basic models which are used to identify opportunities and threats. The five forces can be enumerated as

- Risk arising out of potential competitors entering the arena
- The intensity of rivalry among the existing companies within the same Industry
- The bargaining power of vendors supplying their materials, components and services



- The bargaining power of the buyers; and finally
- The threat from possible substitutes to the existing product.

Andrew Grove former CEO of INTEL has identified a sixth force, the “complimentors”. Complimentors are firms that market products which add value to the products of an Industry when used together to satisfy the customers remarks in a better fashion. An example is the success of personal computers improving with the increased supply of high quality software applications that could be run on personal computers. Non availability of proper complimentors can also become a threat to an unique product produced by an Industry for lack of adequate utilization.

External analysis needs to identify strategic groups within the Industry, e.g., generic group or proprietary group to determine the type of internal rivalry. Another aspect to gauge the evolutionary development of the industry it will be useful to understand the Industry Life Cycle Analysis.

The Industry Life Cycle Model identifies five sequential stages, viz., embryonic, growth, shakeout, mature and decline. At the embryonic stage the buyer is still not fully aware of the Industry’s product as the Industry has still not been able to produce the product at an affordable price and also not available through normal channels. At the growth stage demand expands rapidly and the customers are in a position to know about the product fully and buy the product at affordable price due to economies of scale. During these periods of growth impact of internal rivalry in an Industry is not significant. Rapid growth is not sustainable and demand gets saturated, at this point of time rivalry heats up and there is a shake out threatening inefficient companies to be shaken out. When the Industry enters the next stage of maturity the market is already saturated. As such threat of fresh entry from potential competitors is minimal. In the final declining stage when growth becomes negative normally substitution takes place. Social habits or change of fashion affect the demand. Social habits or a change of fashion affect the demand. Survival of the existing units becomes difficult. This often develops into intense internal rivalry.

To sum up it would be necessary that SWOT analysis of a particular company in an Industry needs to specify and examine the stage at which the Industry is passing through. This stage will indicate the types of opportunities and threats that may pose themselves.

The Macro Environment analysis involves environmental impact assessment and environmental segmentation. This analysis includes factors arising out of political, economic, socio cultural, technological, ecological and legal scenario.

**Political forces** result due to changes in countries statutes and regulations. As political processes culminate into rules and regulations, opportunities as well as threats are created. For, e.g., Industrial licensing has been entry barriers in India warding of potential entrants, however, the same barrier brought in intense rivalry within the existing companies as the industry passed through its life cycle. Besides deregulation has thrown open many opportunities in a growing industry and favorable tax laws has created new opportunities. Again the form of Government be it capitalistic, socialistic or totalitarian instilled fear or hope in the minds of entrepreneurs as to the threat of governmental intervention or favorable opportunities due to Government policies.



**Economic environment** can be a major factor affecting any Industry, the growth rate of economy, fluctuating interest rates, inflation or deflation, consumerism, etc., tend to control demand and supply situations. Business cycles like Boom, consolidation, stagnation, recession and recovery have had tremendous impact in posing threats and creating opportunities. With the opening up of global economy in the last decade, inflow of foreign capital or flight of foreign capital has been witnessed mainly due to changing economic environment in many countries with a sustained growth in GDP.

**Social forces** are the outcome of cultural, moral and societal values which change due to geographic, religious and customary outlook. Many industries which have started entering cross border activities failed to gauge this environment and had to re enter the same environment with a change philosophy. Example is abounding in this area, NIKE in China, KENTUCKY CHICKEN, McDonalds in India due to resistance from the local population. Tobacco industry is another industry which is facing a decline to greater awareness of the deleterious effects of the tobacco on the human health.

**Technological forces** have had grating impact on high technology industries rather than lower technology enterprises. Rapid technological obsolescence has been a feature especially in the I T industry leaving many enterprises on the way side as they could not adopt quickly enough changing technological environment. Any new technology aims either at a substitute or cost reduction. A definite threat shapes up with the adoption of a new technology by a competitor. In some cases the industry itself has become extinct due to the advent of new technology, e.g., the natural Indigo industry phasing out with the induction of artificial Indigo. Again the miniaturized transistor technology drove out radios with big valves. Frontier technological breakthroughs have also created many new opportunities and as such the life cycle of a technology also becomes relevant in the external analysis of a particular industry.

**Ecological Scenario:** In the various types of Industries coming up, the products, by products, by products and Industrial waste products by such industries have become a threat to the surrounding population. The three forms of pollution caused by solid liquid and gaseous effluence has been addressed by specific agencies like Pollution Control Board an organ constituted by Government. These agencies function under specific protection laws draw up tolerance limits and also specify methods of disposal of Industrial Waste. Depending on the type of Industry of which the firm belongs ecological factor assumes great significance in developing strategies, e.g., converting Industrial Waste into usable raw material. Thus avoiding not only pollution, but convert a waste into profitable raw material.

**Legal Scenario:** Each country has a gamut of legislation relating to formation of companies, conduct of companies, industrial disputes, workman's compensation, monopolies and trade practices, etc. These statutes become very important especially in the context of globalization where cross border activities like contract manufacturing, contract research, business process outsourcing, exports, imports, etc., have been the order of the day. Intellectual property rights product liability suites, etc., need to be fully understood before developing strategies.

### 3. Internal Analysis

Having identified the Goals and Objectives, it becomes necessary to understand the company's capabilities vis-à-vis the environment. A SWOT analysis is a most sought after methodology to analyze internally, the strengths and weaknesses of the company. The internal analysis is carried out in three phases.



**First Phase:** Understanding the process by which the company creates value for the customer while earning a profit for the company. For this purpose the company needs to know the role of resources, capabilities and distinctive competencies in this process.

Resources can be financial, physical, social, technological or organizational capital that helps a company to create values for the customers. These resources can be both tangible resources like money, machines, materials, etc., and intangible resources like formation of the company, brand equity, intellectual property including patents copyrights and trade marks.

Capabilities on the other hand refer to the company's ability to coordinate its resources and harnessing them to productive use. These skills are normally evolved through policies, procedures, routines and rules. Thus capabilities are intangible in that they are exhibited through interactions co-ordinations, co-operations and decisions.

Distinctive competencies of which resources and capability form part, build and shape strategies to achieve competitive advantage which leads to superior profitability. So, fundamentally a company's profitability is derived from three factors

- The value perceived by the customers on the companies products
- The price that a company can afford to charge and
- The total cost that the company incurs for creating such value.

**Second Phase:** Comprehension of the importance of superior efficiency innovation, quality and responsiveness to customers for creating value for the customer and earning good profits for the company.

Value creation can be possible through either differentiation or cost leadership for while the four pillars of superior efficiency, quality, innovation and customer responsiveness are firmly erected. A thorough assessment of the above factors analyzing the company's performance over a period of time can be a pointer towards the development of a particular strategy.

**Third Phase:** Analysis of the sources of the company's competitive advantage to identify the drivers for the profitability of the company as also the opposition for holistic improvement. As part of internal analysis the relevant activities from the value chain, viz., research, development, production, marketing and sales and customer service are analyzed for identifying distinctive competencies and competitive advantage.

**Competitive advantage** is defined as the advantage enjoyed by the company over its rivals by virtue of greater profitability over the average profitability of the Industry. A sustained competitive advantage is possible when the company is able to maintain the above advantage over a number of years.

**Distinctive competencies** are company specific strengths to differentiate its products and / or achieve significantly lower cost than its competitors, thus gaining a competitive advantage. These competencies can be manufacturing technique, inventory control systems, optimizing cycle time, evolving innovative marketing techniques or establishing a well oiled net work of distribution. The distinctive competencies evolve out of two main sources, viz., resources and capabilities.

In short, the above 3 phases should finally identify how as to how the strengths of the enterprise can be harnessed to enhance its profitability while estimating or mitigating the weaknesses which result in lower profitability. This analysis could also amply accepting an inherent weakness and converting the same into strengths.



While this internal analysis is carried out it is essential that the factors that influence the durability of competitive advantage are identified. Besides it will be useful to know why even successful companies lose their competitive advantage frequently. Also to develop a methodology to prevent competitive future while sustaining the existing competitive advantage over a period of time.

## STEP 5: DEVELOP STRATEGIES

The alternative strategies that are available for selection based on the company's vision, mission on corporate goals and SWOT Analysis.

### Alternative strategies

| Strategy                      | Definition                                                                                                             | Example                                                                                                         |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 1. Forward Integration        | Enhancing ownership and control over downstream products and distribution of the same.                                 | Sugar Industry, Alcohol and portable spirit along with various distribution outlets.- EID PARRY LTD             |
| 2. Backward Integration       | Gaining ownership and control of raw material and components supplies.                                                 | Iron & Steel Manufacturer gaining control over Iron Ore mines and coke ovens.- TISCO                            |
| 3. Horizontal Integration     | Increasing ownership and control over competitors.                                                                     | Acquisition of Cement Companies of competitors.- INDIA CEMENTS LTD                                              |
| 4. Market Penetration         | Gaining increased market share for present products or services in present markets through improved marketing efforts. | Introduction of daily newspapers in the present market at a penetration price.- DECCAN CHRONICLE                |
| 5. Market Development         | <b>Positioning</b> present products or services into new geographic area.                                              | Introducing existing brands of potable liquor in other countries.- KING FISHER                                  |
| 6. Product Development        | Increasing Sales by improving present products or Services or Developing New Items.                                    | Consumer Industry in India has developed many new products. HINDUSTAN UNILEVER & PROCTER AND GAMBLE             |
| 7. Concentric Diversification | Providing new but related products or services                                                                         | Automobile manufacturers offering financial services to buy their products – MAHINDRA MAHINDRA & SHRIRAM GROUP. |

## STRATEGY FORMULATION



| Strategy                      | Definition                                                                    | Example                                                                                          |
|-------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 8. Horizontal Diversification | Introducing new unrelated products or services for present customers          | Petrol bunks providing Departmental Stores.-IOC Ltd.                                             |
| 9. Retrenchment               | Restructuring thro cost and asset reduction to arrest declining profitability | Introducing Voluntary Retirement Schemes, Regrouping activities, etc.- EID Parry Group in 1980s. |
| 10. Divestiture               | Selling a division or part of the company                                     | Hiving of fertilizer activity. EID Parry Group Selling to Coromandel Fertilizer.                 |
| 11. Liquidation               | Selling all the companies assets in parts for their Tangible Worth            | Sick companies being sold.- BINNY LTD. & STANDARD MOTORS, etc.                                   |

These alternative strategies can be grouped under FOUR heads as follows:

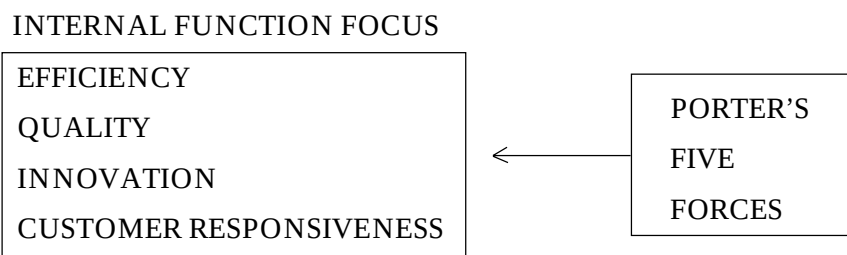
- Functional Level Strategy
- Business Level Strategy
- Global Level Strategy and
- Corporate Level Strategy.

|                           | Forward Integration | Backward Integration | Horizontal Integration | Market Penetration | Market Development | Product Development | Concentric Diversification | Horizontal Diversification | Retrenchment | Divestiture | Liquidation |
|---------------------------|---------------------|----------------------|------------------------|--------------------|--------------------|---------------------|----------------------------|----------------------------|--------------|-------------|-------------|
| Corporate Level Strategy  | ✓                   | ✓                    | ✓                      |                    |                    |                     | ✓                          | ✓                          | ✓            | ✓           | ✓           |
| Global Level Strategy     | ✓                   | ✓                    | ✓                      | ✓                  | ✓                  |                     |                            |                            |              |             |             |
| Business Level Strategy   |                     |                      |                        | ✓                  | ✓                  | ✓                   | ✓                          | ✓                          |              | ✓           |             |
| Functional Level Strategy |                     |                      |                        | ✓                  | ✓                  | ✓                   |                            |                            |              |             |             |

### Functional level strategy

Companies do not operate in vacuum. Michael Porters Five Forces Model exemplifies the changing solutions in the life cycle of a product.





#### Functional level strategy

The change management has to be both internal and external. Functional Level Strategy aims at harnessing the internal strengths and eliminating the weakness. These strategies are focused on the effectiveness of a Company's operation to

- Achieve superior efficiency
- Quality
- Innovation and
- Customer responsiveness

The distinctive competencies of a company can identify the functional level strategies that a company can follow. Recently the Indian Railways have been following functional level strategies to improve its efficiencies, reliability and customer satisfaction. Indian Railways have improved safety through introduction of state-of-art technologies for signaling, removing congestion at terminals by increasing number of platforms as also opening new terminals. Indian Railways are opening ATMs in important terminals, providing E-Tickets and I-Tickets, providing reservation through computers for all stations, etc., thus improving customer satisfaction. Indian Railways are planning to introduce a separate corridor for transporting goods so that this area becomes time sensitive.

#### Achieving Superior Efficiency

Superior efficiency could be achieved by improving productivity as well as through application of value engineering in providing alternative raw materials. This should not compromise quality.

**De-bottlenecking:** Increase output through synergy as well as effective utilization of capacity without any increased fixed cost. This process reduces cost of the production significantly. Application of Theory of Constraints is a pointer in this direction to remove the bottle neck and effectively increase flow of materials through all processes thus increasing output.

Another avenue for achieving Superior Efficiency is to tap the Learning Effects. These effects are savings in costs that derive from learning by doing for e.g., a laborer learns through repetition as to how best he could perform a task. Effects of learning can be plotted on a curve known as Learning Curve. Studies have been instituted to understand the aspects of learning effects and to improve training, education of labor, under Indian ethos this approach is known as "SAMAVAYA" which is holistic to include the 5Ws and 1H, viz., WHAT, WHO, WHEN, WHERE, WHY and HOW. Studies have been conducted in manufacturing and services areas. It was noted that learning effects proved very beneficial whenever processes had complex steps like assembly processes, chemical processes, etc. In the area of services





studies conducted in the health care industry proved that mortality rate came down significantly with the Learning Curve. However, it is to be noted that the effects of learning will phase out for a particular type of process when the laborer has repeated it over a period of two to three years. Learning process starts again with a change in the process introduced externally. Superior efficiency can also be achieved through Experience Curve. Those who have already gone through their Learning Curve are now in a position to apply their experience to analyze the process into value adding activities and non value adding activities. They also understood the changes that occur during the life of a product. The experience curve thus synthesizes the expertise developed through the Learning Curve and experience with the knowledge of variations happening through the life cycle of a product. This approach leads to systematic reduction in cost leading to a holistic effect on the cost structure over the entire life cycle of a product. According to Experience Curve concept the volume of a product produced during the life cycle increases dramatically. In other words Experience Curve phenomenon is the culmination of economics of scale and Learning Curve. This concept is really significant in Industries that adopt mass production of standard products like sugar, commodity chemicals, semi conductor chips, etc. With the globalization of markets and the options available in the 21<sup>st</sup> Century, achieving superior efficiency through flexible manufacturing systems and mass customization has brought in radical changes. The concept of flexible manufacturing technology also known as lean production encompasses a range of production technologies. Designed to optimize cycle times, reducing setup times for complex equipment (SMED), analyze actual processing time by application of Learning Curve and Experience Curve, minimize move time through scientific and technological management and eliminating idle time due to assignable internal causes. Another advantage derived from flexible manufacturing technologies is that the company can also customize its product offering to a much greater extent than was initially possible. The terminology of mass customization is oxymoronic in that the two incompatible concepts of low cost and differentiation can be achieved. However, flexible manufacturing technologies are more sophisticated and complex as they have to integrate different activities leading to a process adopting technological, behavioral, and economical and purist concepts. TOYOTA developed the flexible manufacturing technologies by identifying initially the major draw backs, viz., massive inventories, wrong machine settings, inability to accommodate customer preferences. These three areas were analyzed by number of techniques using flexible machines cells and cross functional groups to comprehend the impact of technology, human behavior and cost elements. Achieving superior efficiency through marketing strategy entails reducing customer defection rates. These defection rates are dependent on the ability of a company to satisfy its customers. Lower defection rates helps the company to achieve a lower cost structure by spreading fixed costs on a larger repeat purchases from a loyal group of customers. Superior efficiency in the area of materials management has been one of the most sought of during the last decades. It has been due to the awareness that a total purchasing cost and the holding cost could be as high as 50% of the material cost itself. Application of simple technologies like Economic Order Quantity (EOQ), lot sizing, Material Requirement Planning (MRP), KANBAN systems and just in time inventory concepts and Electronic Data Interchange (EDI) have largely revolutionized material management. These concepts have extended themselves into supply chain management which embraces the management of the flow of inputs of components from the suppliers into the manufacturing arena to reduce inventory



holding, maximize inventory turnover and reduce total cycle time. Superior efficiency in the sphere of research and development is another aspect engaging the attention of global giants. Both fundamental and applications research have been instrumental in adopting a triple combat for attaining cost leadership, focus and differentiation of products. The various steps adopted in managing research and development will be dealt with in greater detail under Innovation. Superior efficiency in handling human resources impinges on the hiring strategy, employee training and education as also creating self managing teams. Hiring strategy is important in that identification of employees who share the values of the company and develop the same wave length. Hiring strategy also should be consistent with the goals of the company and the attributes that are required must be clearly defined. Employee training is one other area which has come a long way in improving efficiency thus not only making the employee learn as to how he should perform, but also as to why he has to perform. He is also to be educated on the holistic aspect of the product or service the company offers and the customer requires. The making of self managing teams which coordinate their own activities are being much on the lines of Self Help Group (SHG) which have been developed presently in the Indian contexts. Self managing teams in a company improve, team work, revise schedules, empower themselves in regard to quality improvement, inventory reduction and process improvement on the other hand self help groups are entrepreneurial and form their own small productive activities or offer services on their own. Achievement of superior efficiency in an organization has been enhanced through the I.T. Reduction. Information systems and their virtual products of time have dramatically increased with rapid decision making made possible through decision support systems and knowledge solutions. Finally infrastructure required for any organization should facilitate commitment to efficient right through the organization. Proper infrastructure is essential for a smooth coordination of all functions leading to superior efficiency.

### **Attaining Superior Quality**

Attaining Superior Quality increases the reliability of any organization from the narrow definition of quality. Being the sole responsibility of a production team in an organization has now transpired to that real superior quality can be achieved only with the total commitment of entire organization. The awareness that the entire organization has its role to play, each function has to contribute and be responsible for a particular aspect in the achievement of a superior quality. For instance, the materials management function has to be both efficient and effective to make available raw materials and components of the desired quality, the human resources function has to educate and train the employees, how to prevent defects rather than correcting and reworking on defects. The finance function has to ensure availability of funds in time, improve efficiency of utilization of funds, suggest and implement cost reduction measures as also provide information on time for concurrent correction action in the various functions. The marketing function needs to keep the fingers on the pulse of customers through after sales service, identifying their needs graduating to satisfaction and thereafter enjoy the delights of the product or service. Customer response should be analyzed by the marketing function through quality functions deployment for any possible design modification for improving quality. All this awareness of this entire organization is embedded in the total quality management concept. Quality of a product has three major aspects, fitness for purpose, reliability and retentivity. All these three are to be weaved into their



entire fabric of the organization following a 5 Step implementation. Enhanced quality can be interpreted as

- Decreased cost of quality through less re work, fewer mistakes, reduced delays and effective use of time and materials
- As a result productivity improves
- Superior Quality leads to increase in market share and the company is in a position to ask for a premium
- Decreased cost of quality increases company's profitability and sustainability
- The company can provide more jobs through further growth.

### **Innovation**

It is clear that organizations, products and services have their own life cycles. Survival of the fittest and sustained growth can be achieved only through proper change in management. Economies change because of natural development and calamities. Growth of Demographic forces and their needs require change in customs and practices, etc. "The old order changed yielding place to new and God fulfils himself in many ways, lest one custom should corrupt the world".- Said Lord Tennyson reflecting that the natural ethos of the society is change in a society or any walk of life comes through innovation. In the corporate world innovation is the most important source for creating competitive advantage. Innovation can result in creation of new products that can satisfy a customer, can improve the attributes of the existing products or services as also reduce the cost of production to offer customers at affordable prices. The competitive advantage arising out of innovation can be through differentiation of products and avail a premium or improve profit margins through cost leadership by adopting innovative value engineering and value analysis methods. However, not all innovations have been successful and high mortality rate of innovations have been traced to uncertainties, poor commercialization, improper positioning strategies, myopic approach to technologies and inordinate delay in offering product/ services. This failure rate can definitely be reduced drastically through methodical approach of value engineering and value analysis.

Creativeness and Innovation in industry have never been unimportant, but they have never been as important as they are now. The reason is quite simple – IT IS THE PACE OF CHANGE.

Two areas where change must dominate the thinking:

1. Technology
1. Market

What can be produced and what people want to buy, supply and demand. Technological advance is constantly bringing new possibilities into range, either new techniques, processes, and materials, or old ones at new low prices which make it possible to use them on new products.



Customer demand is also constantly changing as people become wealthier and can afford new products or as advances bring products within their range.

“Success in life is a matter not so much of talent or opportunity as of concentration and perseverance.”

– C. W. Wendte

**Innovative project** should be structured properly to include the following steps:

Project selection should be made after a brain storming session of a group represents a cross section of a company as also include experts in a field drawn from external sources.

The project so identified should be able to produce or innovate a product / service in a foreseeable future, i.e., 2 to 3 years, as the life cycle of a product / service is reducing very rapidly and technological obsolescence sets in very easily.

Cross functional integration is extremely important in that the product identified is driven by customer needs; articulated or unarticulated, manufacturability of the new product is assured on a commercial scale. Development costs are held under check through quality function deployment and different milestones leading to commercialization are fully understood by all the members of the cross functional team.

### **Achieving Superior Customer Responsiveness**

Lost but not the least the aspect of customer responsiveness has assumed enormous significance in the globalization of the markets. Options available to the customer in the market place are many and the competition is looming large. Customer responsiveness is an important differentiating attribute which is the foundation to build Brand Loyalty. Customer focus is the first step in understanding the minds of the customer, his attitude to the company's products, shaping his opinion and views towards the company. For creating a proper customer focus a top to bottom exercise has to be initiated with the top management of an organization providing a necessary leadership. A strong leadership should percolate in such a way that the employee attitudes change from a “push philosophy” to “pull philosophy” responding to the needs of a customer. The next step would be to bring the customers into the company by building the necessary public relation. This would help the organization understanding the customer and the customer knowing the company its product better. This can be brought about through customer meets, soliciting customer opinions through questionnaires and through awareness campaigns. After being created a customer focus comprehending the customer needs, the company moves fast from meeting the customer needs to customer satisfaction and thereon to customer delight. This has also been identified in the Bhagavat Geetha as Dharana (Needs), ‘Poshaka’ (Satisfaction) and ‘Bhogya’ (Delight). These three are milestones which have to be achieved through Superior Responsiveness to the customer by (a) customization and (b) Response time. Customization represents identification of the unique needs of groups of customers and offering to satisfy those needs and wants. A consumer surplus in the economic sense will add value to the perception of the customer and his delight is ensured. Offering more value in terms of the customers’ perception for the price he has offered is the real dictum of customization. Responsive time is equally important as “Stitch in time Saves Nine”. Customer needs will have to be satisfied both in time and on time. A delay in supply of goods or services may prove catastrophic. For instance by providing



health care in the form of intensive care to a patient in a hospital has to be time bound as otherwise fatality is bound to occur. Again in the restaurant a hungry customer will not be ready to wait unless services are responsive to satisfy his needs when he requires. The time factor in responding to the customer needs cannot be over emphasized as the money value of time is immense. Reducing response time again has to be approached methodically to inculcate it as a natural attribute of the company. This can be obtained through three steps:

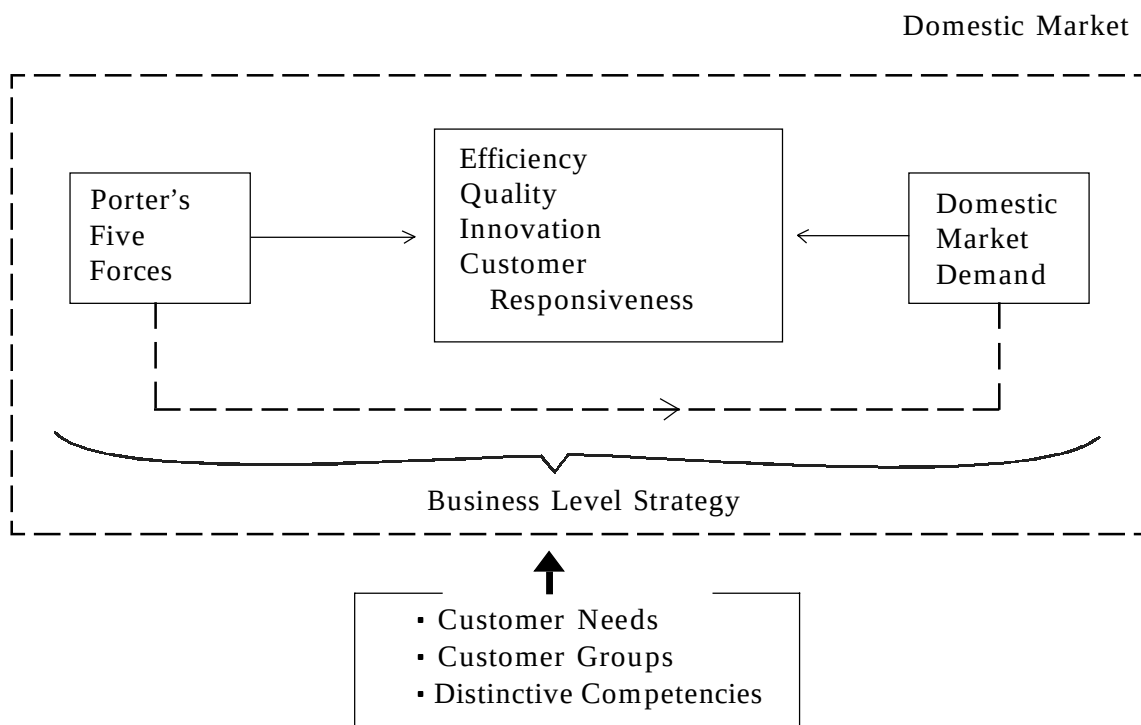
- Quick communication of customer requests to the relevant function of the company.
- Schedules of production and supply need to be responsive even to the unanticipated customer demands
- Information system will have to be devised for online and real time decision making.

Thus the functional strategy attempts to achieve superior efficiency, quality, innovation and responsiveness to customers through improvement of internal efficiency and effectiveness of the organization.

### **Business level strategy**

Functional level strategies are instrumental in lowering costs and lend stability to a cost structure of a product or service as required by a business strategy or in other words the results of functional level strategies are inputs to a Business level strategy.

Business level strategies can be different according as how a company endeavors to create value for customers. Dynamics of a business level strategy is entirely based on industry competitive structure flowing out of Michael Porter's Five Forces model and market Demand.





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The main focus of business level strategy is to develop a firm specific business model to enable a company to achieve competitive advantage over its rivals. This strategy entails identification of

- Customer's needs
- Customer Groups and
- Distinctive competencies which are needed for satisfying the customers.

### **Customers Needs**

Customers' needs are determined by the price of the product and the way a product is differentiated from similar products. TOYOTA addressed differentiation successfully in the Luxury Car Range. In the area of technical design Mercedes Benz and BMW succeeded in introducing differentiated design.

### **Customer Groups**

Identification of customers groups is done through market segmentation. Price has been one of the main factors for segmenting customers. In general three different strategies are available for market segmentation. First method is to recognize an average customer instead of specific or niche groups. Secondly, identify niche groups and develop; specific products to meet their requirements. For example Sony offers more than twenty different models of Television Sets targeting different niche groups. Thirdly the company chooses to identify only one or two niche groups and address their requirements, e.g., Luxury Car Segments. These strategies have to be selected based on the nature of the product and nature of the product and nature of the Industry.

### **Distinctive Competencies**

Distinctive competencies need to be developed for achieving the differentiation required and such competencies can be developed through a proper dove-tailing functional level strategy to their business strategy for achieving superior efficiency, quality, innovation and responsiveness to the customer.

The dynamics of business level strategy depends on

- How to differentiate and price the product
- Timing and the quantum of segmentation in the market; and
- Quantification of investment regard for developing distinctive competencies

The dynamics starts with pricing option through differentiation which is dependant on competition on the one hand and the estimated market demand on the other. The kind of differentiation and the quantum of demand for such a product would determine the target price at which the differentiated product can be positioned. The Functional Level Strategy dovetails itself to the Business Level Strategy by producing the differentiated product with Superior Efficiency, Quality, Innovation and the Responsiveness to Customer at the targeted cost allowing for sufficient profit margin.

The generic Business Level Strategy offers 3 different strategies, viz., cost leadership, differentiation and focus.

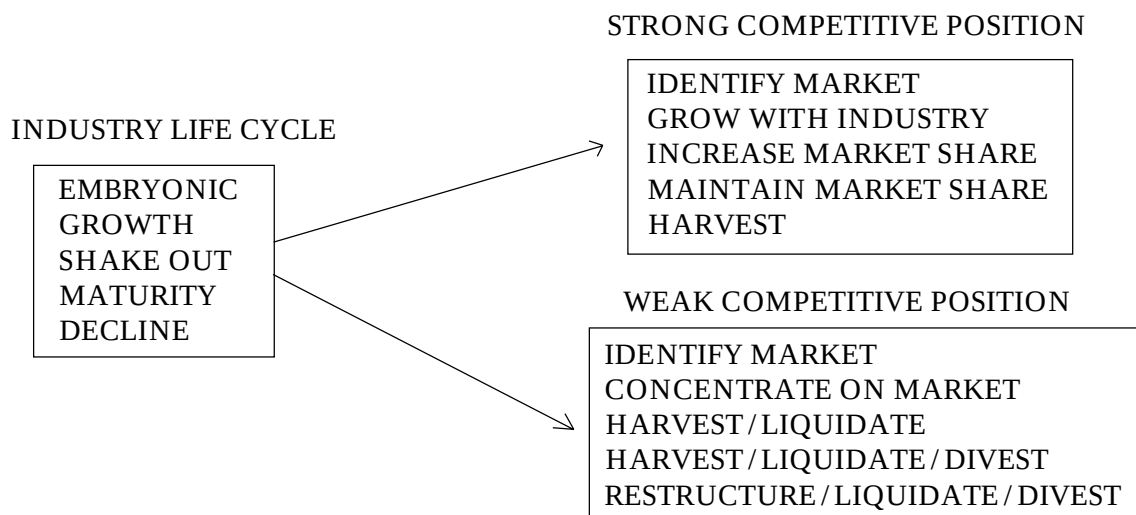


### Product / Market/ Distinctive Competency choices and Generic competencies Strategies

|                                | <b>Cost Leadership</b>                 | <b>Differentiation</b>                        | <b>Focus</b>                         |
|--------------------------------|----------------------------------------|-----------------------------------------------|--------------------------------------|
| <b>Product Differentiation</b> | Low<br>(principally by price)          | High<br>(principally by uniqueness)           | Low to High<br>(price or uniqueness) |
| <b>Market Segmentation</b>     | Low<br>(mass market)                   | High<br>(many market segments)                | Low<br>(one or a few segments)       |
| <b>Distinctive Competency</b>  | Manufacturing and materials management | Research and Development, sales and marketing | Any kind of distinctive competency   |

### Choosing investment strategy at the business level

Choosing an Investment Strategy at the Business Level depends on the quantum and types of resources to maximize company's profitability. For this purpose it becomes necessary to identify the stage at which the industry's life cycle is poised and whether the particular firm is in a strong competitive position or weak competitive position.



In the embryonic stage the focus will be on building the market share. Whether the company is strong or weak in the growth stage it will be necessary to sustain a competitive advantage through increasing investments. If the company happens to be in a weak competitive position it may have to concentrate on the market to maintain its market share. In the shake out stage between growth and maturity stages the stronger companies will place emphasize on

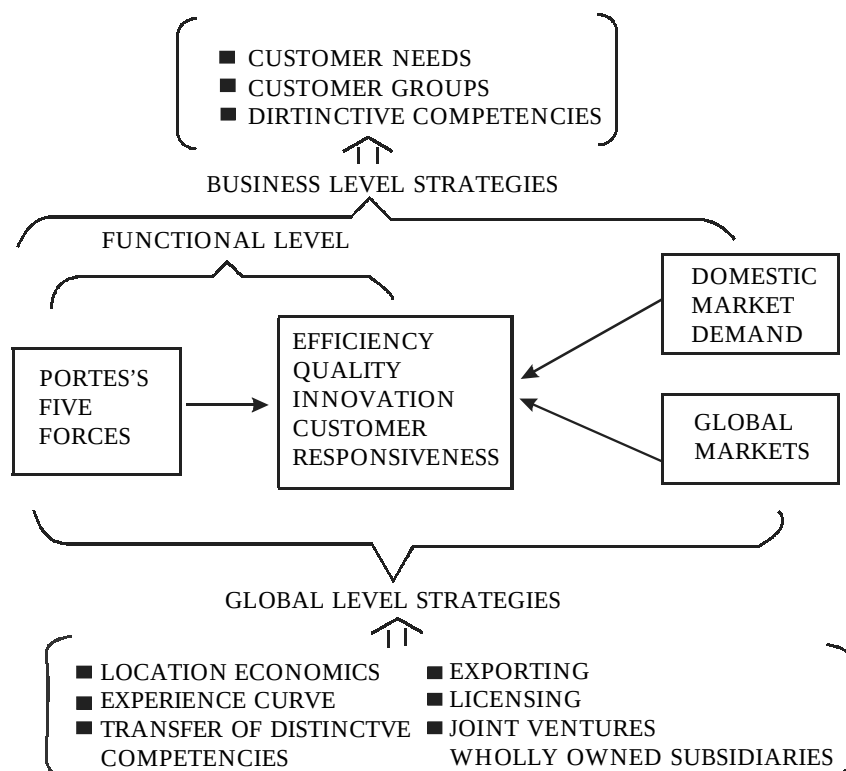


increasing the market share while the weaker ones may think of harvesting or liquidation. The strong companies will consolidate and maintain the market share in the maturity stage while the weaker ones may have to resort to disinvestment. In the final dying stage the stronger companies could go for harvesting and the consequential asset reduction while weaker ones will either adopt a turnaround strategy or phase out.

### Global level strategy

The developed countries having created world class manufacturing facilities that adequate was not forthcoming due to stagnant or declining population in that countries so they started searching new markets in the developing and under developed countries towards the end of 20<sup>th</sup> century. With the advent of I.T. Revolution, Communication became extremely rapid and quick decision making became possible. The strategies required to operate in different countries across the globe called for a new type of strategy on the global environment. Thus the global strategies depended on two major issues, viz.

- Decision making in regard to geographical markets, timing of such an entry and their scale of such an entry and
- The ways and means a company should utilize to enable such a foreign investment.







### Decision making

This depends on

- Location Economics
- Experience Curve
- Transfer of Distinctive Competencies.

### Location economics

A proper assessment of the economic benefits that could arise by entering optimal location for the activity would be the first step. This assessment can indicate as to whether the company should adopt a cost leadership or differentiation strategy, e.g., Hyundai entering the Indian Market in the Low Cost Car Segment.

### Experience curve

Utilizing the local pool of employees through the learning effects and through economies of scale, the employees develop greater comprehension of the processes and are in a position to improve and innovate on these processes due to the experience they have gained over the years of repetitive operations. The advantages of experience curve have been reaped through empowerment by many big multi nationals. The conversion cost especially in the chemical industry and oil refining industry in India is nearly  $1/10^{\text{th}}$  of the cost prevailing in the developed countries. Many pharmaceutical multi nationals had chosen India for contract, production or formulation for catering to the markets in India and the Far East. This strategy has reduced their cost of production as also the logistic cost.

### Transfer of distinctive competencies

The fundamental requirement for production of a product in a third country requires transfer of distinctive competencies often approached through the strategy of wholly owned subsidiary so that secrecy and confidentiality are presumed, e.g., Cocoa Cola and Pepsi..

### Exigencies of global markets

With the entry of more number of multinational companies as also strong local companies, the pressures for cost reduction increased. Again responsiveness of the local customer and his purchasing power would require lower prices, e.g., Tyre industry where multi nationals are present.

Local responsiveness may also be under pressure due to differences in customer culture and his preferences. The products sold by a multi national company in a third country may suffer because they have not taken into consideration difference in culture and taste of the local customer, e.g., Mc Donalds, Pizza Hut, Kentucky Fried Chicken, etc., in India. Differences in availability of the required infrastructure and trade practices also have an impact on the successful advent of multinational companies. Electrical Companies from the west who produce their goods based on 100 volts found it different in 240 volts in countries like India. Again the western Automobile Industry which produce cars for Left Hand Drive find it different in Countries like India where the practice is Right Hand Drive.



Thus, choosing a global strategy need to take into consideration all the above factors as result nowadays the multinational companies presume either an International Strategy or Multi Domestic Strategy or Global Strategy or Transnational Strategy.

**International Strategy** is based on transfer of distinctive competencies to foreign markets.

**Multi Domestic Strategy** depends on the ability to offer customized products catering to local market's requirements.

**Global Strategy** is based on the ability to exploit both the economies of scale and experience curve effects while guarding their own technology through wholly owned subsidiaries.

**Transnational Strategy** combines all the above three strategies to harvest the best of benefits. But this strategy is difficult to implement as complicated organizational structure to integrate both local and international talents will be required.

#### Ramification of global competition

| Strategy       | Advantages                                                                                                                                                                                            | Disadvantages                                                                                                                                                                                   |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| International  | Transfer of distinctive competencies                                                                                                                                                                  | <ul style="list-style-type: none"><li>▪ Inadequate local response</li><li>▪ Unrealized location economics</li><li>▪ Unavailable advantage due to experience-curve</li></ul>                     |
| Multi domestic | Customization of product to suit local market                                                                                                                                                         | <ul style="list-style-type: none"><li>▪ Unrealized location economics</li><li>▪ Unrealized advantage due to experience curve</li><li>▪ Inability to transfer distinctive competencies</li></ul> |
| Global         | <ul style="list-style-type: none"><li>▪ Advantage of Experience Curve</li><li>▪ Advantage of location economics</li></ul>                                                                             | <ul style="list-style-type: none"><li>▪ Inadequate Local Response</li></ul>                                                                                                                     |
| Transnational  | <ul style="list-style-type: none"><li>▪ Advantage of location economics</li><li>▪ Advantage of experience curve</li><li>▪ Advantage of customization</li><li>▪ Benefits of global knowledge</li></ul> | <ul style="list-style-type: none"><li>▪ Problems in implementation because of organizational structure and culture</li></ul>                                                                    |

Global strategy has to contend with another important aspect, viz., the choice of entry mode. Depending on the intensity of operations as well as the volume, as also the extent of risk that a multi national is ready to take various modes of entry are available.

#### Export

This is the least risky mode as it eliminates the cost of establishing manufacturing operations in the third country and the impact will be minimal on the local population while sufficient data and time will be available to understand the economies of cost of production and marketing before actually launching bigger operations.

**Licensing**

This is yet another mode of entry where an entrepreneur from a third country obtains the license from the multinational company for a negotiated fee to produce the multinational company's products. In this mode the Multi National Company avoids development cost and risks and would be able to assess the preferences of the local markets for their products. However, there are drawbacks in this method in that the Multi National Company does not have adequate control over the local company. Again the strategy to be followed in a market place is not coordinated by the Multi National Company and it is purely the acumen of the local entrepreneur which spells success or failure. Thirdly licensing technologies to a third country often takes away the competitive edge of the MNC as it does not have strategic control of the local company.

**Franchising**

Franchising is another form of licensing in which the franchiser not only sells his trademark but also lays down certain rules to be followed in the conduct of business. The Franchiser normally helps the franchisee to generate the business on an ongoing basis. The advantages of franchising are the same as those of a licensing but the disadvantages are fewer. However the franchisor has to be careful that his trade mark is not misused or brought into disrepute.

**Joint ventures**

Another mode of entry is through joint ventures where the foreign company finds a local partner on the basis of strategic alliance to pool their distinctive competencies. This method reduces the risk of operation and the local partner is well aware of the customer requirements. In spite of these advantages the main drawbacks are that the foreign company often finds that it is not in the driver seat either through ownership or control of management.

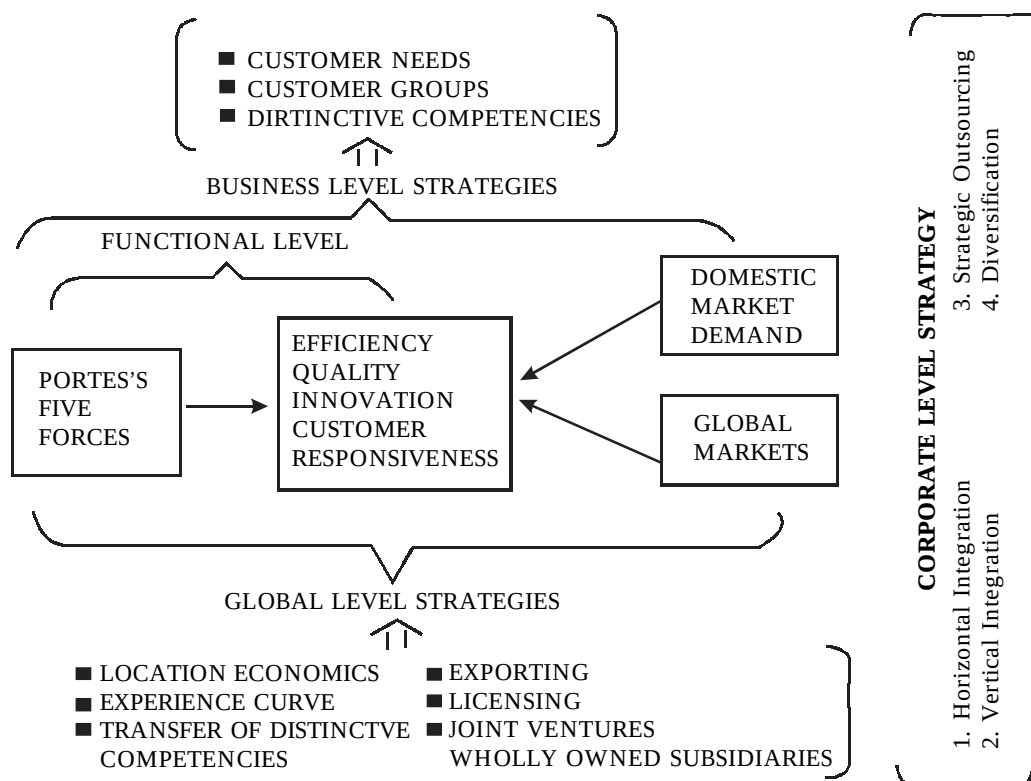
**Wholly owned subsidiaries**

Entering a third country through a wholly owned subsidiary preserves the control over technological competency, maintain a tight control over operations and also realize the full benefits of location economies and experience curve effects. However this mode of entry is the costliest as the entire cost of establishment and promotion would be borne by the parent company.

**Corporate level strategy**

Corporate Level Strategy engages itself in the identification of businesses which a company should endeavor. The value creation activities are to be performed in those businesses and suitable methods for expansion or contraction of different businesses. Four major strategies normally pursued are

- Horizontal integration
- Vertical integration
- Strategic outsourcing and
- Diversification.



## Horizontal Integration

Horizontal Integration is the effort to achieve a competitive edge with increased size and scope. Acquisitions and mergers are the means through which such an increase in the size and scope are attempted. An acquisition takes place when a company uses its resources to purchase another similar company and the acquired company continues to remain as a separate entity. In a merger two companies agree to combine their operations and create a new entity. These will be treated in greater detail under the Chapter Merger and Acquisitions. E.g.—Cement Companies acquiring manufacturing facilities.

Horizontal Integration has acquired more significance in a global market with a view to achieving competitive advantage by growing in size as the organic mode of substantial expansion and green field projects take long gestation time, acquisitions and mergers are becoming more important to take advantage of a growing market expeditiously. The main benefits of horizontal integration are:

1. Reduction in mining cost
2. Possibility of offering a range of products through differentiation
3. Managing existing rivalry through market operations; and
4. Augmenting bargaining capacity over buyers and suppliers

However there are certain limitations to horizontal integration, they are:

1. The problems associated with mergers and acquisitions



- Conflicts that can arise due to statutory requirements while the process of acquisition are mergers is pursued

**Vertical Integration**

Through Vertical Integration a company extends its operation either backward into obtaining raw materials and components, e.g. Iron ore mines by a Steel Company, Limestone quarry by a Cement Company, etc., are expand in the forward direction to produce down stream products which flow out of the present product produced by the company. E.g. Sugar Industry extending into distillery.

Vertical Integration can either be forward or backward integration as already indicated is also possible that such integration can be full or tapered. Full integration has all its supplies. In house for manufacturing needs and the manufactured product is fully supplied through in house distributors. Under Taper Integration, raw materials are component purchases are both from In-house and outside sources required for the manufacturing purposes. The manufactured products are sold both through in-house distributors and Independent Distributors.

**Advantages of Vertical Integration**

- The company is able to create entry barriers for potential competitors.
- Investment to improve efficiency of the entire value chain
- Build robust quality
- Meet deadlines through improved scheduling

The drawback of a particular integration can be summed up as

- Possibilities of building obesity in cost extraneous to manufacturer
- Technological obsolescence can create problems
- Variation in demand may create problem

**Strategic Outsourcing**

It is rather recent in that companies have been separating into certain non-core activities within a business and allowing them to be performed by an Independent Firm, the purpose being reduction in cost production, e.g., sponsoring of back office operations to a third party. Strategic outsourcing has assumed gargantuan proportions during the last decade. Then a race for cost reduction has become furious due to global competition. This outsourcing activity has been in relation to non core activity are a high technology activity which is not the core competence of the company. The benefits of outsourcing are reduction of cost and secondly differentiation product. Reduction of cost is achieved by outsourcing activities to a third party which has been specializing in a particular activity and able to offer services at a lower cost. It is also possible that a particular activity which is highly skilled or uses a costly technological activity, a company may outsource the specialized operation to a outside agency to avoid capital investment and maintain a special cadre of employees. In the same manner differentiation of a final product of a company is also adopted by adding some new features to the product through outsourcing. The risks of outsourcing are possibilities of holder not being able to meet the deadlines due to third parties mistakes and loss of confidentiality of information.

## Diversification

In a corporate life cycle a stage is often reached when both organic and inorganic growth in the existing products or services reach maturity. This forewarns decline and a necessity to look for new businesses or products not in the same range. Thus diversification into related or unrelated areas becomes a necessity. Diversification is the mode of adding new lines of business to a company which are distinctly different of the existing operation. A diversification strategy is often attempted to (a) to increase the number of value creation function at a lower cost (b) to increase the value creation function to differentiate products and (c) to manage the vagaries of demand for the different products of the company to achieve sustained profitability. E.g.—EID Parry Group as a conglomerate has diversified into Sugar, Ceramics and Fertilizers which were distinctly different. This was attempted to take care of the seasonality of operations which affected the demand pattern also improved cash flow right through the financial year. Diversification normally involves Transferring Competencies, Leveraging Competencies, sharing resources effectively, managing rivalry in more than one Industry and emerging organizational competencies in a holistic manner. Diversifications can be either related diversification or unrelated diversification.

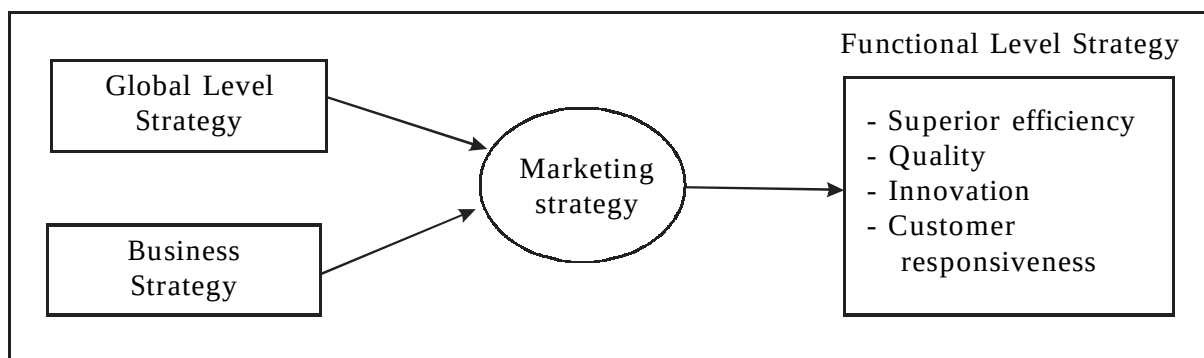
**Related Diversification** normally involves into diversifying into complimentary products like computers, printers, peripherals, etc.

**Unrelated Diversification** involves diversifying to areas which are totally unrelated to present products. E.g., An engineering company like L & T diversifying into Cement.

The limitations of diversification tend to skew the company's profitability, reduce the same due to unrelated operations. Bureaucratic cost may also increase cutting into profit margins. Core competencies may also come under scrutiny. Thus the corporate level strategy has many phases and will be dealt with in generation detail individually under strategy implementation section.

## Marketing strategy as a part of corporate strategy

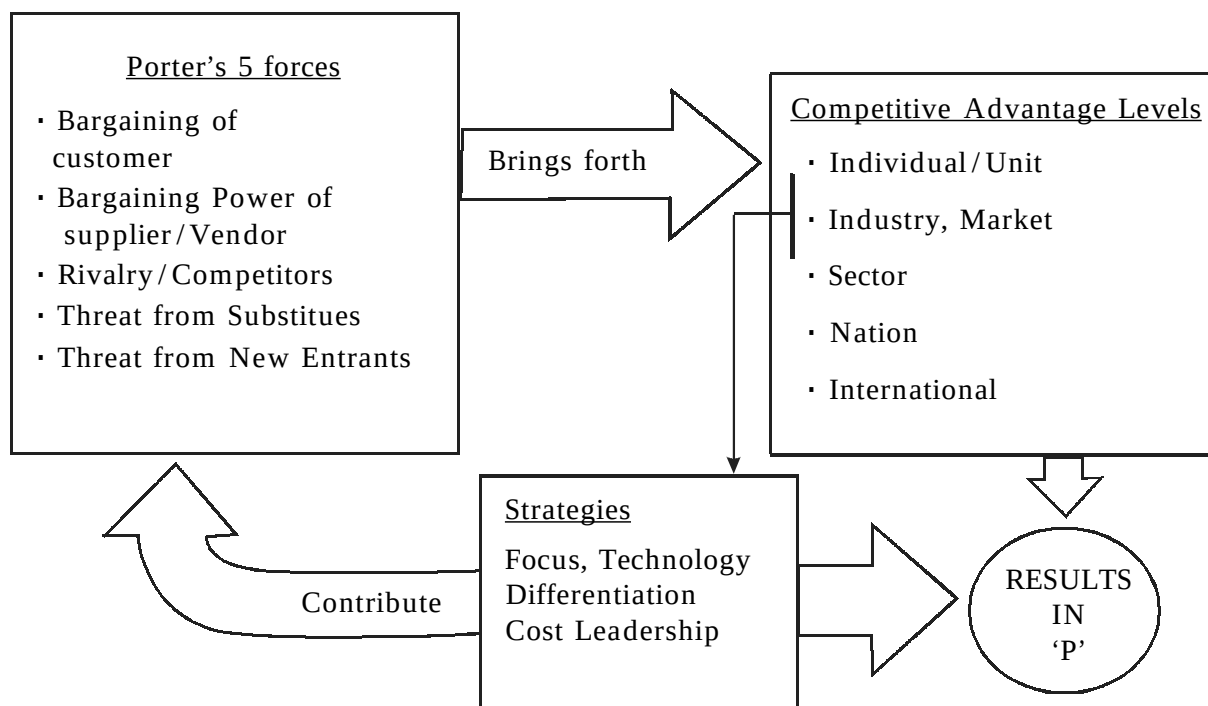
During strategy formulation the four different levels of strategy namely, functional level strategy, business level strategy, global level strategy and corporate level strategy were discussed and their relationship to the alternative forms of strategies were outlined. In the same manner a marketing strategy for a company needs to be an integral part of a corporate strategy, which is the umbrella. The business strategy of a company shapes the marketing strategy, which has to be developed and implemented through functional level strategy involving superior efficiency, quality, innovation and customer responsiveness.



According to David Aakar, the marketing strategy involves laying down strategic specifications as follows:

1. Scope of the product market in which the company desires to compete has to be laid down
2. The level of investment required taking in to consideration the timing, nature and phase of the market will have to be determined.
3. Identify the functional strategies required for implementation
4. The strategic assets like brand name, loyal customer base, talent inventories required for building sustainable competitive advantage will have to be built.
5. In case of multiple businesses need for proper allocation of resources both financial and non-financial becomes important.
6. Synergy among the various market activities for the different business of the same company will have to be developed.

To achieve the necessary the necessary competitive advantage using marketing strategies would mean understanding the relationship of Porter's five forces model with the strategies leading to the results in prosperity through performance.

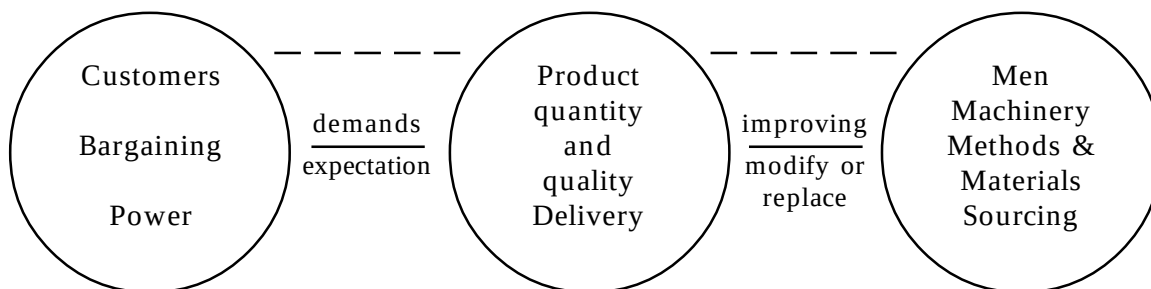


'P' – Customer Advantage, infrastructure growth, employment, technological advancement, formation of clusters, knowledge replication, Technological breakthroughs. "Prosperity through Performance"

**Note:-** Competitive advantage does not over rule the law of Comparative Advantage. A company or nation is said to enjoy a comparative Advantage when it has the ability (natural or sourced) to produce or supply goods or services at a lesser opportunity cost than its competitors. This is based on the Ricardian theory of utilization of ‘resources bundles’ such as land, labor materials and capital. While understanding the CA Model the following questions will arise in the minds of the reader:

1. How can the 5 forces (factors) be an advantage to the company? Why should any company benefit from the forces (which appear to be formidable)?
2. Can the 5 forces really contribute benefits or advantages to the various business or industry levels?

To provide answers and more explanation to the above questions we need to understand the old jungle principle – “faster we are pursued the swifter we become”. A competing company (open system category) will have to be on “on its finger tips” and “on its toes” in order to sustain growth under a non-monopoly market environment; For example let us take the first force ‘bargaining power of customer’. This means that the customers are strong, rational, information seeking, will not easily adjust to poor quality in product or service and that the customers will fight for their rights. Porter connotes bargaining power as demands and expectations towards the product both quantitatively and qualitatively. How can this be an advantage to the company? The answer is simple – now, the company has to perform even better to satisfy such customers. This means that the pressure (feedback) (expectations) given by customers will be passed on to all related departments of sales and marketing and therein to interrelated departments and divisions who will be forced or encouraged to improve their material sourcing product and delivery respectively.]



In a similar manner each of the other of 5 forces brings forth their respective reactions or response within environments. Marketing Guru Kotler comments on CA highlighting the fact that all such force-field interactions in all the three environments has to ultimately be to the customer's advantage, if not so then we cannot consider such forces as a part of Porters CA theory.

A cost leadership strategy is to maintain or improve operating margins through relatively lower cost of production or services compared to the competitors. A cost leadership company is able to offer a product or service at a lower price mainly due to its efficient and effective methods of production continuously improved through application of value engineering, value analysis and Kaizen methods (else where dealt in detail).





A differentiation strategy is seen as an edge over other competitors in terms of product features. Any such edge involved in the selling process is termed as USP (Unique Selling Proposition). An edge sustains and continues to give advantage in improving sales and the loyalty quotient as long as it is not copied or beaten out by the competing forces. So to have a continuing USP innovation through research and development becomes essential. If research and development facilities have not been developed within the organization, many companies go in for acquisition for state-of-art technology from external sources.

Focus as a strategy would pin point the area of cost leadership or differentiation to the target market. This strategy underscores the importance of not dissipating energies over a larger area and not gaining proportionate advantage. For example, introducing a product with USP in a particular sector and gauging the impact on the customer and his response before venturing into larger markets.

Technology as a strategy needs proper monitoring and changing over to a new one before the previous technology becomes obsolescent. This is particularly important in that any new technology brings with it either new feature to a product or a dramatic reduction in costs through efficient processing. Optimization of processes and product design is continuous and so search for innovation through technology is also continuous.

With the growing markets potential entrants have to be reckoned and increased competition will always result. Each competitor will try to develop competitive edge and over a period of time the various strategies of focus, technology, differentiation and cost leadership merge and become multi-pronged, aggressive strategy leading to “best cost provider” status.

### **Growth under inflation**

Bargaining power with the suppliers as well as buyers comes under strain during inflation in the economy. Inflation has both favorable and unfavorable aspects in propelling growth. As per the economic dictum, inflation is a result of “too much money chasing too few goods”. Lot of money in circulation with not much supply of goods will lead to high prices. For increased capacities through either organic or inorganic strategies will take advantage of this situation. However, inflation grips the raw material prices also and as such the operating margins come under strain. Building inventories or following a strategy of make to stock offers better advantage.

If the inflation trend gets intense and a spiral develops a new problem of lower purchasing power of the customer results and suddenly demands starts falling because the customer cannot afford the high price. The immediate future companies that have high capacities may phase recessionary trends that would increase their cost of production through lower capacity utilization. At this point of time, if the recessionary conditions were too prolonged corporate restructuring and turnaround strategies will have to be thought of.

As far as the marketing strategies are concerned inflation will have to be understood fully as to the causes for the trend. The causes can be imported, unexploited resources, too much money in circulation, sudden change in supply position due to statutory regulations, etc.

Due to increase in prices of crude oil in FY 2006-07, FY 2007-08, which is largely, imported in India the refined products like petrol, diesel, and kerosene have become costlier. This is



purely due to imported inflation and proper adjustment of the end product prices will have to be made to maintain the margins. However, in India due to “inclusive” policy followed by the government, products like Kerosene and LPG are subsidized, but still not to the extent of neutralizing the increase in the cost of production. This has put the oil industry in a difficult situation and the strategies followed by the oil companies are in developing efficient purchasing to keep the cost of crude at manageable proportions.

Fiscal policy of the government and the Reserve Bank of India in containing inflation also have its own share of impact on the strategies of any company. Increase in the interest rates leads to lower availability and utilization of funds and the monies in circulation are also controlled through increase of cash reserve ratio. This affects the purchasing power of the customer and the prices of product tend to fall to attract the customer. The strategy to be followed by a company under these conditions will be cost leadership, as there will be better maneuverability in fixing prices.

“Growth under inflation is always a catch 22 situation” as inflation is a double edged sword. It can help you as well as injure you.

## **STEP 6: INITIATE PLANNING PROCESS BY SETTING A FRAMEWORK**

Planning process is an assignment in terms of space - time continuum. Having identified objectives / goals and the strategies to be adopted it is only in the order of things that a framework linking the achievement of various goals in a phased manner using milestones concept. Milestones will have to be enunciated over a time horizon and this forms the basis for long range planning.

Long range planning becomes the basis for break up into annual plans and the strategies to be pursued during the continuous short term plan periods culminating into a long-range plan. Long-range plan can be based on forecasts qualitative or quantitative as the case may be depending on the respective targets. Long-range planning will also involve integrating strategic direction externally oriented planning; forecast based planning, and financial planning to impute values to physical targets. The type of forecast model to be used will depend on the quantum of historical data available if any, data pattern, forecast horizon, preparation time and the sophistication required. These aspects will be discussed in detail in the chapter on model building exercises.

“Tomorrow always arrives, it is always different and even the mightiest company is in trouble if it has not worked on the future. Being surprised by what happens is a risk that even the largest and richest company cannot afford and even the smallest business need not run,” said Peter F. Drucker necessitating an in dept approach to scan the future in a proper way to manage risks.

“Planning is doing things today to make us better tomorrow because the future belongs to those who make the hard decisions today is the motto of Eaton Corporation.”

Taken the above adages corporate planning can be broken up into four phases:

- Strategic direction
- Externally oriented planning
- Forecast based planning
- Financial planning to impute values to physical targets



## STRATEGY FORMULATION

|                                                                                           |                                                                                                                                                            |                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Identifying Strategic direction based on Vision, Mission, Objectives / Goals of a company | Externally oriented planning provides information regarding situation analysis, lead indicators, business cycles, macro level indices movement for economy | Forecast based planning – based on a time horizon five, ten or fifteen years select forecast model on the basis of data available if any, data pattern, forecast horizon, preparation time and the sophistication required | Financial planning – impute values to the physical targets / milestones to be achieved at different points of time in the future. Use of annual budgets of the specific type required eg, zero based, performance budgeting, sunrise or sunset/ operating budgets |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Long range planning—Time-space continuum



## STUDY NOTE - 2

### STRATEGY IMPLEMENTATION

**This Study Note includes:**

- **Corporate Performance, Governance and Ethics**
- **Operationalising strategy**
- **Strategy tools – Benchmarking, Balanced scorecard, EVA, Reverse engineering, BPR and BPM**
- **Controls**
- **Initiate feedback**

#### STRATEGY IMPLEMENTATION

Step1. Lay down principles for corporate performance, governance and ethics

Step2. Operationalising strategies

Step3. Executing strategy using various tools

Step4. Introduce controls

Step5. Detect variance, measure variances, match against control and initiative feedback for revision, if necessary

#### STEP 1. LAY DOWN PRINCIPLES FOR CORPORATE PERFORMANCE, GOVERNANCE AND ETHICS

Corporate performance depends on the four pillars of profitability, solvency, growth and sustainability. A blueprint for such a performance has been evolved through proper linkages of Vision, Mission, Objectives/ Goals, and Choice of strategies and a Framework through a long-range plan broken up into annual plans for operationalising the same. Corporate performance can be monitored, measured, controlled and regulated using specific tools.

Corporate governance is based on the principles of integrity, fairness, equity, transparency, accountability and commitment to values. Good governance practices stem from the culture mind set and shared values of the organization. The evolution of corporate governance shows that the dichotomy of the Board of Directors and the management of a company had two approaches, namely, Agency theory and Stewardship theory. Agency theory argues that shareholder interests require protection by separation of incumbency of roles of board chair and CEO. Stewardship theory argues shareholder interests are maximized by shared incumbency of these roles.



| Approach                                                        | Agency theory   | Stewardship theory             |
|-----------------------------------------------------------------|-----------------|--------------------------------|
| Management                                                      | Agency          | Stewardship                    |
| Principles of governance                                        | Economic        | Sociological and psychological |
| Behavioral                                                      | Individualistic | Collective                     |
| Congruence of interest between the shareholders* and management | Divergence      | Convergence                    |
| Motivation                                                      | Own interest    | Company's interest             |
| Organizational structure                                        | Authoritative   | Participative                  |
| When shareholders evince                                        | Risk aversion   | Risk propensity                |
| Relationship between shareholders and management                | Control         | Trust                          |

\*Shareholders are represented by board of directors

As the shareholders now a days evince keen interest in the practices and performance of the companies, corporate governance has assumed a gargantuan stature.

### **Corporate Governance in India**

An outline provided by the CII was given concrete shape in the Birla Committee report of SEBI. SEBI implemented the recommendations of the Birla Committee through the enactment of Clause 49 of the Listing Agreements. They were applied to companies in the BSE 200 and S&P C&X Nifty indices, and all newly listed companies, on March 31, 2001; to companies with a paid up capital of Rs. 10 crore or with a net worth of Rs. 25 crore at any time in the past five years, as of March 31, 2002; to other listed companies with a paid up capital of over Rs. 3 crore on March 31, 2003. The Narayana Murthy committee worked on further refining the rules of SEBI. The recommendations also show that much of the thrust in Indian corporate governance reform has been on the role and composition of the board of directors and the disclosure laws. The Birla Committee, however, paid much-needed attention to the subject of share transfers which is the Achilles' heel of shareholders' right in India.



### Recommendations of various committees on Corporate Governance in India

| <b>CII Code recommendations (1997)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Birla Committee (SEBI) recommendations (2000)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Narayana Murthy committee (SEBI) recommendations (2003)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>a) No need for German style two-tiered board</p> <p>b) For a listed company with turnover exceeding Rs. 100 crores, if the Chairman is also the MD, at least half of the board should be Independent directors, else at least 30% .</p> <p>c) No single person should hold directorships in more than 10 listed companies.</p> <p>d) Non-executive directors should be competent and active and have clearly defined responsibilities like in the Audit Committee.</p> <p>e) Directors should be paid a commission not exceeding 1% (3%) of net profits for a company with (out) an MD over and above sitting fees. Stock options may be considered too.</p> <p>f) Attendance record of directors should be made explicit at the time of re-appointment. Those with less than 50% attendance should not be reappointed.</p> <p>g) Key information that must be presented to the board is listed in the code.</p> <p>h) <b>Audit Committee:</b> Listed companies with turnover over Rs. 100 crores or paid-up capital of Rs. 20 crores should have an audit committee of at least three members, all non-executive, competent</p> | <p>a) At least 50% non-executive members</p> <p>b) For a company with an executive Chairman, at least half of the board should be independent directors, else at least one-third.</p> <p>c) Non-executive Chairman should have an office and be paid for job related expenses.</p> <p>d) Maximum of 10 directorships and 5 chairmanships per person.</p> <p>e) <b>Audit Committee:</b> A board must have an qualified and independent audit committee, of minimum 3 members, all non-executive, majority and chair independent with at least one having financial and accounting Knowledge. Its chairman should attend AGM to answer shareholder queries. The committee should confer with key executives as necessary and the company secretary should be he Secretary of the committee. The committee should meet at least thrice a year — one before finalization of annual accounts and one necessarily every six months with the quorum being the higher of two members or one-third of members with at least two independent</p> | <p>a) Training of board members suggested.</p> <p>b) There shall be no nominee directors. All directors to be elected by shareholders with same responsibilities and accountabilities.</p> <p>c) Non-executive director compensation to be fixed by board and ratified by shareholders and reported. Stock options should be vested at least a year after their retirement. Independent directors' should be treated the same way as non-executive directors.</p> <p>d) The board should be informed every quarter of business risk and risk management strategies.</p> <p>e) <b>Audit Committee:</b> Should comprise entirely of “financially literate” non-executive members with at least one member having Accounting or related financial management expertise. It should review a mandatory list of Documents including information relating to subsidiary companies. “Whistle blowers” should have direct access to it and all Employees be informed of such policy (and this should be affirmed annually by management). All “related party” transactions must be approved by</p> |



| <b>CII Code recommendations (1997)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Birla Committee (SEBI) recommendations (2000)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Narayana Murthy committee (SEBI) recommendations (2003)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>and willing to work more than other non-executive directors, with clear terms of reference and access to all financial information in the company and should periodically interact with statutory auditors and internal auditors and assist the board in corporate accounting and reporting.</p> <p>i) Reduction in number of nominee directors. FIs should withdraw nominee directors from companies with individual FI shareholding below 5% or total FI holding below 10%.</p> | <p>directors. It should have access to information from any employee and can investigate any matter within its TOR, can seek outside legal/professional service as well as secure attendance of outside experts in meetings. It should act as the bridge between the board, Statutory auditors and internal auditors with far ranging powers and responsibilities.</p> <p><b>f) Remuneration Committee:</b> The remuneration committee should decide remuneration packages for executive directors. It should have at least 3 directors, all non executive and be chaired by an independent director.</p> <p>g) The board should decide on the remuneration of non-executive directors and all remuneration information should be disclosed in annual report</p> <p>h) At least 4 board meetings a year with a maximum gap of 4 months between any 2 meetings. Minimum information available to boards stipulated.</p> | <p>audit committee. The committee should be responsible for the appointment, removal and remuneration of chief internal Auditor.</p> <p>f) Boards of subsidiaries should follow similar composition rules as that of parent and should have at least one independent director s of the parent company.</p> <p>g) The Board report of a parent company should have access to minutes of board meeting in subsidiaries and should affirm reviewing its affairs.</p> <p>h) Performance evaluation of non-executive directors by all his fellow Board members should inform a re -appointment decision.</p> <p>i) While independent and non-executive directors should enjoy some protection from civil and criminal litigation, they may be held responsible of the legal compliance in the company's affairs.</p> <p>j) Code of conduct for Board members and senior management and annual affirmation of compliance to it.</p> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Disclosure and Transparency</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <p>a) Companies should inform their shareholders about the high and low monthly</p>                                                                                                                                                                                                                                                                                                                                                                                                  | <p>a) Companies should provide consolidated accounts for subsidiaries where they</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>a) Management should explain and justify any deviation from accounting stan</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |





| <b>CII Code recommendations (1997)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Birla Committee (SEBI) recommendations (2000)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Narayana Murthy committee (SEBI) recommendations (2003)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>averages of their share prices and about share, performance and prospects of major business segments (exceeding 10% of turnover).</p> <p>b) Consolidation of group accounts should be optional and subject to FI's and IT department's assessment norms. If a company consolidates, no need to annex subsidiary accounts but the definition of "group" should include parent and subsidiaries.</p> <p>c) Stock exchanges should require compliance certificate from CEOs and CFOs on company accounts</p> <p>d) For companies with paid-up capital exceeding Rs. 20 crore, disclosure norms for domestic issues should be same as those for GDR issues.</p> | <p>have majority shareholding.</p> <p>b) Disclosure list pertaining to "related party" transactions provided by committee till ICAI's norm is established.</p> <p>c) A mandatory Management Discussion &amp; Analysis segment of annual report that includes discussion of industry structure and development, opportunities, threats, outlook, risks etc. as well as financial and operational performance and managerial developments in HR/IR front.</p> <p>d) Management should inform board of all potential conflict of interest situations.</p> <p>e) On (re)appointment of directors, shareholders must be informed of their resume, expertise, and names of companies where they are directors.</p> | <p>dards in financial statements.</p> <p>b) Companies should move towards a regime of unqualified financial statements.</p> <p>c) Management should provide a clear description, followed by auditor's comments, of each material contingent liability and its risks.</p> <p>d) CEO/CFO certification of knowledge, veracity and comprehensiveness of financial statements and directors' reports and affirmation of maintaining proper internal control as well as appropriate disclosure to auditors and audit committee.</p> <p>e) Security analysts must disclose the relationship of their employers with the client Company as well as their actual or intended shareholding in the client company.</p> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Other issues</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <p><b>Creditors' Rights</b></p> <p>a) FIs should rewrite loan covenants eliminating nominee directors except in case of serious and systematic debt default or provision of insufficient information.</p> <p>b) In case of multiple credit ratings, they should all be reported in a format show</p>                                                                                                                                                                                                                                                                                                                                                           | <p><b>Shareholders' Rights</b></p> <p>a) Quarterly results, presentation to analysts etc. should be communicated to investors, possibly over the Internet.</p> <p>b) Half-yearly financial results and significant events reports be mailed to shareholders</p>                                                                                                                                                                                                                                                                                                                                                                                                                                              | <p><b>Special Disclosure for IPOs</b></p> <p>a) Companies making Initial Public Offering ("IPO") should inform the Audit Committee of category-wise uses of funds every quarter. It should get non-pre-specified uses approved by Auditors on an annual basis.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                            |

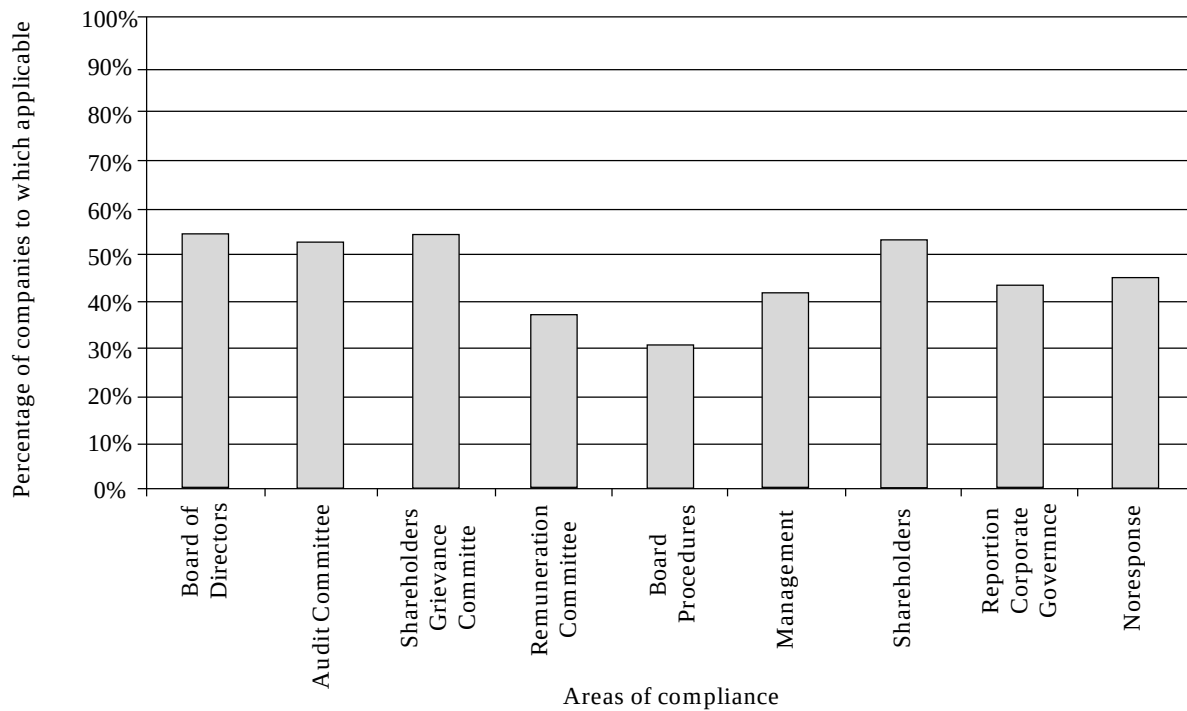




| CII Code recommendations (1997)                                                                                                                                                                                                                                                                                        | Birla Committee (SEBI) recommendations (2000)                                                                                                                                                                                                                                                                                        | Narayana Murthy committee (SEBI) recommendations (2003)                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| <p>ing relative position of the company</p> <p>c) Same disclosure norms for foreign and domestic creditors.</p> <p>d) Companies defaulting on fixed deposits should not be permitted to accept further deposits and make inter-corporate loans or investments or declare dividends until the default is made good.</p> | <p>c) A board committee headed by a non executive director look into shareholder complaints / grievances</p> <p>d) Company should delegate share transfer power to an officer / committee / registrar / share transfer agents. The delegated authority should attend to share transfer formalities at least once in a fortnight.</p> | <p>The audit committee should advise the Board for action in this matter.</p> |

The implementation of various recommendations of the Birla Committee as part of Clause 49 of listing agreement covered substantial segment of public companies as can be seen from the table below:

Compliance with Clause 49 of Listing Agreement, (Sep 30, 2002, BSE companies)





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## **Corporate Ethics and Social responsibility**

Corporate ethics is the foundation on which corporate decisions are made and appraised. An ethical decision is the acceptable decision because it is in the interest of the various stakeholders, the organization or the society. The purpose of business ethics is to set in motion a thinking process to embrace moral implications of strategic decisions. The two main factors in the task of business ethics are:

- Business decisions have an ethical component and
- Managers must choose an avenue for action after weighing the ethical implications

Thus corporate ethics would encompass corporate social responsibility also or in other words, the duty of the corporate body towards the society. This responsibility can find its ramifications through safety measures against occupational hazards, health care, education and pollution control.

Corporate social responsibility (CSR) has evolved into a way of corporate life and become part of any corporate performance. The definition of CSR has also changed into a more inclusive statement.

### **Defining Corporate Social Responsibility**

World Business Council for Sustainable Development defines Corporate Social

Responsibility (CSR) as “The continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large”

The European Commission advocates CSR as “Being socially responsible means not only fulfilling legal expectations, but also going beyond compliance and investing more into human capital, the environment and relations with stakeholders”

In the Indian context it will be relevant to point out that the concept of social responsibility dates back to early 60's of the 20<sup>th</sup> century, Quoted in Mohan, A. Journal of Corporate Citizenship, Summer 2001. In 1965, the then Prime Minister of India presided over a national meeting that issued the following declaration on the Social Responsibilities of Business:

...[Business has] responsibility to itself, to its customers, workers, shareholders and the community ... every enterprise, no matter how large or small, must, if it is to enjoy confidence and respect, seek actively to discharge its responsibilities in all directions ...and not to one or two groups, such as shareholders or workers, at the expense of community and consumer. Business must be just and humane, as well as efficient and dynamic”

CSR can be classified under four heads namely:

- Community involvement
- Socially responsible production processes
- Socially responsible employee relations
- Socially responsible to stakeholders



### **Community involvement**

This involvement with the corporate sector can be both external and internal. A corporate business when it embarks on a project in a location is regulated by the laws of the land in regard to environment pollution, fair compensation for the land taken over from the local residents for the project, compensate for use of natural resources of the community like water, minerals, vegetation...

The new concept of CSR relates to the linkage with the fabric of sustainable development. Protection of the environment and a country's natural resources would certainly be a paramount element of this concept of sustainable development. To carry this list further, it will be relevant to refer the United Nations' Millennium Development Goals (MDGs) and the WEHAB (Water, Energy, Health, Agriculture, and Biodiversity) agenda of the UN Secretary General are key essentials for bringing about a solution to the very basic problems facing society. Consequently, if corporate actions are to target the most fundamental problems facing the society in developing countries, then the components of the MDGs, including water and sanitation, prevention of eradicable diseases and the items included in the WEHAB agenda. It is often asked why a company should worry about anything other than the bottom line measured purely in financial terms. However, business leaders who are evolving long term strategy have understood the importance of CSR and have been quick to accept the new ethos identifying its potential for triple bottom line benefits, namely:

1. Economic bottom line
2. Social bottom line
3. Environmental bottom line

The objectives of sustainable development rest within the principles of corporate social responsibility (CSR), because unless the needs of society, both present and future, are served, sustainable development would remain only a myth. And the most significant step in pursuing CSR is to proactively protect the environment.

On an examination of the activities pursued by Indian corporate in the areas of CSR showed that while improving the environment the companies found that their business interests were also served and a cost-benefit analysis showed that they had realized incomes from the expenditure towards CSR programmes.

Expenditure, therefore, on projects related to CSR, if properly designed, can actually help the business of a company positively in a financial sense. It is estimated that by the year 2020 advertising expenditure of various kinds round the world would total about INR 80 trillion annually. The current expenditure is about 25% that is about INR 20 trillion. This would mean that for advancing the corporate interests through advertising campaigns can better be served by diverting this quantum of expenditure towards CSR programmes. Expenditures on CSR could be far more effective even in a business sense, and yet to go far beyond the purpose of advertising by receiving the trust of society if these expenditures meet the very basic needs of society in general. Hence, such actions would clearly subscribe to Gandhiji's wish of trusteeship involving a new ethical code in voluntary actions of the owners of business.



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In short, CSR in relation to community can be stated as follows:

- Respect the principle of preventive action.
- Support a precautionary approach to environmental challenges.
- Rectify environmental damage as a priority at source.
- Respect the principle that the polluter bears the environmental costs.
- Promote greater environmental responsibility.
- Encourage the development and diffusion of environmentally friendly technologies.
- Contribute to the preservation of biodiversity.
- Contribute to equal access to health facilities.
- Contribute to access to basic food, housing, sanitation and sufficient safe drinking water.
- Contribute to education and access to information with respect to essential health problems in the community.

### **Socially responsible production processes**

Occupational hazards are part of production processes and are often taken care of by adopting safety procedures. For example, in atomic power plant radiation is an operational hazard which can lead to carcinogenic affliction of the employees if not properly protected. In quarries the dust problem is so overwhelming that it can result in silicosis, a pulmonary ailment for those who are working on site. In these cases, statutorily the corporate have to provide safety equipment and adopt safety procedures and the compliance in this regards is total. However, social responsibility would require the company's to periodically monitor the impact of occupational hazards on the employees proactively to avoid any deleterious affect. Certain companies go further to provide dietary supplements to provide immunity in the employees to resist any ill effects due to the hazards.

Another aspect is to reduce any effluents emanating from the process which are harmful to the employees as well as the society surrounding the factory. A big multinational company developed such a positive attitude that they developed a norm to avoid any effluent by improving the processes instead of reducing the effluents. By introducing this norm the company actually benefited by better quality and greater quantum of production and avoiding the costs of treating the effluent. So when the company became more socially responsible in improving the processes, it paid ample dividends. There are many cases where such effluents have been converted into useful raw materials for making new products. These conversions help in improving the environment with in the factory and without, apart from providing additional employment and increasing wealth.

In short CSR in relation to production processes can be stated as follows:

- Reduce energy use
- Limit or alter material use



- Reduce water use
- Limit emissions
- Reduce waste

**Socially responsible employee relations**

CSR in relation to employees would involve the following:

- Respect and ensure the freedom of association and right to collective bargaining
- Do not engage or support the use of forced Labour
- Contribute to the abolition of child Labour
- Do not discriminate with respect to employment and occupation
- Ensure security of employment
- Ensure a living wage.
- Ensure occupational health and safety.
- Respect maximum number of working hours.
- Provide training.
- Guarantee handling of complaints.
- Provide timely information on reorganizations and the right to collective discharge and redundancy schemes.
- Do not use the threat to transfer the operations of the company to other countries as a means for
- Influencing the negotiations with trade unions or employees.
- Do not use double standards.
- Employ and train local staff as much as possible.
- Enable worker representatives to negotiate and confer with decision makers.
- Promote respect for other socio-economic rights, like the right to work, social security, and maternity leave, to take part in cultural life.

These are the standard norms for CSR, but the more enlightened employers take care of the families of the employees by providing health care, education, counseling and improved conditions for living.

**Socially responsible to stakeholders**

While increasing the wealth for the shareholders as one of the major stakeholder, the main stakeholders in the corporate sectors are the shareholders, employees, the surrounding community, the vendors and the consumers. The responsibilities towards shareholders, employees and surrounding communities have already been discussed. CSR with respect to remaining stakeholders, consumers and the vendors' specific attention as follows:

1. Consumers
  - a. Ensure access to essential goods and services.
  - b. Ensure the right to safety, with respect to:
    - i. physical safety



- ii. safety and quality of consumer goods and services
  - iii. food, water and pharmaceuticals
  - c. Ensure the right to information.
  - d. Ensure the right to choice in the market place.
  - e. Ensure the right to be heard.
  - f. Ensure the right to obtain redress.
  - g. Respect the right to consumer education.
  - h. Promote sustainable consumption.
  - i. Respect the right to privacy.
2. Vendors
- a. Ensure the vendor understands corporate values in regard to social responsibilities programme
  - b. Provide raw materials and components of specifications to promote quality of finished product
  - c. Follow ethical practices in supply of materials to avoid adulteration, pilferage and other malpractices
  - d. Follow trade practices and respect law of the land in regard to payment of duties, taxes, etc.
  - e. Treat vendor as a partner and not as an outsider

Chambers, E., Chapple, W., Moon, J. & Sullivan, M. (n.d). CSR in Asia conducted a seven country study of CSR in South Asia. The extent of CSR penetration in the seven Asian countries showed that the average for the seven countries (even including industrially advanced Japan) in terms of value is just 41% compared to say a score of 98% for a developed nation like the United Kingdom. But India for example had an average CSR penetration of 72% compared to Indonesia's 24% and the average of 41% in terms of value.

Especially, in the Indian context corporate performance, governance and ethics have become part of India Inc. and a treatise on the subject becomes part of every annual report under the headings Managements Discussion and Analysis, Corporate Governance, Corporate Social Responsibility. This has been introduced as per the guidelines of Security Exchange Board of India (SEBI). To take care of transparency and share holders interests SEBI have made it mandatory for disclosures of performance results every quarter, improved governance through independent directors forming part of the board, mechanisms to educate the investors periodically of the nuances of corporate strategy and investment. Specific rules have been framed through listing agreements for informing capital markets periodically in specific formats for proper comparison and compliance. SEBI also has taken special care to avoid or reduce the impact of misguided strategies like insider trading, hostile takeovers, pricing for public issues by laying down rules and regulations for the companies to comply with.

## **STEP 2. OPERATIONALISING STRATEGY**

Implementing strategy would involve laying down policies and procedures to be pursued with in and without the company. These policies and procedures can be laid down only if



a proper organizational structure with an inherent culture specific to the company operationalises the required strategies through proper systems.

Whenever an organizational structure is designed three major factors need to be considered:

1. Grouping of tasks into functions and grouping of functions into business units to develop distinctive competencies required for the strategy to be pursued.
2. Delegation of authority and delineation of responsibility among the functions and the business units.
3. According as the complexity of the structure, introduce the required level of coordination or integration as may be necessary.

The types of structures can be either Tall or Flat according to the number of hierarchical levels. The development of any structure will have to reckon with communication problems, distortion of commands and orders as well as high expenditure on salaries, benefits, and accommodation aids, etc. Another very important factor is to establish a relationship between the structure and the strategy to be implemented.

| Impact of strategy on structure |                                   |                                                   |                                                           |                                          |
|---------------------------------|-----------------------------------|---------------------------------------------------|-----------------------------------------------------------|------------------------------------------|
| Formulation of a new strategy   | Resulting administrative problems | Corrective decision on organizational performance | Formation of a modified or a new organizational structure | This leads to organizational performance |

The beliefs and values shape the attitudes and behavior of the employees of an organization and this aspect has a definite impact on the implementation of the strategies. The organizational culture needs to be understood well because it moulds the decision-making process, the extent of cooperation among the various functions and inherent attitude towards the company. Again organizational culture is often shaped by the style of management pursued by the chief executive officer either by being a leader or an autocrat.

### **Descriptions of the styles of two CEO's**

#### **CEO 1 (Participative style)**

(Forty years old. The company has sales of INR 500 Crores, has multiple products, and is divisionally organized)

- Stimulates by inquisitive mind, youthful enthusiasm, ideas and efforts to extend them
- Encourages executives to set high standards, is a strict evaluator and replaces mediocrity
- Decisions are information based and are made after consultation with executives
- Use of authority is reasonably permissive within limits of achievement goals
- Authority is more implied than used
- Catalyses change, pushes for it, and is exhaustive in programming for execution



- Is fully involved in planning, goal setting, and evaluation against targets, with the result that he has a good comprehension of each business and has close, frequent contact with each key executive

### **CEO 2 (Autocratic style)**

(Fifty-five years old. The company has sales of INR 500 Crores, has a single product, and is functionally organized)

- Drives executives by sharpness and toughness of his thought process
- Is respected but not held in affectionately
- Imposes his own standards and is highly demanding in nature
- Becomes emotionally involved in HRD problems and makes arbitrary decisions
- Highly authoritative, has positive point of view but imposes decisions with force
- In spite of efforts to delegate breaths down the shoulder, interferes in operations. Though fully involved in implementation of strategy

Implementing strategy has a facet of control systems, which forms part of the triumvirate and usually lays down policies and procedures to be followed.

### **Hierarchy of policies**

Company strategy: Acquisition of a chain of departmental stores for increasing sales and profitability objectives

Supporting policies:

- All stores will be open from 8 AM to 8 PM for six days in a week with different off days so that customers will be able to market all the seven days in any one of the outlets
- All stores must submit a monthly performance report in the requisite format
- All stores must adhere to laid down guidelines for pricing as per the company manual so that there is uniformity in prices

Divisional objective: Improve division's revenue from INR 10 Mn in 2007 to INR 12 Mn in 2008.

Supporting policies:

1. Beginning January 2008 each one of the divisions sales man must file a weekly activity report as per the requisite format
2. Beginning January 2008 the division will give a five percent incentive of its gross revenue for those sales man who achieved targets
3. Beginning January 2008 inventory levels carried in warehouses will be reduced by 20% in accordance with MRP approach



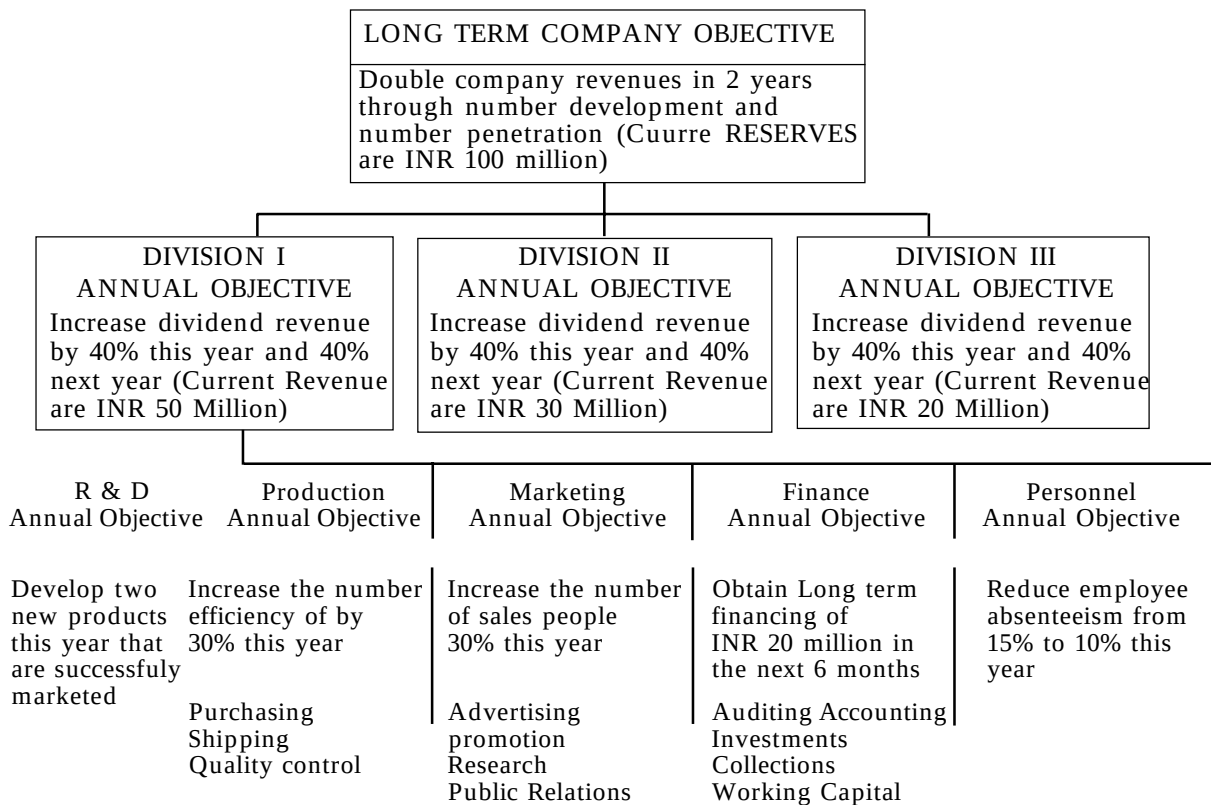


These control systems will provide the management with a set of incentives for motivation of employees for improvement of efficiency, quality, innovation and responsiveness to customers. The annual objectives and targets are enshrined in the master budget that is evolved through cross-functional exercises, marrying physical targets imputing financial values. The control system should also provide specific feed back on the performance of the systems.

In conclusion the integration of various attributes of a company to successfully implement a strategy can be visualized through the Mc Kinsey 7S's as discussed in models chapter.

The exercise of annualizing objectives drawing inspiration as well as continuity from long-term objectives of the company keeps the strategic focus alive. Care should be taken to see that annualized objectives in the form of operating budgets do not become standalone exercises. An example of a company trying to establish annual objectives based on long-term objectives is given below:

### A B C LIMITED



The above illustrates how the ABC Company could establish annual objectives based on long-term objectives.



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### STEP3. EXECUTING STRATEGY USING VARIOUS TOOLS

Having developed a framework incorporating policies, procedures and systems the actual execution of the strategy becomes alive. Execution of strategy in a company is fraught with both resistance and speed breakers due to hierarchical and cultural scenario. To navigate a particular strategy through an organization requires specific tools and these tools have been developed through actual experience with the managerial acumen thrown in. There are certain empiricisms in the approach that need to be tested by each company with the set of variables that need to be correlated. Management tools that are currently used in implementation of strategy can be listed as below:

1. Benchmarking
2. Balanced Scorecard
3. Economic Value added
4. Reverse Engineering
5. Business Process Reengineering
6. Business Process Management

#### 1. Benchmarking

Benchmarking can be defined as a tool for improving performance by continuously identifying, understanding, adopting and adapting best practices and processes followed by an entity internally and externally of a company. It will be necessary to note that a benchmarking exercise is based on “best practices” and not on “best performances”. For “practices” connote continuity in use while performances may be flash in the pan and not continuous. Best practice is a continuous process of learning, feedback, reflection and analysis of what works (or does not work) and why? Types of benchmarking are given below:

- i. **Strategic benchmarking:** This aims at enhancing a company’s holistic performance by analyzing the long-term approaches and strategies adopted by the “best practice companies” for their success in any sector across the globe.
- ii. **Competitive benchmarking:** This is confined to the area relating to the performance characteristics of the companies key products and services. So competitive benchmarking will involve the best practices of the companies in the same sector.
- iii. **Process benchmarking:** This is attempted to improve specific key activities and operations culminating into processes with the help of best practice organizations that are engaged in similar activities and services.
- iv. **Functional benchmarking:** Optimization of functional processes or activities through benchmarking can be done by comparing with different business sectors but engaged in similar functions or processes.
- v. **Internal benchmarking:** This involves benchmarking against the companies own divisions or branches or strategic business units situated at different locations. The purpose is to develop a database which gives access to information and a cross fertilization of the managerial acumen with in the company.



## STRATEGY IMPLEMENTATION

The benchmarking process follows a dozen steps:

### Phase 1: Planning

1. Identify the area to be benchmarked
2. Identify the sensitive performance indicators
3. Identify benchmarking entity
4. Identify the method of collecting data

### Phase 2: Analysis

5. Collection and collation of data and identify gaps
6. Measure and analyze gaps
7. Set phased targets

### Phase 3: Integration

8. Develop consensus on gap analysis and targets set
9. Develop implementation programme

### Phase 4: Action

10. Sensitize the target audience and start implementation
11. Monitor and measure variations in performance
12. Assess the success of benchmarking process quantitatively and qualitatively

A company may benchmark itself either for survival or for growth. In both cases the functional level strategy needs to be pursued, as it is a strategy inside out. The areas for developing excellence as identified as this strategy are achieving superior efficiency, total quality management, innovation and superior responsiveness to customers. The benchmarking approaches to be adopted for the above areas are listed below:

### **Achieving Superior Efficiency (Function and defined roles)**

#### **Production**

1. In mass production, pursue economies of scale.
2. Introduce flexible manufacturing systems for lean production.

#### **Marketing**

1. Adopt aggressive marketing using the experience curve.
2. Reduce customer defection rates by improving brand loyalty.

#### **Human resources**

1. Institute vocational programs to build skills.



2. Encourage self-managing teams.
3. Implement Rewards Scheme for performance.

#### **Materials management**

1. Move towards reducing wastage/inventory.

#### **Information Systems**

1. Use information systems for solutions
2. Use information systems to improve Communication / Coordination.

#### **R & D**

1. Reduce gestation periods

#### **Top Management**

1. Involve companywide commitment to efficiency.
2. Promote cooperation among functions.

#### **Total Quality Management (Function and defined roles)**

#### **Production**

1. Optimize cycle time.
2. Trace defects through cause and effect analysis.

#### **Marketing**

1. Customer Driven Approach
2. Obtain customers' feedback on quality.
3. Approach Robust Quality.

#### **Human resources**

1. Institute TQM education programs.
2. Encourage employees to form quality circles.

#### **Materials management**

1. Rationalize and integrate suppliers
2. Call for third party certification

#### **Information Systems**

1. Institute online controls

#### **R & D**

1. Develop to include quality function deployment.



### **Top Management**

1. Develop leadership and commitment to quality.
2. Set Goals and Offer
3. Welcome suggestions
4. Facilitate cooperation among functions.

### **Innovation (Function and defined roles)**

#### **Production**

1. Associate with R&D on designing products that can be manufactured
2. Collaborate with R & D to develop process innovations.

#### **Marketing**

1. Identify Customer Needs
2. Test market products

#### **Human resources**

1. Hire talented Scientists and Engineers.

#### **Materials management**

1. Identify sources and develop them for required Raw materials / Components

#### **Information Systems**

1. Access relevant data globally in the designated R & D area

#### **R & D**

1. Develop new products and processes.
2. Associate with other R & D organizations externally for assessing development

### **Top Management**

1. Manage R & D holistically including development.
2. Provide adequate resources

### **Superior Responsiveness to Customers (Function and defined roles)**

#### **Production**

1. Introduce customization through implementation of flexible manufacturing. E.g. pull technology

#### **Marketing**

1. Provide After Sales Service



2. Communicate customer feed back to appropriate functions.

### **Human resources**

1. Educate employees on customer expectations

### **Materials management**

1. Improve Operating Cycle through better supply chain management.

### **Information Systems**

1. Introduce Customer Friendly

### **R & D**

1. Associate customers into the product development process through QFD.

### **Top Management**

1. Develop customer driven strategy

In tracking the practices of other companies, **benchmarking** of the process of measuring the company against the products, practices, and services of some of its most efficient global competitors is the ideal way. For example, when Xerox was in the comeback trail in the last lap of 20<sup>th</sup> century, it decided to institute a policy of benchmarking as a means of identifying ways to improve the efficiency of its operations. Xerox benchmarked L.L.Bean for distribution procedures, Deere & Company for central computer operations, Procter & Gamble for marketing and Florida Power & Light for total quality management processes. By the early 1990s, Xerox was benchmarking more than 200 functions against comparable areas in other companies. This process helped Xerox dramatically to improve the efficiency of its operations.

## **2. Balance Scorecard**

Balance scorecard is a system that measures and evaluates the progress of an organization towards strategic objectives incorporating financial indicators as well as three other perspectives namely customer, internal business and learning / innovation. The scorecard delineates the linkages between the four perspectives and the impact / interdependence among them. It helps an organization to provide continuity as well as monitor past present and potential performance. However, the most important aspect of a balanced scorecard is that it enables the company to decide what is vital for the business to set appropriate targets and provide the necessary motivation to the employees for achieving the same.

The balanced scorecard system came of age during the 90's and Kaplan and Norton popularized it in 1992. Professional manager, the official magazine of Chartered Management Institute, UK reports reveal that the companies are very receptive to this tool and nearly 40% of UK companies have used it and 50% of them to a "great extent". Comprehension about this system is wide spread both in US and Europe. This system has been instituted not so much in terms of Key Performance Indicators (KPI) and target setting, but more for aligning actions to the company's



strategy. Actually, a comprehensive scorecard identifies exactly where the company is heading and what the company is trying to achieve. It also explains the objectives and communicates them across the organization.

The first step towards using this tool is to design it properly on the basis of a consensus on the targets for achievement. As the scorecard is very powerful it is important to measure the deviations correctly and early. A delay in tracking may lead to the company derail from its track.

Approach to a balanced scorecard has following steps:

- a. How do we look to shareholders? Or to succeed financially how should we appear to our shareholders? – Financial perspective
  - I. Identify goals / strategic objectives
  - II. Develop measures
  - III. Set targets
  - IV. Develop key performance indicators
  - V. Take initiatives
- b. What must we excel at? Or to satisfy our shareholders and customers what business processes must we excel at? – Internal business
  - I. Identify goals / strategic objectives
  - II. Develop measures
  - III. Set targets
  - IV. Develop Key performance Indicators
  - V. Take initiatives
- c. Can we continue to improve and create value? Or to achieve our vision how will we sustain our ability to change and improve? – Innovation and learning perspective
  - I. Identify goals / strategic objectives
  - II. Develop measures
  - III. Set targets
  - IV. Develop Key performance Indicators
  - V. Take Initiatives
- d. How do customers see us? Or to achieve our vision how should we appear to our customers? – Customer perspective
  - I. Identify goals / strategic objectives



- II. Develop measures
- III. Set targets
- IV. Develop Key performance Indicators
- V. Take Initiatives

Note 1: All the above four steps are not sequential; they are interdependent and as such will have to be developed through cross-functional effort.

Note 2: The Key Performance Indicators will have to be developed for different layers of organization and different functions as they have a cascading effort across the organization. These indicators help to detect whether there is a short fall or the targets have been exceeded.

Note 3: The Key Performance Indicators also become the lead indicators to portray misalignment and strategy at a point of time.

Companies have used balanced scoreboard on an on going basis as part of their strategic management activities. The mission statement is connected to its purpose and spelt out clearly as key values. The balanced scorecard is likened to a steering wheel with four gears (Four perspectives) – customer, financial, operations and people. Latterly, a fifth (perspective) has been included in the form of community to reflect the impact of changing environment. As a steering wheel balanced scorecard communicates the direction of strategy as it is being implemented through out the organization. In some companies the business plan itself is prepared using balanced scorecard and also provide incentives on achievement of results. The results are monitored on quarterly basis and more frequent review meetings.

The scorecard has been improved to account intangibles like managing people, learning perspective, community behavior and so on. However, it is important to interpret these outputs and fully investigate the results, as there is a certain amount of complexity in the framework. Another salient feature of balanced scorecard is that it has a flexible framework that can be applied and adapted for a big or small business and for different circumstances and situations.

Canada's Management Accounting guideline applying the balanced scorecard states "managers can use the balanced scorecard as a means to articulate strategy, communicate its details, motivate people to executive plans and enable executives to monitor results. Perhaps the prime advantage is that a broad array of indicators can improve the decision making that contributes to strategic success...Non financial measures enable managers to consider more factors critical to long term performance."

Corporate social responsibility has gained great currency and has become part of annual reporting by organizations across the globe. In India, the governments during the last decade have been advocating public private partnership in many projects that are oriented towards community development. The focus of a company in respect of corporate social responsibility is to integrate this responsibility into the balanced scorecard's four perspectives so that they can be monitored. It will also establish proper alignment with the company's strategy. The following table shows the integration of corporate social responsibility to balanced scorecard:





### How to integrate CSR into the Balanced Scorecard's four perspectives

| Balanced Scorecard Perspective | Market Forces (Objectives)      | How success or failure is measured using the triple bottom the (A common framework for sustainability reporting) | Target: The level of performance or rate of improvement required. |
|--------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| Financial                      | “Green” consumers               | Energy consumption footprint (annualized lifetime energy requirements) of major products                         | Annual reduction in energy footprint for new products             |
| Financial                      | Energy crunch                   | Direct energy use segmented by source                                                                            | 100% renewable energy                                             |
| Financial                      | Financial                       | Increase/decrease in retained earnings at end of period                                                          | Percentage                                                        |
| Internal                       | Pollution and health            | Standard injury, lost day and absentee rates and number of work-related fatalities (included subcontractors)     | 0 lost-time & fatalities, or long-term illnesses                  |
| Internal                       | Climate change                  | Total greenhouse gas emissions                                                                                   | Annualized reduction                                              |
| Internal                       | Governments and regulators      | Incidents and fines for non-compliance with all laws and regulations                                             | 0 incidents or fines                                              |
| People and Knowledge           | Civil society / NGOs            | Policies guidelines and procedures to address needs of Indigenous people                                         | Number of Indigenous employees                                    |
| People and Knowledge           | Activist shareholders           | Business units currently operating or planning operations in or around protected or sensitive areas              | Number of employees trained in environmental management practices |
| Customer                       | Erosion of trust / transparency | Policy to exclude all child labor                                                                                | No child labor                                                    |
| Customer                       | Globalization backlash          | Supplier performance related to environmental commitments                                                        | Use of 100% organic cotton or coffee                              |



Source: Figure 3, page 859, “The balanced scorecard and corporate social responsibility: Aligning values for profit”, David Crawford and Total Scaletta – The Management Accountant, Volume 42, No.11, November 2007.

### 3. Economic Value Added (EVA)

Management performance has always been evaluated by financial ratios and the management gurus have propagated management of ratios through both numerator and denominator management. On such important ratio is

$$\text{Return on Capital Employed} = \frac{\text{Profit before Interest and Tax}}{\text{Net Fixed Assets} + \text{Net Current Assets}}$$

Or

$$\text{ROCE} = \text{PBIT} / (\text{NFA} + \text{NCA})$$

This ratio had been used for nearly a century for assessing both divisional and company performances from the operational perspective and utilization of funds. Improvement in this ratio has been attempted by the managers through both numerator and denominator management.

While the financial structure of an organization evolved **cost centers** gave way to **profit centers** to provide motivation to divisional managers. At this juncture ROCE was considered as the best measure of a profit centre. However, the divisional heads chose to improve this ratio more by denominator management, which is by reducing the denominator rather than augmenting the numerator. This led to an occupational hazardous situation where the Net Fixed Assets were being phased out but the repair cost to maintain the fixed assets were on the increase without replacing the fixed assets. Technological obsolescence was looming large in the horizon and many companies collapsed due to their fixed assets becoming anachronistic and inefficient. So the profit center had to be upgraded into a **strategic business unit** to take care of the business holistically to include strategy both in respect of business functions and technology with a futuristic tilt.

Arising out of this development *Economic Value Added (EVA)* as an integrated financial system has become important tool for guiding strategy. This forms the basis of an integrated financial system such as

- Setting financial goals
- Developing long-term strategic plans
- Short-term profit plans
- Making capital investment and disinvestment decisions
- Measuring operating performance
- Determining incentive compensation

The above financial system is designed as

- a. Corporate financial goals are identified in terms of Earning Per Share and Return on Net Worth



- b. Individual lines of business are assessed in terms of Return on Assets
- c. Capital investment<sup>4</sup> is analyzed in terms of Discounted Cash Flow or Internal Rate of Return
- d. Acquisition are judged on the basis of their Contribution to Earnings Growth
- e. Division are evaluated with reference to budgeted targets
- f. Incentive compensation schemes are based on targets achieved
- g. Investor communication is normally in the form of Earnings Per Share and Dividends distributed

Economic Value Added can be computed in four different, yet equivalent ways,

- a.  $EVA = NOPAT - c * x (CAPITAL)$
- b.  $EVA = CAPITAL (r - c^*)$
- c.  $EVA = [PAT + INT (1-t) - c^* x (CAPITAL)]$
- d.  $EVA = PAT - K_e \times EQUITY$

Where,

- NOPAT is Net Operating Profit after Tax
- $C^*$  is Cost of Capital
- CAPITAL is Economic Book Value of Capital Employed in the firm
- “r” is Return on Capital =  $NOPAT / CAPITAL$
- PAT is Profit after Tax
- INT is Interest Expense of the firm
- “t” marginal Tax Rate of the firm
- $K_e$  is Cost of Equity
- EQUITY is equity employed in the firm

The EVA system implementation involves six steps in an organization:

- a. Articulate top management commitment to EVA
- b. Develop acceptable definition of EVA
- c. Nominate EVA centers
- d. Identify drivers of EVA
- e. Develop incentive compensation system
- f. Educate all employee about EVA

Having implemented EVA system the ethos of a company will be to interpret EVA as per the requirement of each center and compare it with the targets. Each division then attempts to improve EVA and this can be done in four ways:



- Improving Operating Performance (Functional Level Strategy)
- Improving profitability of investment (Business Level Strategy)
- Divestment of unproductive capital (Global Corporate Level Strategy)
- Reducing the cost of capital (Corporate Level Strategy)

### Balance sheet and profit and loss account of ABC Corporation

ABC cost of equity is 18 per cent. The interest rate on its debt is 12% which, given a marginal tax rate of 30%, translates to a post-tax cost of debt of 8.4%. Since ABC employs debt and equity in equal proportions, its weighted average cost of capital is:  $0.5 \times 18.0 + 0.5 \times 8.4 = 13.2\%$

ABC NOPAT is  $PBIT (1 - \text{tax}) = 42 (1 - 0.3) = \text{Rs. } 29.4$  million. Given a CAPITAL of Rs.200 million, ABC return on capital works out to  $29.4/200 = 0.147$  or 14.7%.

(Rs. In Million)

| Balance sheet as on 31/03/2007 |                  | Profit and Loss statements as on 31/03/2007 |     |
|--------------------------------|------------------|---------------------------------------------|-----|
| Equity 100                     | F. Assets 140    | Net Sales                                   | 300 |
| Debt 100                       | Net C. Assets 60 | Cost of goods sold                          | 258 |
| 200                            | 200              | PBIT                                        | 42  |
|                                |                  | Interest                                    | 12  |
|                                |                  | PBT                                         | 30  |
|                                |                  | Tax                                         | 9   |
|                                |                  | PAT                                         | 21  |

Based on the information, ABC's EVA may be computed in four different, yet equivalent, ways:

$$\text{EVA} = \text{NOPAT} - c^* \times \text{CAPITAL}$$

$$29.4 - (0.132) \times 200 = \text{Rs. } 3 \text{ million}$$

$$\text{EVA} = \text{CAPITAL} (r - c^*)$$

$$200 (0.147 - 0.132) = \text{Rs. } 3 \text{ million}$$

$$\text{EVA} = [\text{PAT} + \text{INT} (1 - t)] - c^* \times \text{CAPITAL}$$

$$[21 + 12 (0.7)] - 0.132 \times 200 = \text{Rs. } 3 \text{ million}$$

$$\text{EVA} = \text{PAT} - K_e \times \text{EQUITY}$$

$$21 - 0.18 \times 100 = \text{Rs. } 3 \text{ million}$$

**Numerical illustration of value creating strategies**Base Case

CAPITAL: 10,000

NOPAT: 2000

C\*: 15 PERCENT

r: 20PERCENT

$$\text{EVA} = \text{CAPITAL} \times (r - c^*) = 10,000(0.20 - 0.15) = 500$$

**Strategy 1: Improvement in operating performance**

1. NOPAT increase from 2000 to 2250, due to greater operating efficiencies. This rises to 22.5 percent. As a result EVA raises to 750
2.  $\text{EVA} = \text{CAPITAL} \times (r - c^*) = 10,000(0.225 - 0.150) = 750$

**Strategy 2: Profitable Investment**

1. A new project requiring 10,000 is expected to earn a return of 18 percent thereby adding 1800 to NOPAT. This project will increase EVA, even though the consolidated return will decline to 19 percent (the average of 20 percent and 18 percent)
2.  $\text{EVA} = \text{CAPITAL} \times (r - c^*) = 20,000(0.19 - 0.15) = 800$
3. Note that maximizing EVA is more important, not maximizing return on capital. Hence the project should be accepted

**Strategy 3: Withdrawal of unproductive Capital**

1. 1000 of working capital can be liquidated with only a marginal decline of NOPAT. NOPAT will fall by just 50. Withdrawing this working capital would increase the rate of return to 21.67 percent  $(2000 - 50) / (10000 - 1000)$  and EVA to 600
2.  $\text{EVA} = 9000 \times (0.2167 - 0.150) = 600$

**Strategy 4: Reduction in the cost of capital**

1. The capital structure of the firm is altered and its change lowers the cost of capital to 13%, without affecting anything else. As a result EVA rises from 500 -700

$$\text{EVA} = \text{Capital} \times (r - c^*) = 10,000 (0.20 - 0.13) = 700$$

**4. Reverse Engineering**

From time immemorial man has been in pursuit of discovery and the ways and means by which he did his pursuit was through understanding nature. He tried to trace the origins of any natural product so that the production cycle or the operation cycle is fully understood. This sense of research into various steps of development from a seed to a tree, a cost to the effect he added his own expertise to synthesize products where natural products were available to improve on their properties. Natural vanilla was available when synthetic vanilla was available. Again natural indigo was available from the farmlands, to increase the availability throughout the year and improve the properties synthetic indigo was produced. In all these



processes reverse engineering method has been applied. Reverse engineering provides the research scholars an insight as to how an existing product was developed and this revelation could lead to a development of similar new products or an improved same product with technological break through.

Reverse engineering has been in prevalence for over centuries and Indian engineers have been particularly successful in reinventing many products through this methodology. Modification or developing a new process by which the same product can be produced at a lower cost with improved properties was achieved through reverse engineering without infringing the patent laws. The patent laws existed until the last decade in India was process oriented but from 2005 with the globalization in full steam the new intellectual property rights regime with product patent orientation has become a dampener on reverse engineering for the invention. However, reverse engineering still continues to be a tool to crack opens the secrets of production of a product and a total understanding of the product.

Reverse engineering is essentially a four-stage development process. The first stage is a development of awareness. At this stage a product that has come into the market and has been accepted by the customer becomes the target for a competitor. The competitor identifies this product, which has just started its life cycle and has a lot of growth potential and tries to gather whatever information is available in the public domain. In the second stage the competitor initiates reverse engineering. He obtains the new product from the market, breaks open the formula, analyses it to understand the nuances of processes, which have produced the product. This part of the research work is time consuming as it has a lot of trial and error judgments involved and the cost also is fairly high. In the third stage the competitor has been able to develop a know how through reverse engineering in the second stage and tries to design new prototypes improving on the product already in the market. The product development goes through their entire gamut of design, producing prototype, test marketing, modifying characteristics and finally ramp up. In the fourth stage commercialization is taken up either to compete with the product already in the market or to substitute it through replacement.

In conclusion though reverse engineering has taken a back seat for introduction of new products akin to the products already floated in the market due to IPR restrictions, the advantage of reverse engineering to understand any new product gives a competitor or entrepreneur new insights for similar products of a family. The basics to understand nature like the cracking of DNA or the processes of cloning etc., reverse engineering still has a big role to play as a functional strategy.

## **5. Business Process Reengineering**

Reengineering has been defined as “the *fundamental* rethinking and *radical* redesign of business *processes* to achieve *dramatic* improvements in critical contemporary measures of performance as cost, quality, service and speed”. The keywords in the above definition clearly indicate the following:

1. The approach to reengineering is from the basics and not just a window dressing operation



2. The approach has to question the basics as to the relevance of the bygone era to the present reality
3. The purpose of reengineering is to bring about a dramatic change or in other words not just an improvement through synergy but as a total turn around
4. Processes, which a collection of activities culminating to a definable stage and are critical, they need to be re-engineered to help a, b and c points. This is in view of the fact that these critical processes are the main constraints and the removal of these constraints will unlock the total flow and energy of the organization.

The reengineering methodology has four phases as follows:

**Preparing for change:**

The top management understands need for a reengineering process to be introduced in the organization as a vital tool to turn the organization around. It takes entire organization into confidence and starts exploring the reengineering process.

**Planning for change:**

This includes application of radical approach to the existing strategy and development of totally a new vision, mission and guiding principles. On the basis of this a new strategic plan has to be developed.

**Designing change:**

Getting into the brass-tacks of the total change to be brought about and then follow specific steps to design the new processes.

**Review and evaluate progress:**

Critically evaluate the results and the problems phased during implementation for any operational modification or breakthrough

The detail steps of the four phases are mentioned below:

**Preparing for change**

1. Top management explores the reengineering process.
  - a. Educate management on the reengineering process and the need to change.
  - b. Create a reengineering steering committee.
  - c. Develop an initial action plan.
2. Prepare workforce for involvement and change.

**Planning for change**

3. Create a vision, mission, and guiding principles.
  - a. Identify core competencies.
  - b. Develop a vision statement.
  - c. Develop a mission statement.
  - d. Determine guiding principles.



4. Develop a three to five year strategic plan.
  - e. Conduct a current business review.
  - f. Determine external environmental factors.
  - g. Conduct an internal health review.
  - h. Complete business-as-usual forecasts.
  - i. Conduct a gap analysis.
  - j. Develop a three – five-year strategic plan.
5. Develop yearly operational or breakthrough plans.
  - k. Develop operational objectives.
  - l. Organize resources.
  - m. Rank potential changes in order of priority.
  - n. Develop one-year operational plans and budgets.
  - o. Apply and evaluate operational plans.

### **Designing change**

1. Create a vision, mission, and guiding principles.
  - a. Determine the critical organizational processes.
  - b. Measure the critical processes.
  - c. Rate the process performance.
  - d. Identify opportunities and the process (es) to be reengineered.
2. Establish the scope of the process-mapping project.
  - e. Identify process stakeholders.
  - f. Create the project's mission and goals.
  - g. Structure and select team members.
  - h. Develop a work plan.
3. Map and analyze the process.
  - i. Depict the process in a flow-chart.
  - j. Depict the process in an integrated flow diagram.
  - k. Complete the process-mapping worksheet.
  - l. Complete the cultural-factor analysis.
4. Create the ideal process.
  - m. Describe the ideal process on paper.
  - n. Compare the current process to the ideal process.





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- o. Assess the gaps.
- 5. Test the new process.
  - p. Develop pilot objectives.
  - q. Develop pilot measures.
  - r. Gain agreement and approval from stakeholders.
  - s. Conduct a pilot test of the new process.
  - t. Assess the impact of the pilot test.
- 6. Implement the new process.
  - u. Develop an implementation action plan.
  - v. Execute the plan.

### Evaluating change

- 7. Review and evaluate progress.
  - w. Evaluate organizational measures.
  - x. Having the steering committee evaluate the results.
  - y. Revise the three-to five-year strategic plan, if necessary.
- 8. Repeat yearly operational / breakthrough planning cycle.

In India business process reengineering has come of age and many companies have successfully attempted bringing dramatic change. Examples can be drawn from the reengineering done by ICICI Bank when they took over Madhura Bank, Indian Railways when they introduced computerized reservation, State Governments introducing reengineering for registration of land and properties, election commission of India reengineering the electoral process itself.

### 6. Business Process Management (BPM)

Another important tool for implementing strategy is the Business Process Management that has come of age. Mark McGregor, a management Guru from U.K has popularized this framework by developing the BPMG 8'Omega framework. The crux of this approach is the grid analysis and the relationship through the grid of the five important perspectives namely, purpose, strategy, people, process and systems with a proven structured approach following a definite path starting with discovery, analysis, design, validation, integration, implementation, control and improvement (DADVIICI).

|          | Discovery | Analysis | Design | Validation | Integration | Implementation | Control | Improve |
|----------|-----------|----------|--------|------------|-------------|----------------|---------|---------|
| Purpose  |           |          |        |            |             |                |         |         |
| Strategy |           |          |        |            |             |                |         |         |
| People   |           |          |        |            |             |                |         |         |
| Process  |           |          |        |            |             |                |         |         |
| Systems  |           |          |        |            |             |                |         |         |



**Purpose:** Arising out of vision and mission of a company the key perspectives, strategy, people, process and systems need to be integrated into single-minded purpose (Ekaagra sandhi). This step is very important in as much as purpose enshrines both quantitative and qualitative aspects of vision and mission in a seamless form.

**Strategy:** Strategy is what separates winners from losers, it is a guiding principle behind what we do and why we do? If projects are not related back to strategy they are not delivering the business value needed for long-term success. Understanding strategy better with the purpose for which we are applying the resources in the most appropriate manner can infuse the purpose in the project.

**People:** Traditional approaches and frameworks have paid little attention to the people perspective. It is necessary to understand the impact of change on people to increase the chances for success in a project. Several organizations have succeeded by just dealing with people, process and strategy without much attention being paid to the other perspective – systems. Or other words, systems are for people and not people for systems. People are the lifeblood of any organization. If the company does not adequately recognize and understand the people impacts of any change, the project tends to fail. People are being bombarded with change in every aspect of their life and the last thing they feel comfortable with is yet, more change at work. The people perspective ultimately controls the success or failure in strategy implementation through projects.

**Process:** Process perspective can relate to enterprise business processes or value chains, business processes or just processes. It is the process that is at the heart of an organization second only to the people perspective. If the company does not fully understand the processes used in the organization, then the chances are that unnecessary waste/ cost will be incurred.

**Systems:** Most of the earlier frameworks commonly in use attack the problem from a systems perspective and relate the rest of the world to them. In the 8 Omega framework, systems have been accorded a position where it designed taking into consideration the purpose, strategy, people and process. Naturally, systems perspective is the invisible thread that connects the above four perspectives. The Bhagavad Gita has offered many systems to approach the Atman, based on the level of comprehension of the individual of the relationship between body and soul. The system to be followed by the individual to reach the goal of Atman is to be selected very carefully. As the individual has control only over the system the results automatically follow if the selection of the system has been properly made on the basis of purpose, strategy, people and process. Systems are also about the way that the people work.

These five perspectives in the 8 Omega framework is built up as follows (DADVIICI):

**Discovery:** Discovery is the starting point for any project or any initiative. Until the company is certain that it has collected all the data and information it cannot proceed to the next stage of analysis. The risk in the discovery stage is that all the variables that impact the perspectives are not identified always. For this stage seeks to identify the root causes to the problems faced by the company. The steps to be followed in the discovery stage are as follows:

1. Compile current and future strategic plans
2. Determine key decision makers
3. Identify strategic planning process



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4. Audit current skills
5. Determine process roles
6. Map functional activities to customer outcomes
7. Understand current process capability
8. Identify process dependencies
9. Map current metrics
10. Audit current systems
11. Capture systems development plans

**Analysis:** Once the company comprehends the issue at hand and has determined the scope analysis can be started. Again the issue is analyzing the problem and not jumping into premature evaluations of potential fixes. The key point here is to do just enough and no more than the company needs. The steps involved in the analysis are given below:

1. Undertake strategic analysis of best practice process performance
2. Identify critical skill sets for improving process performance
3. Establish competence framework
4. Size the effort to move to
  - a. Awareness
  - b. Critical mass
  - c. Fully process centric working
5. Audit the current processes
6. Identify root cause analysis
7. Quantify tactical opportunities available
8. Develop a case for change
9. Complete BPM maturity model
10. Assess systems alignment with process objectives
11. Prioritize system development to align with process objectives
12. Identify business process management systems (Available as specific / generic software systems in the market)

**Design:** In the design phase the company seeks to identify new solutions. In order to do this the company should look and evaluate multiple solutions. The company should also identify some quick wins – the ones that can be put in place and easily in order to encourage the management activity. The company should also propose some outlandish solutions, as many management teams would like to drive the extra mile. It will be apt to quote here Lord Byron “Your desire must extend your grasp, or what else is the heaven for”.



The steps to be followed in this phase:

1. Established “hardwired” strategic view of processes
2. Develop process system design to incorporate key performance measures allied to strategy
3. Create strategic process model
4. Develop people skills development programme and identify reward systems
5. Align customer outcomes to key business processes
6. Create /Refine process model
7. Establish a strategic process model outline
8. Plan process priorities aligned to customer outcomes
9. Select systems for tactical and operational deployment of process change
10. Categorize systems development effort to optimize process deployment

**Validate:** The validation phase is where the company starts to test that the new processes will actually work in the organization. Often, issues crop up during the implementation phase that should have been foreseen, had some one tested the proposed solution was implementable in the organization. Often, the best solution is not the most suitable to the company. All the organizations are different and as such there is not ideal solution. The steps for validation are given below:

1. Simulate strategic roll out to test strategic process assumptions
2. Executive reviews
3. Review process competencies against targets and objectives
4. Confirm skills development programme to grow process knowledge and application
5. Review and agree process plan which sponsors an executive team
6. Confirm and size strategic process model
7. Simulate process activities with in current and developing systems
8. Refine systems development approach
9. Populate strategic process model

**Integrate:** Integration is a phase little understood in the business process world. But the fact is that the company has to put new processes in place in an organization where old processes already exist. More time will have to be spent on this phase for proper integration of the old and the new. The steps involved are:

- Redefine existing strategy into strategic process model
- Undertake organization wide communications defining and emphasizing process objectives
- Align current and developing process management competence system with existing



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reward system

- Migrate people management systems into strategic process model and framework
- Appoint key process people and roles
- Dovetail process change across main functions and activities
- Determine and refine process integration programme
- Migrate legacy systems into new system environment
- Optimize process role out through current systems

**Implement:** Now that the proper groundwork has been done, the company can begin implementation of the new processes or solutions. At this stage communication is very vital, especially as the resistance to change will have to be overcome. The steps for implementation of the new processes or solutions are given below:

- Deploy strategic process model
- Communicate improved process flow and operating guidelines
- Conduct training on improved processes
- Establish BPM awareness and education programme
- Establish process teams priorities
- Manage process integration programme
- Role out process controls
- Deploy new BPM systems
- Refine current systems to achieve process objectives
- Manage roll out and re assess integration approach through BPM audit and feedback

**Control:** During the analysis and design phases the company would have developed measures and metrics to judge the success of the processes or solutions. The company should ensure that the gains are retained and not reverting back to old ways. The steps for instituting controls are as follows:

- Review and monitor strategic process measures
- Provide feedback and action planning to refine strategy
- Review and maintain training and education approaches
- Roll out and maintain BPM awareness
- Manage process metrics
- Hold and continually improve process performance gains

**Improvement:** This is a phase that separates those doing improvement projects from those looking at BPM as a way of life. However well a company does there are always new and innovative ways to improve. The maxim of continuous improvement can never be gainsaid.



The steps in the improvement phase:

- Embrace all key strategic activity
- Align strategy to customer outcomes
- Grow and refine strategic process model
- Broaden process understanding
- Deepen process skills
- Develop process competence
- Populate strategic process model
- Extend process scope across the value chain
- Reinforce customer proposition through process evolution

In conclusion the essence of BPM can be spelt out in the following words:

- a. Identify best practice within the organization
- b. Identify best practice applied in the industry
- c. But, better, cheaper, faster is not enough
- d. In future it will the next practice organizations that will prosper, because
  - i. They are more agile
  - ii. They break the rules
  - iii. They constantly innovate
  - iv. They disrupt markets

## **STEP 4. INTRODUCE CONTROLS**

With the various strategies being implemented using different tools, it is absolutely necessary to oversee that the implementation is proceeding in the correct direction and pace. Towards this, certain strategic controls need to be established for detecting variations from standards. These strategic controls provide the necessary feedback. There are four types of controls, which are normally established.

### **1. Premise control**

Strategy implementation is always based on certain premises and assumptions and these assumptions need to be validated from time to time. The assumptions can be broadly divided into two types namely environmental based and industry based. Environmental factors relate to demography, statutory regulations, technology, inflation, financial indicators, etc. Industry factors are based on the information on competition, suppliers, substitutes, market, etc. All these assumptions are quantified as far as possible so that a comparison can be made with actual

### **2. Implementation control**



The implementation phase is made up of a number of steps sequentially performed. These steps can be a part of the network and are designated by the time taken, resources required and the critically to the total project. The implementation control aims at monitoring strategic thrusts and milestone reviews.

### 3. Strategic surveillance

This control is mainly to ward off any threats or reduced impact of the same. This surveillance is designed to monitor specific events, internal and external to the company that may develop into a threat for the implementation. Examples can be that a particular industry enjoys certain favorable tax sops, export import subsidies, etc. Removal of such sops may threaten the industry itself and the assumptions made for implementation of strategy.

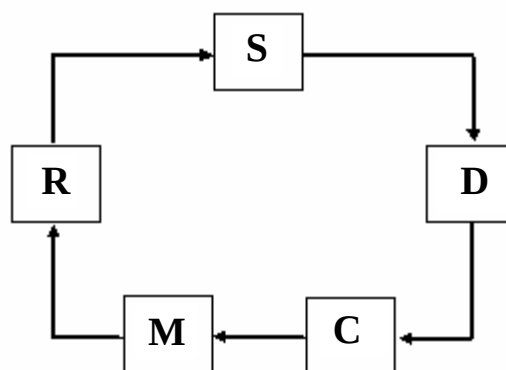
### 4. Special alert control

This control is mainly introduced to expect the unexpected. In many a strategy implementation project it spans over period of years and sudden unexpected events can totally derail the course of implementation. Under such circumstances such an occurrence should be handled on a war footing and a crisis management team will have to go into action immediately. For example, devaluing Indian Rupee in early 1990's put many a project into jeopardy and crisis management efforts had to be put into action. Special alert control in this regard is able to bring to the notice of the management any impending contingency on the basis of certain lead indicators so that the company is not caught off guard.

## STEP 5. INITIATE FEEDBACK CONTROL

Having established the four different controls it is necessary to establish a feedback control system as shown below:

Feedback control loop



Where, S is system, D is detection, C is control, M is measurement and R is regulation.

For our purposes a company can be regarded as a system (S), which is implementing a strategy and has established controls (C). Any deviation from the control is detected by a



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sensor (D) and compared with the control (C) to measure the deviation (M). According as (M) corrective action as regulation (R) is put into the system as a feedback. Now in a strategy implementation four different types of controls and as such detection of deviation will have to be monitored by specific agencies (D).

The agencies can be cost control cell for cost overrun, project-monitoring cell for time overrun, steering committee for strategy deviations and corporate planning cell for environmental scanning to identify impending threats. This monitoring is an ongoing process. Senior management on the basis of the nature and quantification of the deviation normally take the corrective action. This may be in the form of crashing using cost slope and probability models.





## STUDY NOTE - 3

### ALTERNATIVE STRATEGIES REVISITED

This Study Note includes:

- **Joint ventures**
- **Concentric growth and diversification**
- **Mergers and Acquisitions**
- **Hostile takeover**
- **Models for valuation**
- **Divestitures**
- **Corporate Restructuring**

### ALTERNATIVE STRATEGIES REVISITED

| <b>Four groups of alternative strategies</b>                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Corporate Level Strategy</b> <ol style="list-style-type: none"> <li>1. Vertical Integration               <ol style="list-style-type: none"> <li>a. Forward Integration</li> <li>b. Backward Integration</li> </ol> </li> <li>2. Horizontal Integration</li> <li>3. Concentric Diversification</li> <li>4. Horizontal Diversification</li> <li>5. Retrenchment</li> <li>6. Divestiture</li> <li>7. Liquidation</li> </ol> | <b>Global Level Strategies</b> <ol style="list-style-type: none"> <li>1. Vertical Integration               <ol style="list-style-type: none"> <li>a. Forward Integration</li> <li>b. Backward Integration</li> </ol> </li> <li>2. Horizontal Integration</li> <li>3. Market Penetration</li> <li>4. Market Development</li> </ol> |
| <b>Business Level Strategy</b> <ol style="list-style-type: none"> <li>1. Market Penetration</li> <li>2. Market Development</li> <li>3. Product Development</li> <li>4. Concentric Diversification</li> <li>5. Horizontal Diversification</li> <li>6. Divestiture</li> </ol>                                                                                                                                                  | <b>Functional Level Strategies</b> <ol style="list-style-type: none"> <li>1. Market Penetration</li> <li>2. Market Development</li> <li>3. Product Development</li> </ol>                                                                                                                                                          |

Companies during the life cycle need to adopt different strategies, which are both organic and inorganic according as the availability of resources as well as the exigency for implementation of the strategy. The above alternative strategies grouped under four levels take on different garbs when they are classified under organic or inorganic.



- **Expansion:** A forward backward and horizontal integration can be an organic expansion or inorganic mergers and acquisitions, tender offers, concentric diversification, horizontal diversification and joint ventures.
- **Divestitures:** Divestitures include spin offs, split offs, split ups, equity carve outs.
- **Corporate Restructuring:** Corporate restructuring includes retrenchment and liquidation, premium buy backs, exchange offers, share repurchases, going private and leveraged buy-outs.

### Expansion

A company that wants to grow decides enlarge its activities so that it is in a position to increase its market share. The type of expansion activity depends on the stage of lifecycle of the industry. If the industry in the growth stage of the life cycle there is an urgency to grow and the opportunities will have to be taken immediately. This is where the inorganic expansion in the form of joint ventures, mergers and acquisitions come into reckoning. If the industry is in shake out stage, then the organic expansion in the form of synergy or substantial increase in capacity as adopted.

## JOINT VENTURES

Joint ventures are equity arrangements between two or more independent firms. They are usually temporary business partnerships in which two or more business entities (proprietorship, partnership, corporation, or other) join for the purpose of conducting a specific project. Joint ventures are used frequently in the construction business. The joint venture is treated as a separate entity from the other business of the partners, and it keeps a separate set of accounts. When the project is completed, the joint venture is terminated, with all profits distributed to its members (or losses covered by them). In one sense, the joint venture can be considered a temporary form of business organization. In other respects, the possible use of the joint venture form is a strategic alternative.

- Two partners coming together to create a common undertaking contributing money, effort, knowledge, skill or any other asset
- The subject matter of a joint venture is interest in joint property
- Right of management or mutual control of the enterprise
- Presence of “adventure” to anticipate profit
- Right to share in profit
- Normal limitations to the objective of a single undertaking or ad hoc enterprise

### Strategic alliances

Strategic alliances have also been classified as *joint venture* except that these alliances are born out of distinctive strategic advantage of one partner being sought by the other partner having good property or technology or products. The strategic advantage can be in the form of providing state-of-art technology, market expertise or market share or distribution network, etc. There are different types of strategic alliances and they are classified as follows:



- a. **Collisions between two partners:** This sort of an alliance arises between two strong competitors and such alliances do not continue for long. Normally, they either end in dissolution or acquisition by one of the partners or even merge
- b. **Evolution to a sale:** Two strong but compatible partners forge an alliance, but here also competitive tensions do develop culminating into a sale by one of the partner to the other
- c. **Alliances between complementary firms:** Two strong and complementary firms come together for strategic alliance and this normally continues well for a period to be determined by both of them
- d. **Disguised sale:** A strong company forges an alliance with a weak company and this eventually ends with the strong partner acquiring the weaker one over a period
- e. **Boot strap alliance:** Here also the alliance is between a strong and weak companies, but the weak company utilizes the strategic alliance to improve its competencies but again over a period the stronger company acquires the weaker one after developing it
- f. **Alliances of the weak:** Two weak companies strike a strategic alliance but the real strategy is missing and the alliance normally fails.

Another classification of strategic alliances is based on the concept developed by Yves L.Doiz and Gary Hamel who feel that

- a. A strategic alliance is developed between two potential competitors to ward off rivalry. Eg. Air bus consortium formed by European countries
- b. Two companies having specialized resources of their own coming together to create added value. Eg. Hitachi and Texas Instruments for development of DRAM chip
- c. This strategic alliance is forged to acquire new knowledge by working together and observing each other. Eg. GM and Toyota. While GM tried to learn lean manufacturing from Toyota, Toyota learnt the superior designs from GM

### **Motives for joint venture / strategic alliances**

Though the above examples as well as the concepts indicate as to how strategic alliances or joint ventures are created a generic way of identifying motives are given below:

- Lack of funds for seizing an opportunity has been a problem where the opportunity is identified in a gray area. The outcome being uncertain due to high risks as well as long gestation period forces two good entrepreneurs to share the risk and mop up resources
- Learning experience followed by experience curve has also been a very strong motive for joint ventures
- Apart from sharing risk and resources the activity in itself may be their main inspiration for the joint venture
- Regulating authorities are more flexible in regard to joint ventures / strategic alliances rather than mergers, especially as the parents continue to be in operation



### **Reasons for failure of joint ventures**

Not all joint ventures lead down the garden path. They end up many a time on the way side due to:

- The research and development for a new technology never materialized
- Preparation and planning for a joint venture might have been inadequate
- Conflicts in regard to the basic objectives of the joint venture cropping up after the formation
- Sense of secrecy and reluctance share expertise with the partner ends in a fiasco
- Difficulties faced in sharing managerial control between the partners made into a dead lock

With all the limitations joint ventures have a purpose to serve. They are very much of a hors d'oeuvre. They often also complete a project on time basis for which purpose they have come together. Eg., BBJ (Braithwite Burn and Jessop) for building the Howrah bridge later 40's and early 50's of the twentieth century, IPCL and Reliance petrochemical coming together on strategic alliance for a period to learn and understand each others competencies.

## **CONCENTRIC GROWTH**

A firm may look for opportunities for growth in the current line of business and stick to one industry wherein it would like to derive value through the expertise gained over the years. Such growth strategy is understood to be concentric growth. The two basic concentration strategies are vertical growth and horizontal.

### **Vertical growth**

Vertical can be achieved by taking over a function previously provided by a supplier or by a distributor. The company, in effect, grows by making its own supplies and / or by distributing its own products. This may be done in order to reduce costs, gain control over a scarce resource, guarantee quality of a key input, or obtain access to potential customers. This growth can be achieved either internally by expanding current operations or externally through acquisitions.

One of the classic cases of vertical integration in India is of Reliance Industries, which starting as a textile trading company into manufacturing and integrated backward to polyester manufacture and so on and finally into petroleum refinery. The group has petroleum transportation business and distribution as well. Apart from them a large number of Indian companies have captive power plants to support manufacturing and also have control over distribution channels. Similarly one of the leading aerated MNC brand as part of entry strategy in 90's took over dealer distribution network to complement its main product distribution network.

Vertical growth results in vertical integration – the degree to which a firm operates vertically in multiple locations on an industry's value chain from extracting raw materials to manufacturing to retailing. More specifically, assuming a function previously provided by a supplier is called backward integration (going backward on an industry's value chain). The



purchase of Millennium Business Solution Ltd., a public limited software solutions developer was bought out by a Company called take solutions which was into software product development in supply chain domain. This is a case in backward integration as the company; Take solutions with its domain knowledge could being a technology solutions developer add on products to its portfolio quickly with development capability.

Normally a function previously provided by a distributor is labeled forward integration (going forward on an industry's value chain). Jubilant Organosys Limited formally took over the Pharmaceuticals business of Max India in March 2003. According to analysts, life sciences business has strong synergies with Jubilant Organosys core specialty chemicals business. In line with their growth model, the company could leverage this business to further their standing in the high value added knowledge based product segments, thus expanding market presence and moving closer to their customers. The company is already a preferred supplier of advanced intermediates to many global international pharmaceutical and agrochemical companies. This entry into life sciences represents a logical forward integration.

Vertical growth is a logical strategy for a corporation or business unit with a strong competitive position in a highly attractive industry-especially when technology is predictable and markets are growing. To keep and even improve its competitive position, the company may use backward integration to minimize resource acquisition costs and inefficient operations as well as forward integration to gain more control over product distribution. The firm, in effect, builds on its distinctive competence by expanding along the industry's value chain to gain greater competitive advantage.

Although backward integration is usually more profitable than forward integration, it can reduce a corporation's strategic flexibility. The resulting encumbrance of expensive assets that might be hard to sell could create an *exit barrier*; preventing the corporation from leaving that particular industry. Transaction cost economics proposes that vertical integration is more efficient than contracting for goods and services in the market place when the transaction costs of buying goods on the open market become too great. When highly vertically integrated firms become excessively large and bureaucratic, however, the costs of managing the internal transactions may become greater than simply purchasing the needed goods externally, thus justifying outsourcing over vertical integration.

A company's degree of vertical integration can range from total ownership of the value chain needed to make and sell a product to no ownership at all. Under full integration, a firm internally makes 100% of its key supplies and completely controls its distributors. Large companies like Reliance Industries and Raymond of Aditya Birla group, are fully integrated. If a corporation does not want the disadvantages of full vertical integration, it may choose either taper or quasi-integration strategies. With taper integration, a firm internally produces less than half of its own requirements and buys the rest from outside suppliers. For example, a third party truck solution company in the logistics industry may have its trucks supplied through its own subsidiaries and engage from market balance requirements adjusting for demand and supply sensitivity. In terms of distributors, a firm sells part of its goods through company-owned stores and the rest through general wholesalers. Both Bata India and Pantaloons are selling their products through their own stores. With quasi integration, a company does not make any of its key supplies but purchases most of its requirements from



outside suppliers that are under its partial control. For example, by purchasing 20% of the common stock of a key supplier, an OE manufacturer can provide access to technology and have committed quality supplies and shorten new product development cycle. Purchasing part interest in a key supplier or distributor usually provides a company with a seat on the other firm's board of directors, thus guaranteeing the acquiring firm both information and a company may not want to invest in suppliers or distributors, but it still wants to guarantee access to needed supplies or distribution channels. In this case, it may use contractual agreements. Long-term contracts are agreements between two separate firms to provide agreed-upon goods and services to each other for a specified period of time. This cannot really be considered to be vertical integration unless the contract specifies that the supplier or distributor cannot have a similar relationship with a competitive firm. In this case, the supplier or distributor is really a *captive company* that although officially independent, does most of its business with the contracted firm and is formally tied to the other company through a long-term contract.

Contemporary business practices are more of cooperative contractual relationships with suppliers and even with competitors rather than adopting vertical growth strategies (and thus vertical integration). These relationships range from outsourcing, in which resources are purchased from outsiders through long-term contracts instead of being made in-house to strategic alliance, in which partnerships, technology licensing agreements, and joint ventures supplement, a firm's capabilities. One can observe such practices among information technology companies with that of solution developers, pure technology companies with IT companies; transport and hospitality services companies are classic cases where they work on such collaborative relationships.

### **Horizontal growth**

Horizontal growth can be achieved by expanding the firm's products into other geographic locations and / or by increasing the range of products and services offered to current markets. In this case, the company expands sideways at the same location on the industry's value chain. For example, in India, Parry sugar business has grown by adding on capacities at different regions. Similarly, few cement manufacturing companies like India Cements and Madras Cements have followed similar strategies. Dell Computers followed a horizontal growth strategy when it extended its mail order business to Europe and to China. A company can grow horizontally through internal development or externally through acquisitions or strategic alliances with another firm in the same industry. Horizontal growth results in horizontal integration – the degree to which a firm operates in multiple geographic locations at the same point in an industry's value chain. Horizontal integration for a firm may range from full to partial ownership to long-term contracts.

### **Circular growth**

With the assembly operation getting more important in the engineering industry, sourcing components has assumed a definite role. Automobiles, connectors, television, computer hardware, entertainment electronics etc have grown phenomenally and also have developed specific managerial processes to make these production operations more efficient and effective. Farming out components which do not form part of core competence of a manufacturing company has created many SMEs. The need to coordinate sourcing and supply of components



to have a strategic fit with the manufacturing programme based on the concepts of JIT and logistics strategy, circular growth concept has emerged. The components suppliers are normally a part of an industrial estate which is close to the manufacturer of the finished product so that the flow of components match the production programme without fail. Especially, when MTO and MTA programmes are on the anvil, circular growth of component industry along with the manufacturing company has become the practice.

## **CONCENTRIC DIVERSIFICATION**

When an industry consolidates and becomes mature, most of the surviving firms have reached the limits of growth using vertical and horizontal growth strategies. Unless the competitors are able to expand internationally into less mature markets, they may have no choice but to diversify into different industries if they want to continue growing. The two basic diversification strategies are concentric and conglomerate.

### **Concentric (Related) diversification**

Growth through concentric diversification into a related industry may be a very appropriate corporate strategy when a firm has a strong competitive position but industry attractiveness is low. By focusing on the characteristics that have given the company its distinctive competence, the company uses those very strengths as it means of diversification. The firm attempts to secure strategic fit in a new industry where the firm's product knowledge, its manufacturing capabilities, and the marketing skills it used so effectively in the original industry can be put to good use. The corporation's products or processes are related in some way: They possess some common thread. The search is for a synergy, the concept that two businesses will generate more profits together than they could separately. The point of commonality may be similar technology, customer usage, distribution, managerial skills, or product similarity.

The firm may choose to diversify concentrically through either internal or external means. Murugappa group's E.I.D. Parry India Ltd., for example, has diversified both internally and externally out of the unpredictable sugar business into a series of related businesses run by the parent company. Building on the expertise of its technology solutions development, Infosys Technologies Ltd. launched a banking solutions product and then went on growing related business geographically as well.

### **Conglomerate Strategy**

When management realizes that the current industry is unattractive compared to market returns and that the firm lacks outstanding abilities or skills that it could easily transfer to related products or services in other industries, the most likely strategy is conglomerate diversification – diversifying into an industry unrelated to its current one. In stead of holding a common link throughout the organizations, strategic managers who adopt this strategy are primarily concerned with financial considerations of cash flow or risk reduction.

The emphasis in conglomerate diversification is on financial considerations rather than on the product market synergy common to concentric diversification. A cash-rich company with few opportunities for growth in its industry might, for example, move into another industry where opportunities are great but cash is hard to find. Another instance of conglomerate diversification might be when a company with a seasonal sales and, therefore, uneven cash





flow purchases a firm in an unrelated industry with complementing seasonal sales that will level out the cash flow. ITC Ltd. in India is one of the leading conglomerate which in business of tobacco, hotels, food, paper and paper boards and so on.

### **Mergers and Acquisitions**

Why firms merge? It is important to understand various conceptual inputs that are available on drives of mergers and acquisitions. One of the key theories of mergers is the efficiencies theories which emanates from economic theory of firms.

### **Efficiency Theories**

The principle of Different efficiency believes that when two forms A and B operate independently there could be redundancy of resources and resource utilization could be inefficient. By merging these two entities, the management could drive higher value through resource reduction or saving.

The Inefficient management theory is also on the same lines where there could be inefficient managerial resource utilization and consolidation of entities brings scope of deploying efficient and highly productive managerial resources which would increase the value to the shareholders.

The operating synergy could arise due to economies of scale, complimentary and vertical integration. The enhanced profitability would arise from mergers through cost reduction and efficient utilizations of resources. The expanded scale of operations brought about through mergers leads to reduction in per unit cost of production. It allows for expanded volume of production without a corresponding increase in fixed costs. This leads to reduced per unit fixed costs. Efficient and optimal use of available fixed resources such as production facilities, management functions and management resources and systems also results in enhanced profitability.

It is possible for a firm that chooses to take the mergers route to achieve economies of scale in all spheres of business activity such as production, marketing, personnel, R & D, etc. Mergers facilitates better coordination and administration of the different stages of business operations such as purchasing, manufacturing and marketing thus eliminating in the process, the need for bargaining with suppliers and customers, and thereby minimizing uncertainty of supply of inputs and demand for product.

**Operating economics** comes about to the acquiring firm in the following manner:

1. Reducing the cost of production by eliminating some fixed costs
2. Reduction in the R & D expenditure due to the new set up which underscores the need for eliminating similar research efforts and repetition of work already done by the target firm
3. Reduction in management expenses as a result of corporate reconstruction
4. Cost reduction by streamlining of selling, marketing and advertisement department by being in a position to offer a wider product line to make larger sales





**Complementary mergers** may result in each firm filling in the “missing pieces” of their firm with pieces from other firm. A merger of a firm with strong R & D unit would help to improve new product development while with a firm with a strong distribution network, may benefit better distribution.

As mentioned earlier, **vertical integration** helps a firm to benefit buying of suppliers and manage cost, availability and product development better. Similarly when forward integration is initiated the benefits of distribution management and improving cost efficiency and responsiveness to customers would bring more value to the firm.

When firm strategies’ to grow through external or otherwise called as inorganic growth, it pursues mergers, acquisitions and takeovers. Today in India one could observe how competitive horizon is dramatically changing through such inorganic growth initiatives. For example in aviation business, Air India, Government of India’s international carrier merged with Indian Airlines to form National Aviation Company of India Ltd. Jet Airways took over Sahara Airlines and King Fisher Airlines has bought stakes in Air Deccan.

### **Scramble for market opportunities**

Mergers and Acquisitions (M & A) as forms of business combination are increasingly being used for undertaking restructuring of corporate enterprises the world over. Of late, mergers happen in all the sectors of the economy, the prime driving force being the accomplishment of synergetic effect for both the acquiring and the acquirer companies. As mentioned earlier, Mergers have started happened in India too at an increasing pace, for example exploiting the growing market without gestation.

## **MERGER**

A type of business combination where two or more firms amalgamate into one single firm is known as a ‘merger’, one or more companies may merge with an existing company or they may combine to form a new company. In the Indian context, both the terms ‘mergers’ and ‘amalgamations’ are used interchangeably. For instance, according to Section 2 (IA) of the Income tax Act, 1961, the term ‘amalgamation’ is defined as “the merger of one or more companies with another company or the merger of two or more companies (called amalgamating company or companies) to form a new company (called amalgamated company) in such a way that all assets and liabilities of the amalgamating company or companies become assets and liabilities of the amalgamated company and shareholders holding not less than nine-tenths in value of the shares in the amalgamating company or companies become shareholders of the amalgamated company”.

In a broader sense, the term merger includes consolidation, amalgamation, absorption and takeover. Merger refers to a situation where two or more existing firms combine together and form a new entry. Merger signifies the transfer of all assets and liabilities of one or more existing companies to another existing or new company. A basic feature of merger is that an entity which takes the ownership of another company combines with it, the operations of the merging entity. Merger which takes place either through absorption or consolidation allows for the takeover of the ownership of other companies and combination of their operations with its own operations. The main purpose of merger is to achieve the advantage of synergy through expansion and diversification.



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## **Purpose of merger**

### **Diversification**

Another important theoretical framework on merger motives is that the firms seek mergers for achieving market supremacy and dominance by way of diversification into new areas and new products. Diversification brings about magical growth in revenues and profits. The benefits are enormous where the merger takes place for such companies whose risk profiles are negatively correlated. In the same manner, the greatest advantage of merger can be obtained in the case of conglomerate mergers, where two firms could merge where cash flows could offset one's operational risk with others. The conglomerate mergers work well where both the relationship between operational and financial risks are inverse. The biggest advantage of this type of merger is that it results in reduction of total risk through substantial reduction of the risks of operations of individual firms. Risk diversification arises as a result of combination of management and other systems to strengthen the capacity of the combined firm to withstand the severity of the unforeseen economic factors which could otherwise endanger the survival of individual companies. Risk diversification in the case of conglomerate mergers can also be achieved by the shareholders of unquoted companies as they get an opportunity for trading in their shares. Further, diversification helps reduce the total risk of shareholders by holding shares of diversified companies.

### **Strategic realignment**

The most fundamental of all the reasons for mergers is the 'synergy' argument which is the basis of strategic realignment. According to Eugene F. Brigham, the term synergy is defined as "the condition wherein the whole is greater than the sum of its parts; in a synergistic merger, the post merger value exceeds the sum of the separate companies' pre merger values". Accordingly, under 'synergy', the combined value of a firm is much greater than the value of individual firms. The phenomenon of synergy arises due to economies of scale of operation. Besides, the combined mega features such as enhanced managerial capabilities, creativity, innovativeness, R & D and market coverage capacity. Due to the complementary nature of resources and skills a widened horizon of opportunities are also responsible for synergy on a merger situation.

### **Financial leverage**

There could be financial strategy by mergers. The combined assets and debt capacity could help to leverage better and build business better than each firm could do individually.

### **Information and signaling**

One of the arguments in favor of mergers is information and signaling to gain market values of target firm because of information dissemination during the tender offer or media or both. The market values such information better sending values northwards. Similarly, the new found media attention and drive to increase value of their firm, the senior management gets inspired with a kick in pants and works for better valuation.

### **Market Power**

The other driver of merger is becoming bigger. The size and volume gives enough motivation and makes the firms to combine.

**Hubris**

One of the main reasons for merger could be behaviour of agents or managers who drive to increase their utilization and on animal spirits or hubris or for pride drive takeovers. At times, managers commit errors of over optimism in evaluating merger opportunities due to excessive pride, animal spirits or hubris and mergers erode value.

**Tax benefit**

This is the biggest advantage arising out of a merger move. It allows a sick company to carry forward its accumulated losses to be set-off against its possible future earnings. This happens for the purpose of calculating tax liability. Since it might not be possible for a sick firm to earn profits in future sufficient enough to take advantage of the carry-forward provision, the same can be accomplished by way of combining with a profit making enterprise. This tax benefit is available in many countries of the world. For instance, in India a sick company can merge with a profitable company to set-off the accumulated losses and utilized depreciation of the company. Several mergers have taken place in India in order to avail the benefit of reduced tax liability.

**Forms of merger**

Merger takes place in the following forms:

- Merger through absorption
- Merger through consolidation

**Merger through Absorption**

Under the absorption mode of merger, a combination of two or more companies into an existing company takes place. In the case of 'merger through absorption' all companies except one lose their identity. An example of this type of merger is the absorption of Bank of Madura by the ICICI bank. The ICICI Bank was the acquiring company (buyer) which survived after the merger, while the Bank of Madura, an acquired company (seller), which ceased to exist. The Bank of Madura transferred its assets, liabilities and shares to the ICICI Bank.

**Merger through Consolidation**

Under the consolidation mode of merger, two or more companies merge into a new company. Under this form of merger, all companies are legally dissolved and a new entity is created. The acquired company transfers its assets, liabilities and shares to the acquiring company for cash or for shares. An example of merger through consolidation is the merger or amalgamation of Air India and Indian Airlines to form an entirely new company called 'National Aviation Company of India Ltd. (NACIL).

Merger, acquisitions and takeover have been well articulated, these nomenclatures are used interchangeably. It may be useful to point out various terms and definitions used while dealing with mergers and acquisitions.

**Acquisition**

An act of acquiring effective control by one company over the assets or management of another company without any combination of companies is referred to as 'acquisition'. A



typical characteristic of acquisition is that while two or more companies remain independent and separate legal entities, there is change in the control of companies.

The term 'acquisition' is used to refer to the act of acquiring of ownership right in the property and assets of another company and thereby bringing about change in the management of the acquiring company. In one of the cases mentioned earlier namely on Jet Airways, the company acquired Sahara Airlines. Sterlite Industries Ltd. bought over Bharat Aluminium Ltd. (BALCO) while it was privatized.

Acquisition could happen in any of the following ways:

1. Entering into an agreement with a person or persons holding controlling interest in the other company
2. Subscribing new shares issued by the other company in the open market
3. Purchasing shares of the other company at a stock exchange
4. Making an offer to buy the shares of other company, to the existing shareholders of that company

### **Takeover**

Another term associated with merger is 'takeover'. In the case of a takeover, one company obtains control over management of another company. Under both acquisition and takeover, it is possible for a company to have effective control over another company even by holding minority ownership. For instance, the Monopolies and Restrictive Trade Practices (MRTP) Act prescribed that a minimum of 25 percent voting power must be acquired as to constitute a takeover. Similarly, section 372 of the Companies Act defines the limit of a company's investment in the shares of another company as anything more than 10 percent of the subscribed capital so as to constitute a takeover. Currently, SEBI guidelines are well defined and regulate effectively mergers and takeover.

Where a distinction between acquisition and takeover is made, takeover usually takes the form of 'hostile' or 'forced' or 'unwilling' acquisition and acquisition happens at the instance and the willingness of the company management and the shareholders. It is for this reason that acquisition is generally referred to as 'friendly takeover'. An example of acquisition is Aditya Birla group, a leading conglomerate in India with substantial interest in textiles and cement, apart from other things, took over from L & T its cement business on a friendly takeover. Similar such transaction was that ORBI Tech by Polaris Software. On the other hand, the acquisition of Raasi Cement by India Cements earlier was a hostile takeover by the India Cements Group. Further, the term takeover is often used to denote the hostile nature of acquisition, where there is an element of resistance and opposition to the takeover bid.

### **Hostile takeover**

Where in a merger one firm acquires another firm without the knowledge and consent of the management of the target firm, it takes the form of a 'hostile takeover'. The acquiring firm makes a unilateral attempt to gain a controlling interest in the target firm, by purchasing shares of the latter firm directly in the open (stock) market. An example of hostile takeover was the takeover of Shah Wallace / Dunlop by Chhabirias Group. Since this type of takeover



is generally prejudicial to the interest of the shareholders, SEBI has come out with relevant code of conduct for the purpose of disciplining the takeover practice in India.

## **HOSTILE TAKEOVER-STRATEGIC TACTICS**

A target firm is one which could be taken over in a hostile takeover and a predator is one who attempts the takeover. When a target firm fears a hostile takeover, the management of the company may initiate the defensive measures and strategies to avoid takeover. The management being the agents of the shareholders has to take decisions in the best interest of the shareholders. Further, the existence of the management of the target firm is also uncertain as there is an all-likely chance of change of management of the target firm, if the takeover bid proves successful.

According to Weston, J.I., Chung, K.S. and Hoag, S.E., a target company which faces the threat of a hostile takeover, would adopt the following strategies:

### **Poison pill tactics**

This strategy aims at initiating action against the predator by destroying the attractiveness of the firm. The following are few methods:

The acquiring company may issue substantial amount of convertible debentures to its existing shareholders which would make it difficult for the potential acquirer as there is a danger of considerable increase in the voting power of the company.

- The target firm either sells or mortgages or leases or otherwise disposes off some of its precious assets.
- The target firm can defend itself from the onslaught of the potential bidder is to dispose of its liquidity by acquiring some asset or other firm.
- The target grants its employees stock options that immediately vest if the company is taken over. This is intended to give employees an incentive to continue working for the target company at least until a merger is completed instead of looking for a new job as soon as takeover discussions begin. However, with the release of the “golden handcuffs”, many discontented employees may quit immediately after they’ve cashed in their stock options. The poison pill may create an exodus of talented employees. In many high-tech businesses, attrition of talented human resources often means an empty shell is left behind for the new owner.
- The target company issues rights to existing shareholders to acquire a large number of new securities, usually common stock or preferred stock. These new rights usually allow holders (other than an acquirer) to convert the right into a large number of common shares if anyone acquires more than a set amount of the target’s stock (typically 10-20%). This immediately dilutes the percentage of the target owned by the acquirer, and makes it more expensive to acquire control of the target.

### **Green mail tactics**

The target firm can purchase its own stocks at a premium to avert a takeover bid. The incentive is offered by management of the target company to the potential bidder for not pursuing the takeover bid.



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### **White Knight tactics**

The target company's management may seek out a friendlier potential acquiring company who could offer a higher offer price which would eventually drive away the original bidder. The purpose of 'white knight strategy' is to seek to find a bidder. The objective is to make the takeover exercise as much unviable and unprofitable as possible for the original bidder. Such a strategy will help get the target firm a better deal. There are cases where a white knight has later been aggressive with the target company and consummated the deal at better terms.

### **Golden Parachutes tactics**

Adopted by the target company by offering hefty compensations to its managers if they manage to get ousted due to takeover; this is pursued to reduce their resistance to takeover. This was also mentioned among one of the strategies of poison pill. This is mainly initiated because soft target firms who are managed by professional managers may fear shifting of loyalty by professional managers and to avoid any such attempts set up golden parachutes so that predators may not have incentive to deal with the agents for consummating the deal.

**Divestiture tactics:** Whereby target the company arranges to divest or spin off some of its businesses in the form of an independent, subsidiary company thus reducing the attractiveness of the existing business to the predator. This clearly changes the valuation of the company and many a times the multiples of valuation for multi divisional businesses would encourage such moves by target companies.

**Crown Jewel tactics:** Whereby the target company arranges to sell its crown jewel namely highly profitable part of the business or ones which market values better in order to dissuade the predator. However, such strategic initiative requires clear understanding of predators target businesses and valuation guidelines to be effective.

**Legal tactics:** A target firm can forestall the possible takeover bid through legal mode. It takes the form of 'legal strategy' for guarding against hostile takeovers. In this case, it is possible for the target firm to move a court of law for obtaining injunction against the offer. For this purpose, relevant provisions exist in the Securities Contracts (Regulations) Act, 1956 and the Companies Act, 1956. This strategy is resorted to either to block or delay the tender offer in circumstances where the shares are lodged for the transfer by the bidder. SEBI has come with clear guidelines to discourage hostile takeovers in India.

### **Tactical Initiatives**

The management of the target firm may adopt different types of tactical initiatives to discourage hostile takeover bid. For this purpose, the target company may initiate the following tactics:

- a. Mounting media campaign
- b. Sending letters and circulars to the shareholders dissuading them from accepting the tender offer
- c. Educating the shareholders that the consideration being offered by the acquiring firm is inadequate and that the proposed merger / takeover does not make any economic sense and the performance of the firm may be adversely affected by the takeover.



- d. Causing reduction of floating stock of the target firm by persuading business associates, directors, and employees to purchase the shares of the firm from the market in order to frustrate the efforts of the bidder to acquire the controlling interest.
- e. Allowing the existing shareholders to increase their stake by the issue of warrants or convertible preference shares or convertible bonds, etc. at a relatively low price.
- f. Offensive moves like counter take over move being initiated if financially strong

**Reasons for failure of mergers**

The following are more commonly found reasons for failure of mergers:

**Overoptimistic Appraisal:** The investment advisors and the agents' namely professional managers are generally buoyant during pre merger time and are over optimistic while appraising the opportunity. This arises not only in estimating cash flows, profitability and returns but also on soft issues and statutory requirements which lands up in trouble later.

**Overestimation of synergies:** There is again a tendency to over estimate the synergy and ignore conditionally required for achieving the synergy: Many a times synergy is on paper because of idealistic assumptions. Time lines, investment and managerial resource commitments are ignored while planning for synergies or gaps arise during post merger management on these which lead to failure.

**Overbidding:** Driven by hubris there has been a tendency to overbid to acquire. However, the economics fail to support leading to failure as the investment sunk can only be recovered through economic returns.

**Poor post-acquisition integration:** This has been the most common cause for failure of mergers. Like typical case of "marry in haste and repent in failure", corporate rush to merge without implementation plan. The integration derails at the start involving slippages in investment plan, revenue targets and loss of key managerial resources, at times, a lot of cultural issues lead to chaos. Statutory and legal issues, creditors' settlement are also other issues which would arise while managing post merger situation.

**Recommended Steps in an Acquisition Process**

1. Pre-acquisition phase
  - Evaluate own company and identify readiness and need for external growth
  - Organize and plan areas and seek professional advice
2. Screening and short listing of targets
  - Look at public companies, divisions of companies and privately held companies
  - Identify knock out criteria
  - How to use investment banks
  - Prioritize opportunities
3. Cost and Value imputation
  - Value companies
  - Know exactly how you would recoup takeover premiums





- Identify real synergies
  - Decide on a restructuring plan
  - Decide on a financial engineering opportunity
4. Negotiation
    1. Decide on Maximum reserve price
    2. Understand background and incentives on the other side
    3. Establish negotiation strategy
    4. Conduct due diligence
  5. Post merger implementation
    1. Move quickly to conserve management resources
    2. Recognize continuity and push for growth
    3. Infusion of new and additional resources, if necessary
    4. Carefully manage cultural, legal and statutory issues.

To conclude, mergers and acquisitions provide a great opportunity as a strategic initiative for firms which would like to pursue inorganic growth. The challenges and limitations are phenomenal and one needs to thread carefully while driving such strategic initiative.

### **Valuation**

Cost and Value Imputation: The predator / buyer of any firm or asset would go through certain processes while initiating a merger or takeover move. Similarly, a target company would also go through few critical processes while intending to be a target for a merger or takeover deal. For example, when a company like IBM buys out Daksh a BPO firm out of Gurgaon, New Delhi, both IBM and Daksh go through the decision process. The transaction is arrived at certain value. Ability to close a deal by agreeing to a value and signing off the deal would be one of the key processes where both the firms converge. Here one may look at the various aspects of such valuation techniques and how one must be prepared for the same.

### **The process of mergers and acquisition**

While involving in a merger move, a predator or a buyer would go through the following steps:

1. Contemplation and Approach
2. Confidentiality Agreement
3. Exchange of Information / Evaluation
4. Preliminary Negotiation and Letter of Intent (LOI)
5. Due Diligence
6. Definitive Agreements





7. Financing
8. Closure
9. Post merger integration

It may be observed from the above that there is a number of steps but the key to all these is the valuation as it forms the fulcrum of the deal. Also the buyer and seller have certain objectives for the deal and it must get captured in the value negotiated. Prima facie, the seller would like to get maximum value out of the deal and the buyer would be the best price which need not be what the seller expects. The art of getting into a right transaction price is possible only through a detailed valuation exercise and probably a well meaning negotiation to make a deal happen.

### **Requirements for valuation**

Valuation of an entity or an asset would predominantly depend on the numbers that can be constructed around the same. Then, the same is used for zeroing a value to enable the deal or transaction. When one discusses about quantitative numbers, one may require a profit and loss statement, balance sheet and future projections of the same. When one works out the future projections, one may have to look at the business plan and strategy for constructing the revenues and assets which may be required for generating the same. Typically, the following may be required for a valuation exercise from buyer's angle:

- a. Historic Financial Performance for a period of 3 to 5 years of the Target Company
- b. Current Balance Sheet and Interim Financial Statements
- c. Projections of target company for 3 to 5 years as is where is
- d. Strategic focus: scenario building and likely impact on merged business and this information is to be collected based on chosen models
- e. Forecast for Next 3 to 5 years for the merged company and GAP analysis
- f. Arrive at Maximum Reserve Price for negotiation

Valuation of Target Company by the owner also is a significant part of negotiation for the reserve price / upset price. While the reserve price has been computed by the buyer, the upset price is calculated by the seller below which he would not like to slip. The seller normally keeps the upset price close to his heart as he expects the higher price to be bid by the seller. However, the upset price will have to be computed on the basis of constructive costing estimates on the following steps:

1. Historic financial performance for a period of 3 to 5 years of the target company
2. Current balance sheet and interim financial statements of the target company
3. Strategic focus: scenario building and likely impact on the target company's performance following the owners (seller's) strategy
4. Identify the synergy between the buyer's company and the seller's company and evaluate the distinctive competence of the target company (Seller's) and develop a premium for this entity



5. If there is brand equity, good will or such other intangible assets they need to be valued using specific models and include such value into the upset price.

### **Caution**

From the above it will be clear that there is no single value for the target company that is to be merged. The view point of the buyer will be to minimize the value so that the purchase price is lower; while the seller would like to improve the value so that he gets a fair deal and its upset price is fully covered. Towards this both the seller and the buyer will have to be careful about the following factors:

1. The valuation exercises being different from the buyer and the seller, there is no objective known as true value. Actually, there will be two valuations that have to be marched and negotiated.
2. Precision is not the objective in valuation as estimates well into the future of quantifiable components as well as valuation of intangibles are involved.
3. Models need to be employed for valuation and it will be prudent for both the buyer and the seller to agree on the prime variables that should form part of the model. Model selection is the crux of consensus.

## **MODELS FOR VALUATION**

There are a number of models to valuation which are as follows:

1. Asset based valuation model
2. Discounted cash flow model
3. Relative valuation model
4. Contingent claim models or option pricing models

Most of the above measures are market related. There could be some approaches which are opinions and expert views. The use of valuation models in investment decisions (i.e. in decisions on which assets are under valued and which are over valued) are based upon:

1. A perception that markets are inefficient and make mistakes in assessing
2. An assumption about how and when these inefficiencies will get corrected.

In an efficient market, the market price is the best estimate of value. The purpose of any valuation model is then the justification of this value. There are other situations where valuation models are useful are:

1. When the asset or the firm is not publicly traded and there is a need to arrive at an appropriate value
2. When an analyst or a buyer has reasons to be believe that a new business model can be deployed and a new set of values can be arrived at based on the management perception which is different from the market.

### **1. Asset Based Valuation**

There are a number of assets a company has. It could be tangible assets like, land and building, machinery and so on or intangibles like human resources, good will, rights of



distribution and so on. A firm would look at asset based valuation only when it decides to handle liabilities independent of the assets. The situations in which this model is useful are as below:

- To sell of a business unit as an asset and retain liabilities so that it could be settled independently
- To sell an asset from a group of assets for enabling replacement or change of plans with respect to its productive use
- In the condition of distress where liabilities could be more and require to be handled through a settlement process similar to bankruptcy or liquidation.

The most commonly used asset based valuation methods are:

1. Liquidation value
2. Replacement value

### **Liquidation method**

Many factors can contribute to tough financial times for a business, including a struggling economy, natural disaster, or illegal activity such as fraud. When a business encounters this type of financial distress, it may be forced to claim bankruptcy and liquidate some of its assets in order to regain some of its investment. The liquidation value is the approximate amount a business can expect to get back when this type of sale takes place.

Usually this amount is less than the market value as the book value. The reason for this decrease in value is that liabilities are subtracted from the value of the assets in order to determine the liquidation value of the business. The liquidation value is usually determined by qualified professionals, who will provide an estimate so that the company can decide if it actually wants to go through with the process. Another factor that can influence liquidation values is the state of the market at the time of the liquidation. When a firm in financial distress needs to sell assets, its industry peers are likely to be experiencing problems themselves, leading to asset sales at prices below value in best use. Such illiquidity makes assets cheap in bad times.

There are two types of liquidation values, depending on the urgency of the situation. Orderly liquidation value applies to a business that can afford to take its time to field offers from a multitude of bidders in order to get the best price for its assets. Often, in these cases, the business can sell items individually instead of selling the whole collection of assets at one time. Distress liquidation values come into play when a business is desperate to liquidate its assets. Usually the assets are sold all at once and often to firms or dealers who specialize in purchasing liquidated items. Distress liquidation values are always lower than orderly liquidation values and in some instances drastically lower.

It should be noted that liquidations are not necessarily a sign of failure. While much liquidation occurs during poor financial times, others do not. Often a business may be forced to liquidate



some of their assets in an effort to keep up with changes in the market place. For example, new products or technologies can come out that make older ones obsolete and therefore force a business to buy the new product in an effort to keep up. Some experts contend that some form of liquidation is taking place even amongst the most successful companies. If these trends are closely monitored and quickly dealt with, a company should be able to stay ahead of the game and avoid any negative financial repercussions.

### **Replacement cost method**

Normally the balance sheet of a company as certified by the auditors gives a fair and true picture of the company. However, in reality values of the assets as per the balance sheet represents the depreciated value as also the original value of a by gone era. Towards this it becomes necessary to update the values of physical assets like land, buildings, plant and machinery, tools and spares, etc. As land is never depreciated the original cost at which it was bought still represents the value in the current balance sheet. This is normally updated on the basis of guideline values available with the Registrar. When it comes to other physical assets that are depreciated, the replacement cost model takes into consideration two major factors:

1. The residual economic life of the asset
2. The present cost of replacement of the particular asset, i.e., the into factory cost including the present market price of the asset adjusted for the residual life of the asset.

For arriving at replacement cost where the market price of the type of asset the company possesses is not available currently this replacement cost is built up taking into consideration the whole sale price index for the materials and for the labor the cost of living index. With these indices and selecting the proper method of costing the replacement cost of an asset is arrived.

This model is a fair substitute to infuse a semblance of reality into the valuation of a company's assets. However, this does not take into consideration the impact of intangibles like technology, experience curve and intellectual property.

Another interesting facet of replacement cost model is the existence of old economy companies and new economy companies producing the same commodity. For example, cement, sugar and steel. While comparing these companies the significant fact that comes out is the low capitalization of the old economy as against as a new economy ones and a necessity for a correction for the inflationary values. Tobins'Q is one such technique which has given an insight into relating market value of a company to its replacement value of assets.

$$\text{Tobin's Q} = \text{Market value of company} / \text{Replacement value of its assets}$$

Tobin's Q will be 1, if the recorded assets of the company reflect a market value. The other two cases where  $Q > 1$  or  $< 1$ , will have to be moderated by taking into consideration the three following factors.

1. The recorded assets of the company
2. The market perception about the company
3. The intellectual capital of the company



## 2. Discounted cash flow models

In discounted cash flow valuation, the value of an asset is the present value of the expected cash flows on the asset. Suppose if one has to buy an asset which is a single property business class hotel, the value of the property would depend upon the business it would bring over the years. The future net cash flow are discounted at the cost of capital and the value of the property is arrived at. This is based on the rationale that every asset has an intrinsic value that can be estimated, based upon its characteristics in terms of cash flows, growth and risk.

To use discounted flow valuation, one would need

1. to estimate the life of the asset
2. to estimate the cash flows during the life of the asset
3. to estimate the discount rate to apply to these cash flows to get present value

These are the three key inputs which require good assessment on future of the business and business acumen. The quality of valuation precisely depends on the same.

$$\text{Value} = \sum_{t=1}^{t=n} \frac{CF_t}{(1+r)^t}$$

Where  $CF_t$  is the cash flow in period  $t$ ,  $r$  is the discount rate appropriate given the riskiness of the cash flow and  $t$  is the life of the asset.

### Equity valuation method

The value of equity is obtained by discounting expected cash flows to equity, i.e., the residual cash flows after meeting all expenses, tax obligations and interest and principal payments, at the cost of equity, i.e., the rate of return required by equity investors in the firm.

$$\text{Value of Equity} = \sum_{t=1}^{t=n} \frac{CF \text{ to Equity}_t}{(1+ke)^t}$$

Where,

$CF \text{ to Equity}$  = Expected Cash flow to Equity in period  $t$

$Ke$  = Cost of Equity

The above method is based on the free cash flows available to equity shareholders after payment of obligations including debt fund providers.

### Dividend based method

An alternative to the above method is the dividends based method. The dividend discount method is a specialized case of equity valuation, and the value of a stock is the present value of expected future dividends. In the more general version, one can consider the cash flows left over after debt payments and reinvestment needs as the free cash flow to equity.



### **Firm value method**

The value of the firm is obtained by discounting expected cash flows to the firm, i.e., the residual cash flows after meeting all operating expenses and taxes, but prior to debt payments, at the weighted average cost of capital, which is the cost of the different components of financing used by the firm, weighted by their market value proportions.

$$\text{Value of Firm} = \sum_{t=1}^{t=n} \frac{\text{CF to Firm}_t}{(1 + \text{WACC})^t}$$

Adjusted Present Value (APV) approach: The value of the firm can also be written as the sum of the value of the unlevered firm and the effects (good and bad) of debt.

Firm Value = Unlevered Firm Value + PV of tax benefits of debt – Expected Bankruptcy Cost

### **Adjusted present value method**

In the adjusted present value approach, the value of the firm is written as the sum of the value of the firm without debt (the unlevered firm) and the effect of debt on firm value

Firm Value = Unlevered Firm Value + (Tax Benefits of Debt – Expected Bankruptcy Cost from the Debt)

1. The unlevered firm value can be estimated by discounting the free cash flows to the firm at the unlevered cost of equity
2. The tax benefit of debt reflects the present value of the expected tax benefits. In its simplest form, Tax Benefit = Tax rate \* Debt
  - The expected cost is a function of the probability of bankruptcy and the cost of bankruptcy (direct as well as indirect) as a per cent of firm value.

### **Excess returns method**

One can present any discounted cash flow model in terms of excess returns, with the value being written as:

$$\begin{aligned} \text{Value} = & \text{Capital Invested} + \text{Present value of excess returns on current} \\ & \text{Investments} + \text{Present Value of Excess returns on future} \\ & \text{Investments} \end{aligned}$$

This model can be stated in terms of firm value (EVA) or equity value.

### **3. Relative Valuation Model**

The value of any asset can be estimated by looking at how the market prices “similar” or ‘comparable’ assets. This is useful when the asset is not traded directly in market or when the intrinsic value of an asset is impossible to estimate for want of appropriate input data. Then, the value of an asset is whatever the market is willing to pay for it based upon its characteristics of similar or comparable assets.



For arriving at a relative valuation, one would need

- an identical asset, or a group of comparable or similar assets
- a standardized measure of value (in equity, this is obtained by dividing the price by a common variable, such as earnings or book value)
- and if the assets are not perfectly comparable, variables to control for the differences

Pricing errors made across similar or comparable assets are easier to sport, easier to exploit and are much more quickly corrected.

Variations on Multiples that are used are as below:

**Equity versus Firm Value**

- Equity multiples (Price per share or Market value of equity)
- Firm value multiples (firm value or Enterprise value)

**Scaling variable**

1. Earnings (EPS, Net Income, EBIT, EBITDA)
2. Book value (Book value of equity, Book value of assets, Book value of Capital)
3. Revenues
4. Sector specific variables

**Base year**

1. Most recent financial year (current)
2. Last four quarters (Trailing)
3. Average over last few years (Normalized)
4. Expected future year (Forward)

**Comparables**

5. Sector
6. Market

**4. Contingent Claim (Option) Valuation**

Options have several features

1. They derive their value from an underlying asset, which has value
2. The payoff on call (put) option occurs only if the value of the underlying asset is greater (lesser) than an exercise price that is specified at the time the option is treated. If this contingency does not occur, the option is worthless.
3. They have a fixed life



Any security that shares these features can be valued as an option.

### Choice of models

| Model                                         | Method                                           | Applicable                                                                                                                                                                                                                                                                                    | Not applicable                                                                                                                                                                                                                                |
|-----------------------------------------------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Asset Based Valuation                         | Liquidation                                      | Mature businesses, separable and marketable assets                                                                                                                                                                                                                                            | Growth businesses, linked and non marketable assets                                                                                                                                                                                           |
|                                               | Replacement cost                                 | Mature businesses, separable and marketable assets                                                                                                                                                                                                                                            | Growth businesses, linked and non marketable assets                                                                                                                                                                                           |
| Discounted Cash Flow Valuation                | Equity valuation<br>Dividend based<br>Firm based | <ol style="list-style-type: none"> <li>Where cash flows currently are available or in new future</li> <li>Unique assets or business</li> </ol>                                                                                                                                                | Where cash flow if a contingency occurs or assets that will never generate cash flows                                                                                                                                                         |
| Relative Valuation                            | Using multiples like equity vs. firm value       | <ol style="list-style-type: none"> <li>Where cash flows currently are available or expected in near future</li> <li>Assets that will never generate cash flows</li> <li>Large number of similar assets that are priced</li> <li>Growth businesses linked and non marketable assets</li> </ol> | <ol style="list-style-type: none"> <li>Mature businesses with separable and marketable assets</li> <li>Unique asset of business</li> </ol>                                                                                                    |
| Contingent Claims or Option Pricing Valuation | Derivatives (Put and Call Options)               | <ol style="list-style-type: none"> <li>Unique asset or business</li> <li>Growth businesses, linked and non marketable assets</li> </ol>                                                                                                                                                       | <ol style="list-style-type: none"> <li>Where cash flows currently are available or expected in near future</li> <li>Mature businesses with separable and marketable assets</li> <li>Large number of similar assets that are priced</li> </ol> |

### More on Due Diligence

Due Diligence is the most important aspect in doing a merger and takeover deal. During the process of takeover, the predator and the target extend a lot of information on an informal mode and predator's deal progress is based on a number of assumptions and data inputs are





primarily from public source and competitive intelligence. The process of due diligence gives the predator the authority to validate the “Homework” of the Deal. Hence the management gives a lot of importance for this activity during the transaction.

While doing the due diligence the focus would be to assert whether the deal is worth the bill. When someone triggers such a thought, the following aspects would prop up:

- 1. Confirmation of the strategy and feasibility of the target’s business:** The initiation of deal progress and reaching up to a stage of signing the letter of intent would have taken care of the business potential of the target. One always believes so! But quite a number of deals have failed because the synchronization was not perfect. For example, if a predator wants to buy out a casting company, one would have evaluated the business potential, technology and so on. The target could be an old vintage company and run successfully by the current management in a traditional environment with the local workmen and line expansion could have been driven by convenience rather than industrial engineering. If the predator wants to replace the production process with automated system and reduce labor for improving the size and productivity, it may not fit in as the style of the target been traditional and conventional growth. This one would realize after making detailed enquiry. More importantly even though during prior stages there could have been opportunities to validate the same, predator moves with confidence to realign and due diligence gives an opportunity for revalidation.
- 2. Verifying operations and assets and liabilities are as represented:** This process means physically verifying operations and doing a technical due diligence. The asset register might be shared and the number, quality and realizable life of the assets would be validated as per the record. Though it means physically demanding, there are experts who are available to execute such processes. These experts have methodology like random checking and asserting high value items, etc. Similarly the target company provides the liabilities statement. It is important that the buyer validates the same. This is purely from financial angle as the balance sheet must be true and realizable.

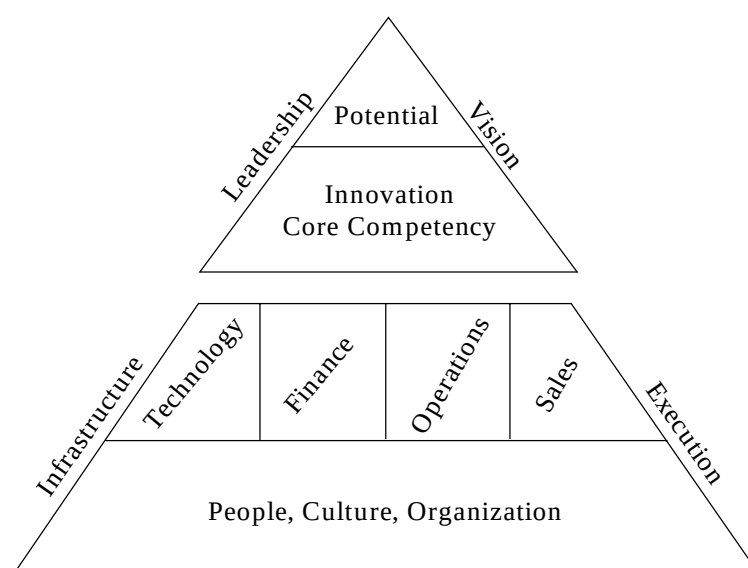
There is another aspect on the same which the physical executable capability of the assets. The books may show that the captive power plant to have an installed capacity of 100 mw. Especially, if the buyer is planning for modernization and expansion, the normal rate of generation need to be ascertained. Similarly there are a number of such productive capacities whose productive efficiencies need validation. A due diligence process precisely does the same.

- 3. Develop and evaluate opportunities to best fit the target with the buyer:** The buyer / acquirer while negotiating the acquisition, develops certain alternatives or scope of business based on the information provided. Generally, when one starts probing into businesses, few more alternatives are likely to develop as the validation process starts. For example, when a buyer was looking at taking over a 5000 tcd sugar plant, he evaluates the option with a matching capacity of creating a co-generation plant which could be anywhere between 24 – 32 MW depending upon certain specifications and consumption requirement. While doing due diligence a new scope may arise where the buyer could spot opportunities for multi fuel boiler with adequate space and other economies supportive of the same and move up to 40 MW. This generates a quite bit of additional scope in the viability of the

deal. Similarly in every business there would one such new vista or otherwise hampering aspect which needs more validation and assertion.

4. **Cultural fit:** Though a buyer looks at the composition and structure of employees, a lot relating to cultural fit would emerge during the due diligence process. The aspects of cultural fit may be on style of relationship, exertion of power, peer relationship and so on. Some of it comes from the gender mix, sociological factors, entrepreneurial and professional management involvement, power hierarchy and power versus process driven factors. There are numerous cases where good buy outs are not the best because of cultural divergence. The classic example in the international scenario one could think would be between Daimler and Chrysler where there was a marriage between technology driven German auto manufacturer and market savvy American auto major. Similarly, it could be within the same country and same industry like IBM and Lotus. In finale, two merging groups have same cultural attitudes to vibe for making the merger move successful!
5. **Understanding the seller's financial and legal structure:** The buyer would be progressing on broad indicators for consummating the deal. The buyer would have discussed on "sale of assets" or as a "going concern" or an SBU or buying controlling interest or any such combination. The actual financial structuring would depend upon the rights and limitations of the powers vested with the shareholders. Likewise, the banks, institutions and debt funders like lessors may have various charges on the assets who may have to approve such transactions. Also a substantial impact would be based on the statutory implications binding on the transaction and the company and also the accounting policies followed. There could be again a number of legal issues which need to be addressed for doing the transaction. A buyer has to necessarily be aware of these. Moreover, there could some aspects which buyer would have presumed while working the deal. This could be like transferring of liabilities. But the debt fund institution or individual may not agree for the same. Hence the due diligence process helps to iron out those areas.

To sum up, due diligence addresses the following pyramid and asserts a "Take over".



**Spirit and Action on due diligence**

The buyer must go with the spirit of confirming the value of the deal agreed to at the earlier stage and if corrections required, one must ascertain the same. Then the buyer must probably see how value generating activities could be driven on the post deal stage. If the buyer goes with the intention of finding gaps, probably the whole process may destabilize. There may not be perfect information sharing or mapping at Letter of intent stage. However, the margin of error would be provided for while working the deal structure and value. At the due diligence stage the buyer must ascertain whether the margin provided for is appropriate or is there a need to revisit the deal value or structure.

Similarly, the target company must also view due diligence process as a means to facilitate the deal rather than an interrogative process. If a firm is being sold, it could be for skimming the value or stop losses or an opportunity for turnaround. In such situation, there could be scope for identification of wrong moves or management gaps. If there are any adverse new revelations, those should not hurt the process of the transaction.

**Information Exchange**

Most acquirers have a standard form or checklist. The investment advisors facilitate for revisiting such formats and make it specific to the transactions. There are cross functional experts who would handle the same. Typically, the request should go to seller immediately after execution of the LOI.

Typically seller is requested to respond to each specific request as soon as possible. In the interest of the deal and his own, the seller must quickly respond. The information shared is specific to the transaction and is confidential. Hence the buyer must be aware of the need to handle the “Non disclosure and Confidentiality” clause sensibly. Or else, it could potentially hurt the future transactions. Many a times a dedicated team from the buyer and seller would handle the due diligence part to have control on secrecy and proprietorship of the information exchanged.

The following are the indicative areas of due diligence:

**1. Legal**

What Must Happen to Approve the Transaction?

1. Articles of Incorporation
  - a. Basic capital structure
  - b. Rights & privileges of equity owners
2. Bylaws/Operating Agreements
  - a. Ascertain necessary approvals and procedures
3. Board minutes
  - a. Understand corporate history
  - b. Understand how it handles substantive transactions



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## **2. Corporate Governance**

1. Stockholder Agreements
  - a. Stockholder rights and preferences
2. Capitalization Table
  - a. Understand all of the ownership and votes within the company
3. Stock Options and Warrants
  - a. Understand change of control provisions
  - b. Do options and warrants vest? Convert? Cancel?

## **3. Key Operating Agreements**

1. Customer Agreements
  - a. Are there any parts of agreement limit the ownership structure change?
  - b. What are the penalty clauses for non-compliance of customer contract?
  - c. Are contracts executed in full and to the satisfaction of the customers?
2. Employment Agreements
  - a. Non-competition agreements
  - b. Confidentiality agreements with key employees
  - c. Electronic data and information security and policies that involve employees
  - d. Golden parachutes that kick in with Change of Control

## **4. Human Resources**

- Obtain and review employee benefit plans
  1. Employee manual – ‘contract’ with the employee
  2. Health and retirement plans
  3. Statutory payments with respect to employees

## **5. Bank or Credit Arrangements**

- Is there the change of control provisions?
  - ☐ Do banks have “veto” power or debt acceleration?
  - ☐ Is there a default that could complicate the deal?
  - ☐ If we need permission, how long will it take?
  - ☐ Are assets pledged?

## **6. Strategic Partner and Vendor Agreements**

1. What are the changes of control provisions?



1. Do they have “veto” power, or worse?
2. If we need permission, how long will it take?

**7. Supplier Agreements**

1. Change of control – right to re-price?
2. Notice provisions

**8. Intellectual Property**

1. Patents, Trademarks, Copyrights
2. Trade secrets, licenses
3. Are they protected?

The above list is only indicative and a very detailed and exhaustive questions need to be prepared and administered.

Interactions and the review process would keep going during this stage. There would be questions, review, analysis, consideration, more questions until understanding is reached. After review, buyer typically prepares a due diligence memorandum based on the materials and information reviewed.

Buyer then typically requests follow-up information on certain points which could be:

- i. Concern areas usually warrant further investigation
- ii. May have implications on LOI and Definitive Agreements.
- iii. Additional representations and warranties hold-back of purchase

Price or even adjustment of consideration

The objective of the due diligence is to finalize the agreement which is called as the Definite Agreement Process. Ideally there would be coordination with Definitive Agreement Process. Typically, the definitive purchase agreement is being drafted simultaneously with the due diligence review in an effort to speed the process. The diligence group must coordinate with document drafting group to ensure concerns are incorporated in documents as appropriate.

**DIVESTITURES**

Sell offs or Divestitures are interchangeable though strictly sell offs is a generic term which includes spin offs, split offs, split ups and equity carve outs.

A *spin off* is the process of creation of a separate legal entity when the shares are distributed to the existing shareholders of the parent company on a proportionate basis. This method creates a new entity, which can take independent decisions, which it could not when it was a parent company.

There are two types of spin offs again, which are described as split offs and split ups. When some of the existing shareholders are given stocks in a subsidiary in exchange for the stocks of the parent company a *split off* is born. When the entire firm is fragmented into a number of spin offs the resulting firms exists but not the parent company. This is called *split up*.



When divestiture is used in a specific sense, it involves sale of a part of the company to a third party. Since the buying firm already exists no new legal entity is born. Another method of specific divestiture is the *equity carves out* when part of a company is sold to a third party or a group of outsiders through an equity offer giving them the ownership for the portion sold. Now it becomes an independent company owned by outsiders.

The above methods of getting away from a particular activity by a parent company happen when it finds the following reasons:

1. A particular activity has not been viable and needs to be phased out
2. A particular activity does not form part of the distinctive competence or even the core competence
3. A particular activity which was viable until recently has become unviable due to technological obsolescence
4. From the angle of financial restructuring
5. When the company want to go for strategic alliance for a particular activity, this is done

## **CORPORATE RESTRUCTURING**

Towards the end of the 20<sup>th</sup> century recessionary economic conditions loomed large forcing many companies in the developed countries to look inward. The concept of restructuring was born and it is concerned with the reduction in size of a company to improve both efficiency and effectiveness. The restructuring process can involve either *downsizing*, *right sizing* or *de-layering*, thus reducing the size of the firm in terms of the number of employees as well as number of divisions or units or the number of hierarchical levels in an organization. The concept of job security and lifetime employment had a jolt and many companies entered into lengthy negotiations with the labor unions to chalk out elaborate programme of retrenchment with huge severance cheques.

As the process of restructuring involved lengthy negotiations with the labor unions and complicated legal processes, this mode of improving a company's effectiveness and efficiency has not been preferred. Though, many companies had to resort to restructuring for survival rather than improving effectiveness and efficiency. The process of restructuring culminated in a company becoming smaller better and faster, but this strategy is more for catching up with the competitors who out smart them. Though restructuring can be a pause it cannot become a panacea for all its evils. Another glaring factor is that the restructuring is concerned more with the well being of the shareholder rather than taking care of the employee. It is a cynical travesty that in the name of efficiency and effectiveness a company becomes smaller and smaller without addressing the fundamental factors facing the company. At best restructuring is a beginning of reforms to be followed by a turnaround strategy based on reengineering and regeneration.

The prime reason for restructuring has been that conglomerates that are highly diversified were assigned a diversification discount in respect of its stocks to the capital markets. This arises due to the fact that the stock of highly diversified company is very frequently assigned



a lower valuation in relation their earnings compared to a less diversified company. Two main factors flow out of this premise; firstly, the complex nature and not so transparent consolidated financial statements of highly diversified companies normally put off investors. This is because they are not in a position to get a fair and true picture of the segmented activities of the company and the risk involved in such activities. Secondly, greater diversification for its sake has not provided the required viability and as such the company as a whole has been saddled with unprofitable ventures. In effect, the administrative and other fixed cost tend to increase and the company becomes obese. In the above two cases restructuring is the immediate remedy to arrest declining financial performance.

Some times restructuring becomes necessity in case of failed acquisitions. Hurried decisions to acquire another company with out adequate preparation and cultural fit have led to slowing down of post acquisition performance. In these cases restructuring is the initial step to cut losses and then think of a divestiture or turnaround strategy.

Another area, which has become significant to recommend restructuring, is that the economic laws of diminishing advantages start working when there is an overdose of vertical integration or diversification. This diminishing advantage is aggravated due to innovation in management process and strategy. For instance, long term relationships between suppliers and a company were considered as a mature exercise and a vertical integration is a logical sequence. However, with the innovations in supply chain management through effective solutions using information technology highly diversified companies have come to grief. Here again, prima facie, restructuring becomes the first stage. Latterly, turnaround management always follows restructuring exercises.

Normally, a company starts introspection when its performance starts plummeting and reaches a nadir (Lowest point). And this phase is the decline phase of the company. As a result of introspection, it starts initiating response in the form of restructuring and reengineering. The period during which various activities leading to turnaround are carried out takes time and is the transition period. In the final stage the outcomes of the various steps taken are evaluated as to whether the adventure has been a success or a failure.

The whole processes of turnaround as indicated involve four stages and are punctuated with key events. The theoretical approach to turnaround strategy can be classified into two types on the basis of decline K – extinction and R – extinction. K-extinction relates to the macro or the environmental factors responsible for the decline of the company. R- Extinction relates to internal factors of a company resulting in a decline irrespective of the external environment. The magnitude of the decline naturally will have to be analyzed on the basis of the impact of the external forces and internal inefficiencies separately. This will lead to the identification of actions for intervention, which can trigger bigger action. On the basis of this analysis an identification of intervention activities the second phase of response initiation starts. Responses can be two fold, strategic and operative. Strategic responses lead to change or adjustment of businesses of a firm and involve change management. Operating responses deal with the modus operandi of business. Normally, they aim at cost reduction and revenue generation. These activities need acceptance and absorption within the company and a temporal phase sets in. This period of gestation is a transition period and results start showing up only gradually. However, business process reengineering has honed many skills leading to



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dramatic outcomes by identifying critical success factors through process analysis followed by gap analysis. Thus, in the final stage the outcome will have to be measured compared with controls and regulated.

A failure or success of turnaround strategy depends on the following:

1. A proper plan laying down mile stones at definite intervals
2. Resource commitment will have to be clear
3. Policies and programmes will have to be evolved in an inclusive manner
4. Structural changes need to be accepted by properly providing safety nets, rewards and incentives for achievement of targets set for the employees

When implementing contingency plans to combat a downturn in the fortunes of a company, Gary Hamel and C.K.Prahalad in their book “Competing for the future” talk about “numerator driven business strategy” and “denominator driven strategy”. Increasing profitability through improvement of productivity is considered as numerator focused management. Denominator driven management involves reduction of head count, disposal of assets and reducing investment.





## STUDY NOTE - 4

### INDIAN SCENARIO – ECONOMIC SURVEY

**This Study Note includes:**

- **Government policies**
- **Government finances**
- **Public – Private sector investments**
- **Balance of payments**
- **Outlook**

### INDIAN SCENARIO – ECONOMIC SURVEY

For four years in succession global economic activity has been buoyant and it is reasonable to believe that the current year 2007-2008 will also continue to maintain the growth momentum. The global economic growth accelerated from 4.9% during 2005 to 5.5% in 2006 and average 4.9% per annum during the four year period 2003-2006. In this environment of strong global growth the real GDP growth in India is increased to 9.4% in 2006-2007 from 9.0% in 2005-2006. The real GDP growth averaged at 7.6% per annum during the 10<sup>th</sup> five-year plan period (2002-2003 to 2006-2007). Growth in per- capita income increased from 7.4% in 2005-2006 to 8.4% during 2006-2007. Per-capita income growth averaged at 6.1% per annum during the tenth plan period and 7.1% per annum during the last four years. Domestic savings, investments and productivity gains, are amply supporting this robust economic activity. This sustained growth has been possible due to proactive policy measures taken by the government of India to improve the productivity and competitiveness of the Indian economy. The policies enunciated in the various sectors of the economy - real, fiscal, external, monetary and financial.

#### **1. Real sector policies**

##### **a. Agriculture and allied activities**

Agriculture sector has remained a problem area and there has been a deceleration in its growth. To arrest this trend and reverse the deceleration number of policy inputs has been made. A National Rain fed Area Authority (NRAA) has been created in November 2006 to support up gradation and management of dry land and rain fed agriculture. The authority would coordinate all schemes relating to watershed development and other aspects of land use. The accelerated irrigation benefit programme is also being revamped to repair, renovate and restore water bodies in various states. For improved productivity in the agricultural sector an action plan has been formulated product specific. Like the green revolution of 1960's another revolution is on the



threshold. The 11<sup>th</sup> plan will give special emphasis to agriculture to reorient and rejuvenate this sector to meet the needs of the farmers. The credit flow to the agricultural sector has exceeded the target for the third consecutive year. However, doubts are being expressed about the efficacy of the delivery systems and the improvement of this system is the urgent need. The National Agricultural Insurance Scheme (NAIS) and the National Rural Employment Guarantee Scheme (NREGS) are two important schemes, which have been implemented recently. These have been extended to more number of villages, so that the under employment in agriculture sector is mitigated and business risk in agricultural farming due to natural calamities are also taken care of.

### **b. Manufacturing and infrastructure policies**

If the increased activity in the manufacturing sector since 2003- 2004 has to be sustained focus on upgrading the infrastructure facilities in the country is the need of the hour. Up gradation of human skills, work on golden quadrilateral, introduction of public-private partnership model, increase in the power production capacity, etc, have already been identified as the areas which need robust growth in the immediate future. Spiraling of crude oil prices has had a deleterious impact on production and logistics costs through higher fuel costs. Alternatives to fossil fuel are being looked into. Wind energy is being harnessed increasingly apart from utilizing the large coal reserves available in our country. The credible alternative of producing nuclear power is one of the salient government policy. In regard to the industrial policy, the micro, small and medium enterprises development act 2006 has modified the previous act to increase the threshold investment. Micro, small and medium enterprises have now being defined as those in which investment in plant and machinery does not exceed Rs. 25 lakhs, Rs. 5 crores and Rs. 10 crores respectively. For the service sector this classification has been defined as Rs.10 lakhs, Rs. 2 crores and Rs. 5 crores respectively. A new national pharmaceutical policy has also been announced during the year 2006 to strengthen drug regulatory system and patent office.

The public-private partnership model has enabled greater private sector participation in the creation and maintenance of infrastructure. Concepts of special economic zone are under introduction and there have been a lot of hiccups in this area. New modifications are on the anvil to take care of the displaced landowners as also protection of the fertile lands.

The information technology amendment bill 2006 will put in place technology applications, security practices and procedures relating to such applications.

## **2. Fiscal policy**

While preparing a policy to take care of the robust growth of the economy it has also been necessary to introduce fiscal corrections to reduce the fiscal deficit. Government of India subjected itself to a fiscal discipline for reducing deficits in the key areas viz, revenue, fiscal and primary. The tax base is being broadened to include more and more new services in the tax net. Personal taxation is being reduced so that the disposable incomes are bigger and savings grow. Introduction of value added tax (VAT) in various



states has been a significant success and is expected to usher price stability as well as improved earnings to the various states through higher volumes.

### **3. External sector policies**

Foreign trade policy of 2004-2009 was modified through an annual supplement in 2007 for deepening the incentives provided for focused products and markets. For simplifying and liberalizing the external payments regime and deepen the foreign exchange market the recommendations of the committee of Fuller Capital Account Convertibility have been considered by the Government of India and certain policy initiatives have been undertaken. They relate to increase in overseas investment limits for joint ventures / wholly owned subsidiaries abroad by Indian companies, higher portfolio investment limits for Indian companies / domestic mutual funds, higher ceilings for investments by foreign institutional investors in Government securities and enhanced repayment limits for external commercial borrowings.

### **4. Monetary policies**

The necessity to balance the growth of economy with containing inflationary pressures has guided the monetary policy. The Reserve Bank of India (RBI) have taken its stance on the monetary policy to continue to reinforce the emphasis on price stability and well anchored inflation expectations and there by sustain the growth momentum contextually, financial stability may assume greater importance in the near future. RBI has been managing this area with the cash reserve ratio (CRR) on one-hand and Repo rates on the other. The interest rates are being modified whenever necessary on the basis of the monitoring exercise on rates of inflation.

### **5. Financial sector policies**

In view of the critical role played by the financial sector in supporting the robust growth of economy, RBI have tightened provisioning norms and risk weights to ensure asset quality, strengthened the accounting and disclosure norms for greater transparency and discipline. Final guidelines for the implementation of the new capital adequacy framework have been issued. Alongside its initiatives to strengthen the financial sector the RBI continue to take measures for protecting customers' rights and enhancing the quality of customer service.

## **GOVERNMENT FINANCES**

### **a. Pattern of receipts**

The combined finances of central and state governments registered an impressive improvement during 2006-2007. The buoyancy in tax revenue was possible due to the growth economy as well as the changes effected in the taxation system through reduced tax rates and broadening tax base. As a result Government of India could increase the allocation for development expenditure. 21.4% of GDP represented revenue receipts and the total expenditure net off repayments was 28.2% of the GDP. Developmental expenditure accounted for 15.2 % of GDP against 14.5% earlier. Debt including the reserve funds and deposits and advances came down to 77% against 80.5% of the previous year. For the year 2007-2008 revenue receipts are expected to increase by



14.9% over the previous year. Tax to GDP ratio is expected to increase to 11.8% in 2007-2008 and the non-tax revenue increase to 6.7% in 2007-2008. In respect of non-debt capital receives the recoveries of loans and advances from the state governments and central public sector units are expected to decline due to debt consolidation.

#### **b. Pattern of expenditure**

Aggregate expenditure as percentage of GDP in 2007-2008 has been budgeted at 13.8% of GDP as against 14.1% of GDP in 2006-2007, reflecting reduction of non-planned expenditure particularly interest payments and subsidies. On the other hand the planned expenditure to GDP ratio is budgeted to increase on the back of higher budgetary support for the central plan at 22.5% against 20.9% during the previous year. Capital expenditure will remain unchanged at 1.8% of GDP in 2007-2008. Among the major developmental expenditure education and health as a proportion to total expenditure has increased to 4.1% and 2.1% respectively against 3.7% and 1.8% in the previous year. The share of agriculture and rural development has more or less maintained the same level at around 10%.

### **PUBLIC - PRIVATE SECTOR INVESTMENTS**

#### **a. Public sector investments**

During 2005-2006 the public sector enterprises contributed to around 11.12% of GDP and supplied a wide range of products and services including basic goods like steel, cement and chemicals, capital goods and intermediate goods. They also rendered services like telecommunications, tourism and warehousing. The cumulative investment of all central public sector enterprises (CPSE) at end March 2006 was Rs. 3,93,057 crores. Manufacturing CPSEs contributed 51% followed by CPSEs for services at 40% and mining by CPSEs accounted for 9%. In terms of capacity utilization, major CPSEs operated at above 75%. CPSEs had near monopoly in the production of coal 85.5%, crude oil 85.87% and petroleum refining 74.5%. The accumulated losses of all CPSEs declined by Rs.10, 578 crores from Rs.83, 725 crores in 2004-2005 to 73,147 crores in 2005-2006 (12%). In net value addition of CPSEs at market prices, the share of taxes and duties was the highest at 46%. At end March 2006, 239 CPSEs employed over 16.49 lakh people excluding casual workers.

#### **b. Private sector investments**

Resource mobilization through primary market was Rs.1, 61,769 crores during 2006 as against Rs.69, 543 crores during 2003. Out of this, private placement accounted for 1,17, 40 crores. And equity through IPOs accounted for Rs.32, 672 crores during 2006. Mutual funds contributed to private sector to the extent of Rs.86, 295 crores in 2006 against 35,646 crores in 2003.

Foreign direct investment inflows net were of the order of USD 4.7 billion during 2005 – 2006 and continued to climb during 2007. Foreign institutional investors have shown a chequered movement depending on the variation of interest rates in various countries compared to India and also exchange parity. Indian rupee has been steadily strengthening against dollar and it had its own impact on foreign trade as well as investments.

**c. Public-Private partnership**

The growth in the economy either in the industrial or services sector has put an inordinate pressure on the infrastructure like power, ports, highways, airports, tourism and urban infrastructure. The growth of infrastructure has lagged behind and may assume serious proportions. So, the government has been actively pursuing public private partnership (PPP) to bridge the deficit in the infrastructure. Under the overall guidance of the committee of infrastructure headed by the Prime Minister, the PPP programme formulation and implementation are being closely monitored by the relevant ministry / departments. An appraisal mechanism has been laid down and PPP appraisal committee has been given a mandate and guidelines for drawing up time frame for according approvals to proposals in a speedy manner. About 15 proposals valued at Rs. 2,480 crores have been already approved. PPP projects normally involve long term contracts between the government and private parties detailing the rights and obligations of both the contracting parties. Government has decided to develop standardized frameworks based on due diligence and agreements will follow international practices. They will also create a framework with a right matrix of risk allocation, obligations and returns. Planning commission has also issued model concession agreement (MCA) for ports, state highways and operation maintenance agreements for highways. PPP is still a nascent concept in India and the expertise for handling PPP is still under evolution. To promote PPP programme all state governments and central ministries are setting up PPP cell with a senior level officer as a nodal officer. Technical assistance has been obtained from Asian Development Bank (ADB) including hiring of consultants and training of personnel. A database on PPP projects in India is also under preparation.

**BALANCE OF PAYMENTS**

The strengthening of Rupee against USD started from a low of Rupees 46.5 to Rs. 39.50 in October 2007. Robust capital inflows are expected in the near future also and as such the pressure on the rupee is expected to continue. Net foreign institutional investment (FII) peaked at 4.7 billion USD in July 2007. FDI during April – July 2007 nearly doubled to USD 4.4 billion compared to USD 2.3 billion in the corresponding period in the previous year. RBI may tighten the external commercial borrowing norms further. India's export growth in terms of USD continued to show an impressive performance in spite of the strengthening rupee. Exports have grown cumulatively at a satisfactory level of 18.5% for the period April – September 2007 but still it was lower than the corresponding period of previous year at 27%. Various exports like leather, textile, and readymade garments were affected by the strengthening of the rupee. During April – May 2007 total imports were higher by 37.7%. POL and gold silver imports recorded an increase of 38.6% and growth in capital goods imports increased by 35%.

The world trade growth is expected to slow down during the year 2007-2008 according to world economic outlook; growth in world trade goods and services in volume terms is expected to be lower at 6.6% compared to 9.2% of last year. During January 2007, world exports in USD increased by 13.3% as compared to 13.5% to the corresponding period in 2006. Growth was



higher due to exports from industrialized countries. In the case of developing countries, the growth was lower at 15.1% during January –July 2007, against 18.1% in the corresponding period previous year.

## **OUTLOOK**

The Indian economy has grown by 8.58% in the quarter ended September 2007. While the industrial sector grew by 8.7%, the services and agriculture sector are expected to grow at 10.3% and 3.2% respectively. For the year 2007-2008 GDP growth is forecasted at 9.1%. Interest rates continue to shown a lower trend. But this trend is expected to be arrested with the latest announcement by RBI of CRR hike of 50 basis points. Inflation has been under control with the lowest level at 3.02% during October 2007.

The national development council (NDC), the country's highest policy-making body recently endorsed the draft for 11<sup>th</sup> five-year plan for the country. This draft assumes an average 9% growth in GDP for the first four years and 10% growth during the final year 2011-2012. The overall investment Rs. 36,00,000 crores out of which Rs.10, 00, 000 crores will be from gross budgetary support to assist the states for introducing inclusive growth through the development of social infrastructure such as health, education and eradication of poverty by generating more jobs. The target for reduction in incidence of poverty by 10% of points would mean generating 7 crores new jobs and ensuring electricity connection for all the villages in the country. After serious discussion on the draft it has been decided to institute a task force in the planning commission to examine the resource needs for expanding irrigation and chalking out a new approach to implementation there of. In regard to agricultural indebtedness a scheme is under formulation on the basis of the recommendations of Radha Krishna committee. The discussions on the 11<sup>th</sup> five-year plan also brought into focus the problem of food security. The plan recognizes the necessity for enhancing stocks of food grains and considering buffer stocks for pulses and edible oils. To take care of the regional disparity and increasing rural-urban divide, the 11<sup>th</sup> plan has allocated more than 50% of the gross budgetary support to the key sectors of agriculture, health and education. Power sector however was expected to be major area of concern and the necessity to build enough power capacity to keep abreast of the growing industrial sector has been given high priority by the Government of India.



## STUDY NOTE - 5

### FORECASTING, MODEL BUILDING AND MODELS

**This Study Note includes:**

- **Forecasting Models**
- **Accounting and Financial Models**
- **Decision Analysis Models**
- **Econometric Models**
- **Simulation Models**
- **Life cycle Models**
- **Strategic Options Models**
- **Portfolio Planning Models**

#### **Introduction**

Many tools are being used in all analytical exercises, whether they are in science, engineering, management, economics or social sciences. Models are a group of tools, which help comprehension of problems and also help assist in taking decisions. A typical modeling process starts with the identification of a problem and analysis of the requirements of the situation. This analysis will include the scope of the problem, internal or external forces acting as part of the problem and the dynamics of the situation. While such an analysis is attempted, the need to identify variables and their relationship is very essential. Whenever a model is built assumptions are made. These assumptions usually are untested beliefs or predictions and as such they will have to be tested for their relevance to the model. As otherwise the results of the model may not be realistic.

The analysis stated above can be either static or dynamic. **Static analysis** is about “single snap shot situation”. This would mean that all occurrences take place in a single interval whose duration can be either short or long. For example, “make or buy decisions” belong to static analysis. **Dynamic analysis** is applied to situations, which are subject to change over a period. A simple example would be a financial projection either of profitability or funds over five-year period. The input data such as investments, costs, prices and quantities are likely to change from year to year. Another important factor is that the dynamic models are temporal dependent. For instance, arrival of people at a station to board the train changes right through the day hour-to-hour on the basis of the departure time of the various trains.

**Dynamic models** also are used for analyzing trends and patterns over a period of time. Statistical averages have been used in many a forecasting dynamic model. Dynamic analysis is used very frequently to analyze the changes occurring with in a business enterprise over a period of time. This analysis is also used for developing solutions to specific business problems as also in the formulation of business strategies, tactics and plans. Decision support systems are also utilizing models especially as many situations need to assume certainty, uncertainty or risk.





The advantage of models is that many user inputs and data are transformed into useful information. Models also represent a real situation as an abstract framework. A general model can be framed in mathematical equations or in natural language expressions or as a computer algorithm. The models can be used to manipulate the input and give corresponding changed out puts. They can update records, provide responses to user actions and perform repeated analytical work.

An **explanatory model** narrates the relationship between occurrences and results and also provides an analysis of the situation. For example, a correlation between production, raw materials, product mix and capacity utilization and a comparison with another time period is an explanatory model.

A **contemplative model** is about forecasting outcomes that may result from introduction of a specific set of parameters or changes to a model. This analysis is dynamic and requires interaction with the user.

An **algebraic model** involve introduction of simultaneous equations to provide specific solutions. A manager decides on an outcome and also a point of initiation, and then runs the model. This type of model assists managers to assess to what extent variables can be manipulated between two definite points (beginning and the end). While explanatory models are descriptive in nature, contemplative and algebraic models are predictive models.

For **decision support systems models** used are cost benefit analysis, forecasting demands, sales pattern, etc, finance and investment quantification, inventory control and stock out, transportation problems, project management, queuing, scheduling, etc.

## FORECASTING MODELS

Business forecasting is an integral part of strategic management. In that forecast models are needed to develop strategic plans for long-range perspectives. Forecasting models are of four types:

1. Qualitative models
  - a. Delphi model – Collects and analyzes panel of experts opinions
  - b. Historic data – Develop analogies to the past through judgment
  - c. Nominal group technique – Participative group process with forced voting
2. Naive (time series) quantitative models
  - a. Simple average – Averages past data to project the future based on that average
  - b. Exponential smoothing – Weights differently earlier forecasts and the recent to project into the future
3. Causal quantitative model
  - a. Regression analysis – Defines functional relationships among variables as to whether it is linear or non-linear
  - b. Economic modeling – Offers an overall forecast for a variable like Gross National Product (GNP)
4. Combination of monetary and physical projections
  - a. Marketing projections – Monetary by region, product and product group





- b. Economic projections – Monetary by region, industry and broad product category
- c. Historical demand projections – In units, monetary by product and product group
- d. Demand forecast – In units by product and product group for operations management and monetary for sales and financial planning. (This is a combination of a, b and c)

### Criteria for selecting a forecasting method

Often the managers are called upon to prepare forecasts regarding trend, seasonality, and turning points for short, medium and long term. Sourcing data also becomes a difficult problem and the managers have to take decision on how they should select the method of forecast with the available data. The following table is a guide for such selection:

| Serial Number | Forecasting method             | Quantum of data                                            | Pattern of data                               | Time horizon               | Preparation time                                           | Type of skills required     |
|---------------|--------------------------------|------------------------------------------------------------|-----------------------------------------------|----------------------------|------------------------------------------------------------|-----------------------------|
| 1             | Simple exponential smoothing   | Maximum 10 observations to accord weight                   | Stationary                                    | Short                      | Short                                                      | No sophistication           |
| 2             | Holt's exponential smoothing   | 10 – 15 observations to set both weights                   | Trend without seasonality                     | Short / Medium             | Short                                                      | Some sophistication         |
| 3             | Winter's exponential smoothing | Minimum 4-5 observations per season                        | Trend and seasonality                         | Short and Medium           | Short                                                      | Moderate sophistication     |
| 4             | Regression trend models        | Maximum 20 observations. Minimum 5 observations per season | Trend and seasonality                         | Short / Medium             | Short                                                      | Moderate sophistication     |
| 5             | Causal regression models       | Minimum 10 observations per independent variable           | Complex                                       | Short / Medium / Long term | Long development time but can be implemented in short time | Considerable sophistication |
| 6             | Time series decomposition      | Adequate to cover at least two peaks and troughs           | Cyclical / seasonal containing turning points | Short / Medium             | Short / Moderate                                           | No sophistication           |
| 7             | Box Jenkins                    | Minimum 50 observations                                    | Stationary                                    | Short / Medium / Long term | Long                                                       | Highly sophisticated        |

Adapted from J. Holton Wilson and Deborah Allison – Korber, “Combining subjective and objective forecasts improves results”, The Journal of business forecasting, fall 1992, and page 4.



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## ACCOUNTING AND FINANCIAL MODELS

**Target pricing model** for identifying selling prices for new product is one of the important models. For this two sub models are used – a break-even point for new product and a target return on investment model. After “What-if analysis” the selling price can be computed. These models help in developing the relationship between prices, marketing expenses, and profits for brand and product planning.

The **break-even model** provides price-volume-profit relationships. The important facet of this model is making reasonable assumptions in regard to fixed and variable costs.

**Budget financial models:** Budgeting data support systems with their intense calculations and multi-variables require models, which can track the necessary solutions for divisions, products or projects. As a process, it's a company wide effort. Companies are trying to combine the traditional bottom-up approach for budget preparation with a top-down approach to align the strategic objectives. Using web technologies changes are made through the budget model estimates. Some new models support participative budget processes. Comshare, Adaytum software and Hyperion solutions have developed products that assist the strategic planning, budgeting, management reporting, analysis and consolidation.

**Proforma financial statements:** Strategic planning must be supported by financial analysis and projections. A Proforma income statement projects financial results for a specific time horizon. Gross sales are projected and costs are estimated based on specific assumptions, historical data and projections. A profit and loss statement is also computed. These statements are useful for formulating and evaluating strategic plans and can be used for monitoring implementation.

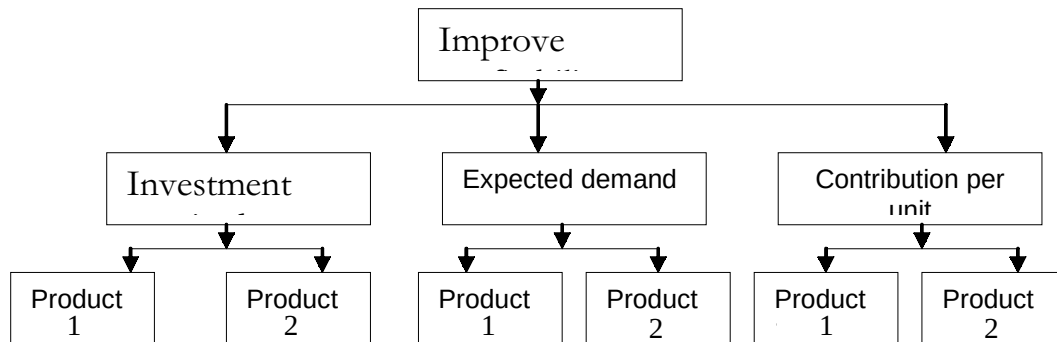
**Ratio analysis:** Ratio analysis is a much sought after methodology for interpreting and evaluating a company's performance. A decision support system can model a time series of sales growth as also a table of key ratios. There are many specific accounting and financial models along with ratio analysis for monitoring firms' credit worthiness, potential earnings, financial strengths and weaknesses.

## DECISION ANALYSIS MODELS

Situations some times involve analysis techniques to help decision makers comprehend their problem and identify different variables for priorities and preferences. This is normally achieved through structuring problems into a hierarchy of objectives and by identifying decision alternatives on specific criteria. In general, computerized decision analysis tools are used to break and structure problems.

### Analytical hierarchy process (AHP)

This is one such technique and is characterized by a multi-criteria decision technique combining qualitative and quantitative variables. The first step is to make a hierarchical representation of the problem. The overall objective is designated first followed by decision alternatives at the bottom. Between top and bottom levels selection criteria are indicated.



Hierarchical representation

Having developed the above representation the necessary data will have to be generated for comparing the alternatives. A decision maker has to make comparisons in pairs of the elements relative to next higher level in hierarchy. Usually in the analytical hierarchy process, a relational scale of real numbers from one to nine is used to indicate preferences.

Having determined the relative priority of each attribute a consistency ratio is calculated. This has the option of re doing the comparison matrix. Finally, the priorities are weighed of the lowest level alternatives relative to topmost objective are computed and shown. Thus AHP helps developing a holistic and logical analysis of problems, which exhibit considerable uncertainty. The widely used AHP package is Expert Charts.

### Decision trees or multi-attribute utility models (MAUA)

Usually, decision trees model is used to decide on alternatives to be proceeded with or to be dropped. A generalized decision analysis programme models develops such a system with different probabilities and for a particular criteria. The criteria can be maximizing monetary value or maximizing sales, etc.

Mutli-attribute utility analysis model use more decision factors with proper weights. The decision maker also provides adequate information about each alternative on each attribute. This method MAUA has been often used in selection problems in which there is certainty regarding the attribute levels of the alternatives. If there are uncertainties in these values, probability can be introduced. This probability distribution can be used in combination to MAUA to establish a consistent framework for selection decisions.

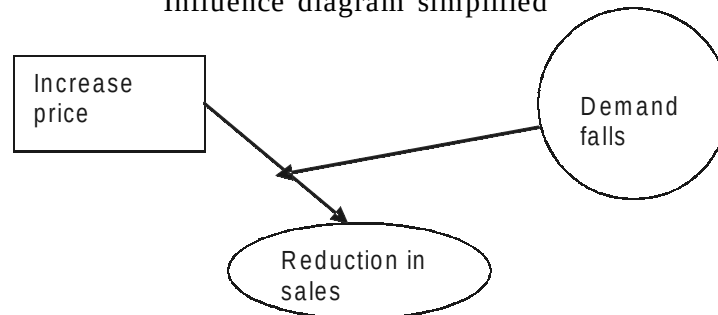
### Influence diagrams

Another important decision analysis tool is known as an influence diagram. It offers a graphical presentation of decision situation expressing the exact nature of relationships between the variables. Bodily (1985) developed certain conventions for influence diagrams. They are:

1. A rectangle is a decision variable
2. A circle is an uncontrollable or intermediate variable
3. An oval is a result or outcome variable

These three types of variables are connected with arrows that indicate the direction of influence. Arrows can be one way or two ways.

Influence diagram simplified



## ECONOMETRIC MODELS

Economics as a subject has evolved over a period of time and latterly injection of statistics into economics created a new branch as econometrics marrying theoretical economics with statistical computations. This has helped developing dynamic, stochastic, general equilibrium models, which have more theoretical assumptions and least statistical interventions. Incomplete Dynamic Stochastic General Equilibrium Models has still substantial theoretical coherence with increased statistical intervention. Models with Explicit Long Run Equilibrium contain more or less equal inputs from theoretical economics and statistical information. Vector Autoregressive (VAR) model is essentially a statistical model containing lot of statistical inputs with economic assumptions. VAR is used to introduce the impact of various variables on the Gross National Product or Foreign trade or industrial production and so on. Such variable or shocks are interest rate, real exchange rate, inflation, terms of trade, domestic demand and foreign demand. Kapetianos, Tin Bergen, Mckibbin and Vines Colette Black are some of the professionals who developed econometric models to help formulating fiscal as well as monetary policies.

A non-linear statistical model of business cycle has been developed as an econometric model. Harding, Pagan and Breunig developed this model to measure the business cycles. The cycles are divided into phases – periods like boom and recession. These non-linear models depicted peaks and troughs with turning points.

Econometric models like Input-output model and End-use model have been used extensively in preparing countries economic plans. The Input-output model is a special type of economic model in which a number of inputs are chosen and for each relationship the quantities of a number of different outputs through linear relationship. The inputs being independent variables, the output would be the forecasted dependent variables. In the End-use model, the product for which demand is to be forecast is related to the various end uses to which it is put and the quantitative relationship between units of the product and corresponding units of the end-use product is established. This relationship is known as the bridging factor. The projected demand of the end-use product over the forecasting period is now obtained and worked backwards to obtain the demand forecast of the product.



It will be seen that there is considerable similarity between input-output analysis and end-use model. A major obvious difference is that whereas in input-output analysis, the inputs are the independent variables, in the end-use model, the position is reversed. Also, in the input-output model, multiple inputs and outputs are considered simultaneously, any output having one or more inputs, just may be related to one or more outputs. As against that, in the end-use model, a single product is considered and is related to all the end products, which have significant requirement of the product. The forecast derivation in the end-use model is thus more direct and data requirement is often less. Both the models, it may be mentioned, are extremely important and significant, having extensive use in forecasting.

### SIMULATION MODELS

Simulation model is normally used when companies have to take interrelated decisions. For example, manufacture of a new product would require decisions on plant and machinery, scheduling and dispatching on the shop floor and the manufacturing philosophy itself. Such interrelated decisions issues are taken care of through discrete event simulations and costing models. A simulation model can generate test conditions approximating actual or operational conditions. For example, wind tunnel where conditions akin to space conditions are created to train pilots to fly aircrafts. Many problems can be evaluated through simulations including materials management, manpower planning, transportation problem, and replacement policy and scheduling.

Simulation models are different from other models in that most models are based on abstract reality, while simulation models try to imitate reality. Again, simulation models enable “what-if” analysis over a multiple time periods or events. Simulation models also help to narrate and predict the characteristics of a given system under different conditions. Finally, simulation is normally used when the problem is too complex for using optimization models.

Simulation model building involves following steps:

1. Define the problem
2. Construct the simulation model gathering necessary data and develop a flow chart to describe the process
3. Program the model
4. Test and validate
5. Design experiments
6. Conduct experiments
7. Evaluate the results

#### Types of Simulation models

There are several types of simulation as given below:

1. **Probabilistic simulation** where one or more independent variables is conceptualized as a probability distribution of values
2. **Discrete simulation** where it becomes important to know when an event exactly occurs
3. **Visual simulation** is a graphical representation of computerized results. Software for this method is one of the recent developments in computer - human interaction and problem solving



### **Advantages and disadvantages of simulation models**

Decision support systems have been increasingly using simulation models for the following reasons:

1. Simulation theory is relatively easy to comprehend
2. Simulation can offer solutions to “what-if” type questions
3. Decision support system analysts work closely with managers who seek solution
4. The simulation model is built for one particular problem
5. Simulation models allow inclusion of real life complexities and no simplifications are necessary

Disadvantages:

1. An optimal or the best solution is not always guaranteed
2. Building simulation model is a slow and costly process
3. Solutions and inferences from a specific simulation model cannot be transferred for other problems

### **Sensitivity analysis**

Whenever the plan is formulated or a model constructed or a budget document is prepared, many assumptions underlie such activity. These activities are time bound and also involve time consuming exercises. They are prepared normally ahead of a particular dead line for implementation. So, it is possible that some of the key assumptions may undergo a change to near efflux of time. So it is always prudent to quantify the impact of such assumptions or variables due to their deviations from the original quantifications. A sensitivity analysis guides an analyst through the varying impacts of the particular component or variable on the model or the plan or the budget. Sensitivity analysis is often attempted by varying one sensitive factor at a time, other factor remaining the same and quantifies the impact on the model or budget or plan. For instance, price and capacity utilization are two common factors that are taken for sensitivity analysis. If the price of the product were to go up, sales falls due to lowering demand. But how exactly the increments of price per unit affect the demand or the sale will be borne out in the sensitivity analysis. It becomes very important for the models as the variables can be many and interdependencies will have to be fully understood for a meaningful exercise. Towards this sensitivity analysis helps.

### **LIFE CYCLES MODELS**

Life cycle models apply to products, processes, machines, projects and businesses. Products have life from the inception of the concept to embryonic, growth, maturity and decline. Processes in the same manner has a life cycle due to technological obsolescence – technological feasibility, development, commercialization, growth, maturity and decline. Machines have their life span from the time of acquisition through sustenance and final scrapping. Projects again are onetime activities and as such have a cycle of conceptualization, startup, implementation and completion. Businesses have also exhibited a life cycle with embryonic, growth, shake outs, maturity and decline.

So it is absolutely imperative that whenever a strategy is formulated and implemented it should take full cognizance of the life cycles involved, as strategies will vary with the stage of the life cycle.



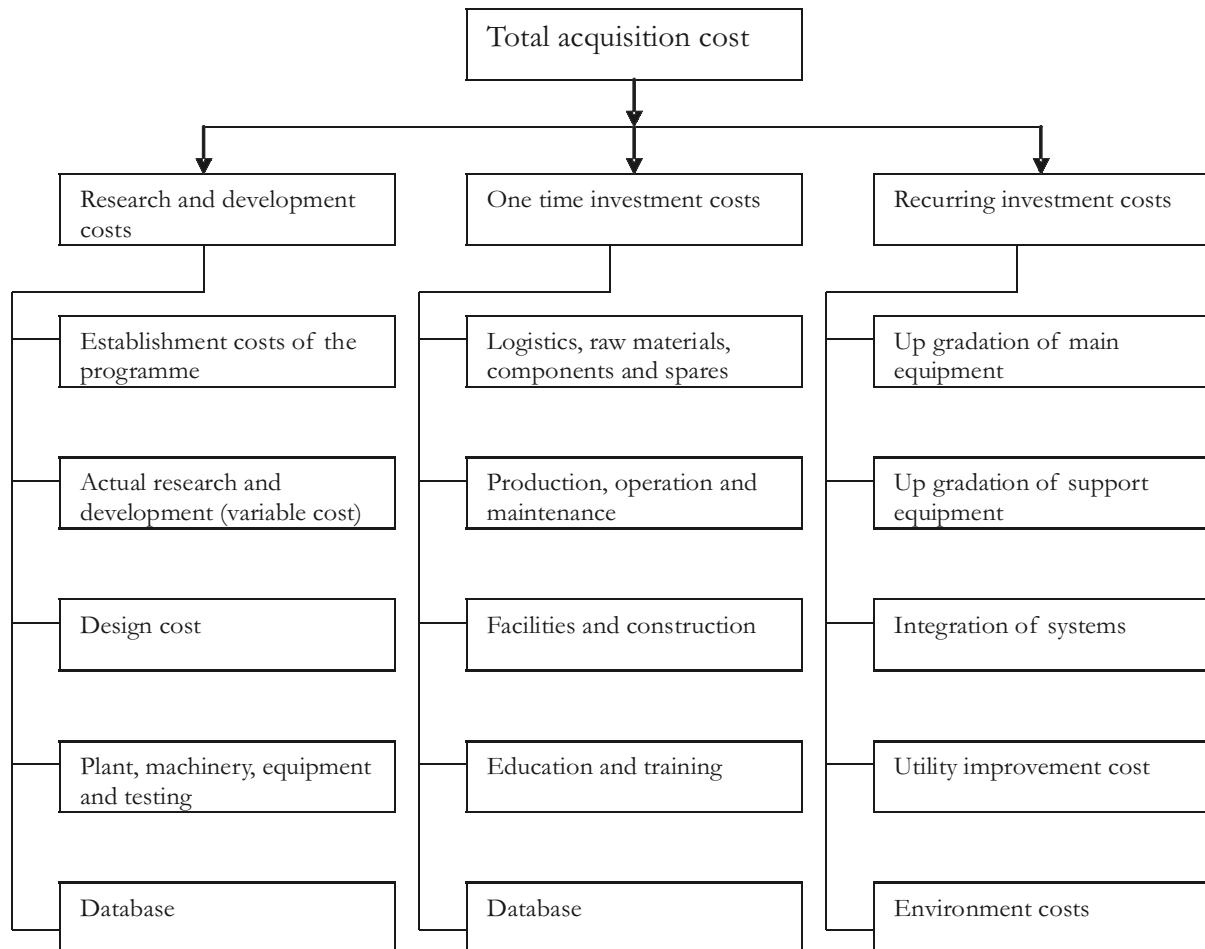
Apart from that in the beginning of every life cycle, be it for product, process, machine, project or business, there is a huge commitment cost involved followed by sustenance cost. Strategies naturally have to be built up from two different stand points:

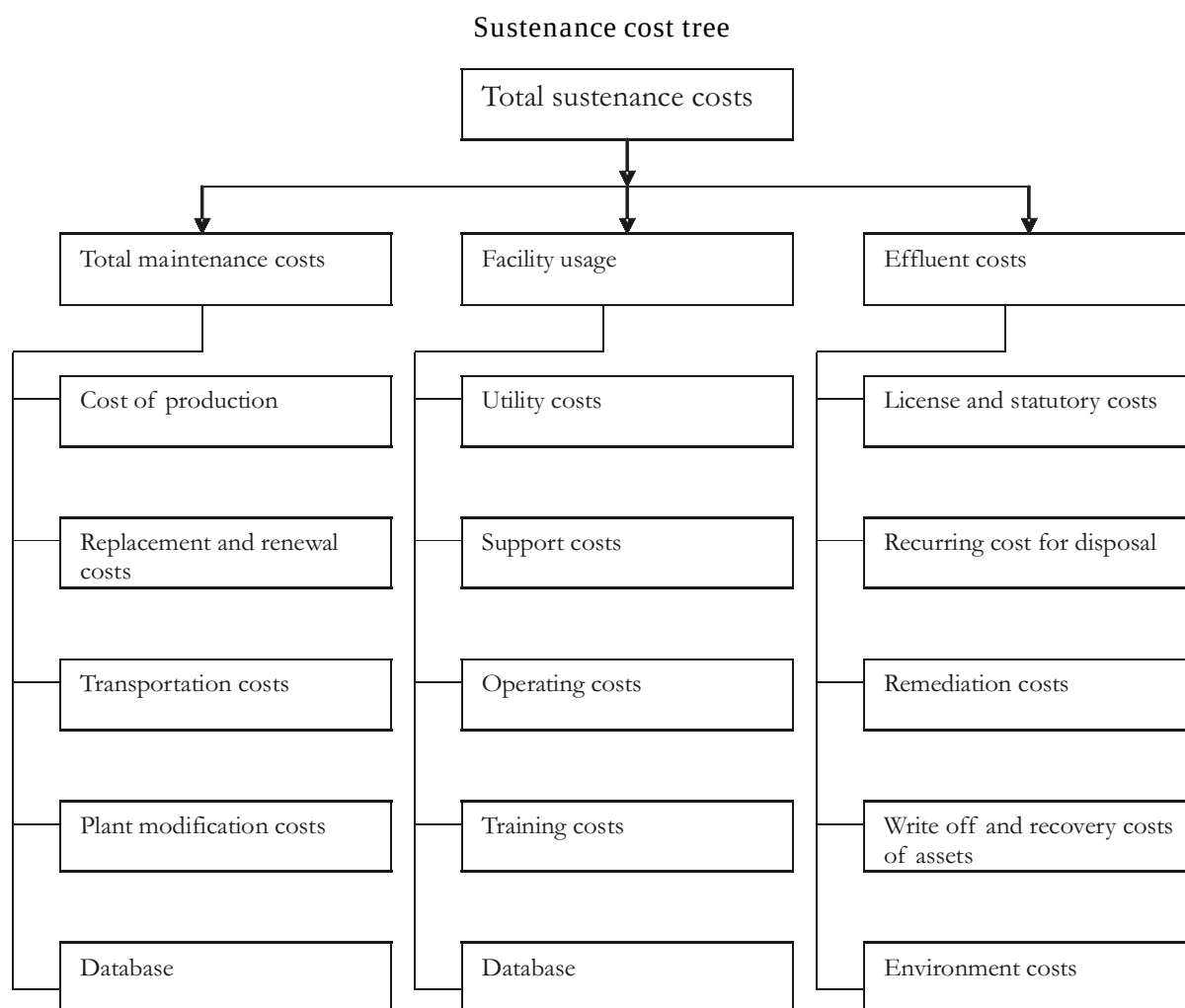
How the commitment costs are transformed into actual expenditure over a time frame? and  
How they are matched with resources available?

Computation of return on the total investment has to be recovered throughout the life cycle and the programming of such return and the rates of such return at different stages of lifecycle depends on the strategy employed.

Life cycle costs analysis becomes necessary for providing the customers a long term guarantee taking into account the business and financial risk, keeping the system value during time, optimizing sustenance procedures, etc. These are dependent on reliability, maintainability, safety and performance of the entity during the life cycle. So, development of a life cycle cost model starts with a simple relationship based on costs for acquisition and a cost for sustenance totaling to life cycle cost.

**Acquisition cost tree**





Normally, acquisition costs are one time cost, whereas sustenance cost is a continuing cost through out the lifecycle. Though the acquisition cost is in the nature of capital cost and is incurred within a definite time horizon. Sustenance cost is more in revenue nature and is incurred over a longer period throughout a life cycle. However, sustenance cost is always many times greater than acquisition cost.

A life cycle cost calculation will have definite steps as below:

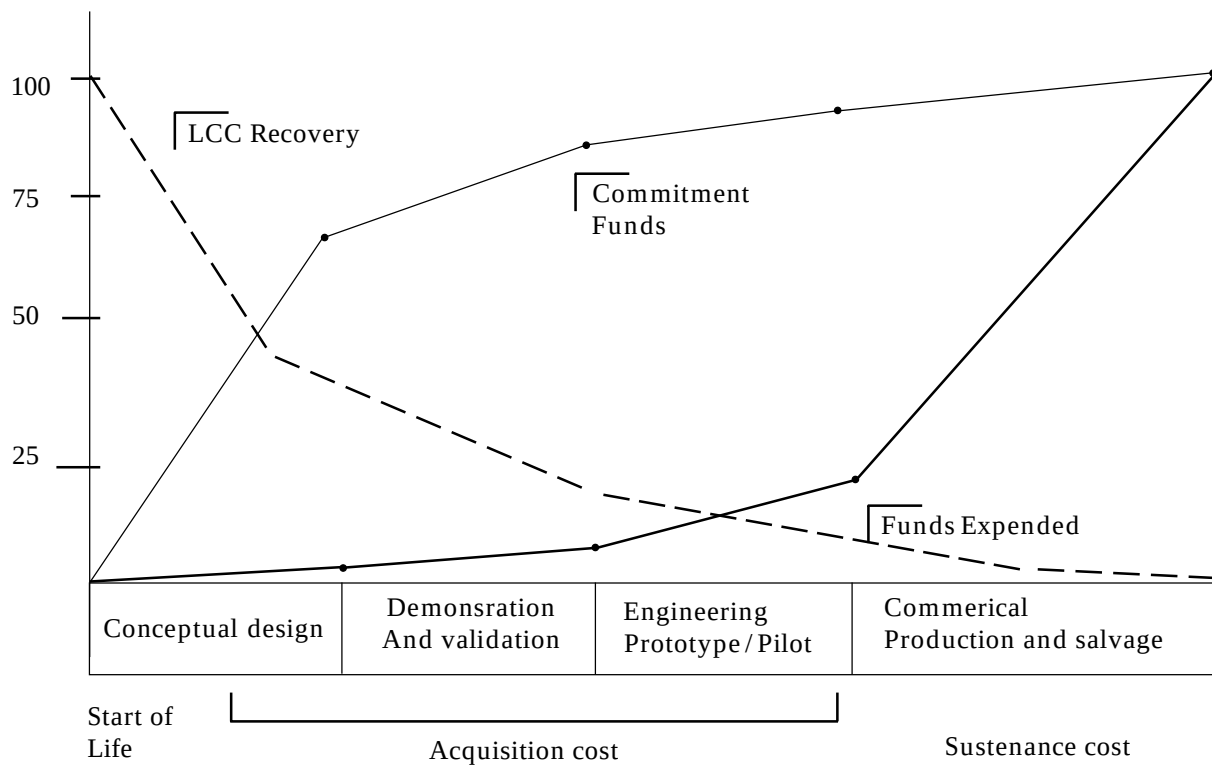
1. Define the problem, which requires computation of lifecycle costs
2. Alternatives and acquisition / sustaining costs
3. Prepare a break up for both acquisition and sustenance costs
4. Identify an analytical cost model
5. Prepare cost estimates and cost models
6. Prepare cost profiles for each year or period of the lifecycle
7. Develop break even charts for the time intervals





8. Develop Pareto charts for identifying the vital cost drivers
9. Develop sensitivity analysis for the cost drivers
10. Risk analysis - both physical and financial
11. Select preferred course of action using life cycle cost
12. Feedback of 11 to 2, 3, 4 and 5

Components of Life cycle cost and recovery through the cycle



## SOME MODELS TO ASSIST IN EXPLORING STRATEGIC OPTIONS

### The value chain

To get a bird's eye view of an organization's operation is the purpose of the value chain model of corporate activities, developed by Michael Porter. Competitive advantage, says Porter, arises out of the way in which firms organize and perform activities. One should keep in mind that in Porter's analysis, business activities are not the same as business functions.

1. Functions are the familiar departments of a business and reflect the format organization structure and distribution of labor.

2. Activities are what actually goes on, and the work that is done. A single activity can be performed by a number of functions in sequence.

Activities are the means by which a firm creates a value in its products. Activities incur costs, and in combination with other activities, provide a product or service which earns revenue. Firms create value for their buyers by performing these activities. The ultimate value a firm creates is measured by the amount customers are willing to pay for its products or services above the cost of carrying out value activities. A firm is profitable if the realized value to customers exceeds the collective cost of performing the activities. There are two points to note here:

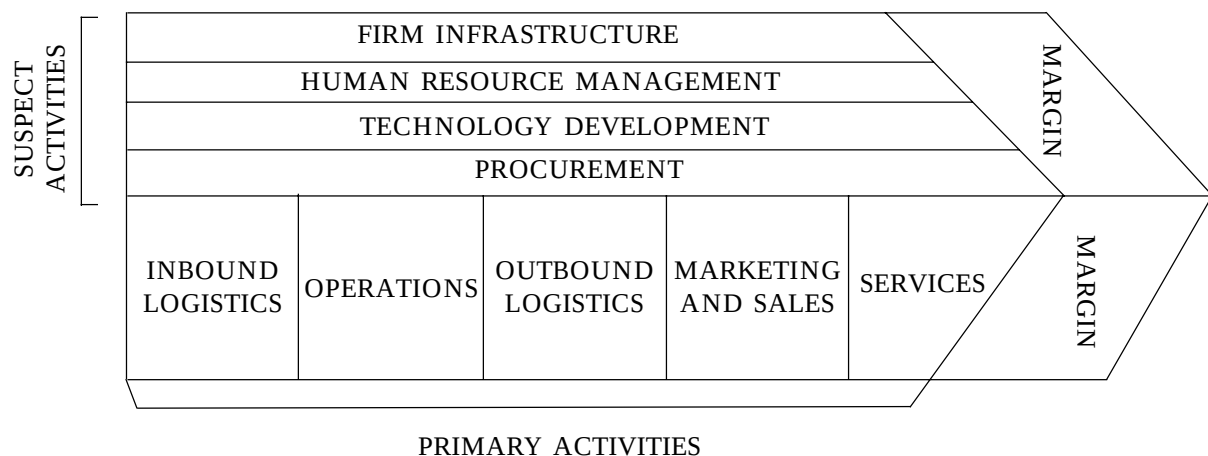
1. Customer's purchase value, which they measure by comparing a firm's products and services with similar offerings by competitors.
2. The business creates value by carrying its activities either more efficiently than other businesses, or combined in such a way as to provide a unique product or service.

Porter analyzed the various activities of an organization into a value chain. This is a model of value activities and the relationships between them.

**Primary Activities** – are those directly related with production, sales, marketing, delivery and services. The diagram shows five primary activities.

- a. **Inbound logistics** are those activities involved with receiving, handling and storing inputs to the production system.
- b. **Operations** are those activities which convert resource inputs into a final product.
- c. **Outbound logistics** are those activities relating to storing the product and its distribution to customers.
- d. **Marketing and sales** are those activities that relate to informing customer about the product, persuading them to buy it, and enabling them to do so.
- e. **After sales services:** For many companies, there are activities such as installing, repairing products, providing spares, etc.

The Value chain





**Support Activities** – are those which provide purchased inputs, human resources technology and infrastructural functions to support primary activities. Support activities include:

- a. **Procurement** refers to those activities which acquire the resource inputs to the primary activities.
- b. **Technology Development:** These activities are related to both product design and to improving process and / or resource utilization.
- c. **Human Resource Management** is the activities of recruiting training and rewarding people.
- d. **Firm infrastructure:** The systems of planning, finance etc., are activities which Porter believes are crucially important to an organization's strategic capability in all primary activities.

Furthermore, in addition to the categories described above, Porter identifies three other ways of categorizing activities:

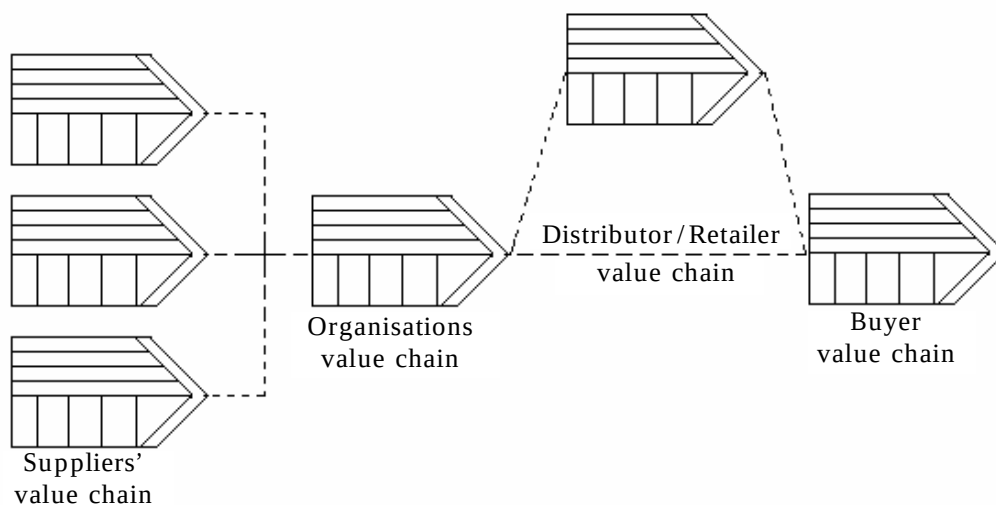
- a. Direct activities are concerned with the adding value to inputs.
- b. Indirect activities enable direct activities to be performed, e.g., maintenance.
- c. Quality assurance: This type of activity monitors the quality of other activities and includes – inspection; review and audit.

**Linkages** connect the interdependent elements of the value chain together. They occur when one element of the value chain affects the cost or effectiveness of another.

The Value chain contains an element of **margin**. This is the excess of the amount that the customer is prepared to pay over the costs of the resource inputs and value activities. Firms can gain competitive advantage by conceiving of new ways to conduct activities, employing new procedures, implementing new technologies, or using different inputs and by exploiting linkage effectively.

A company's value chain is not bounded by a company's border. It is connected to what Porter describes as a value system.

The Value System



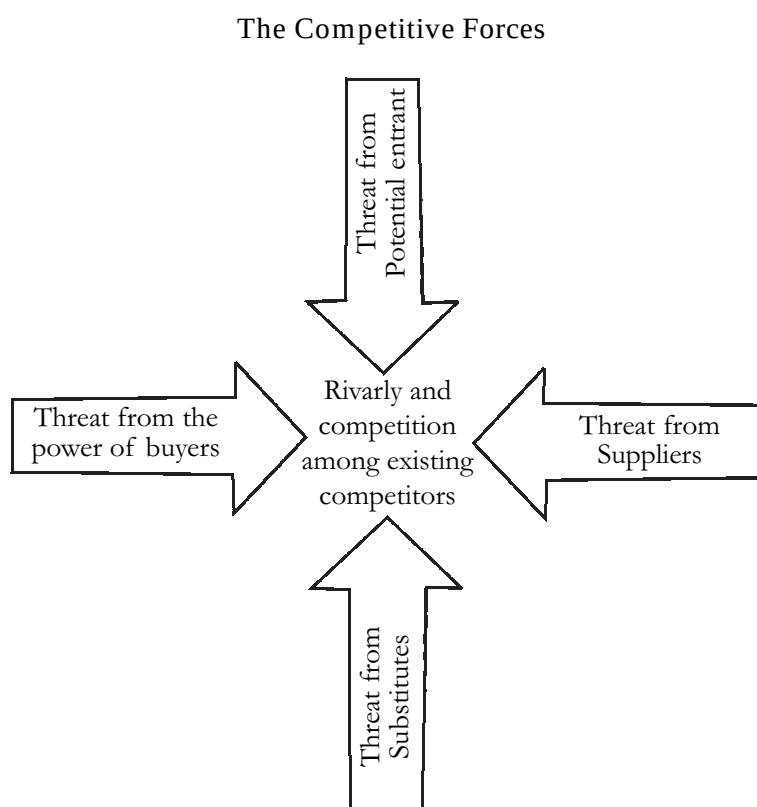
As well as managing its own value chain, a firm can secure competitive advantage by managing the linkage with its suppliers and customers. A company can create competitively advantage by making best use of these links and this means considering the value chain of these suppliers and customers.

The value chain is also a useful model for analyzing a firm's competitiveness and also further on in the planning process for designing strategies. A firm's value chain not always easy to identify nor are the linkages between the different elements. However, it is an important analytical tool because it helps people:

- a. to see the business as a whole
- b. to identify potential sources of competitive advantage

### Industry structure analysis

When one looks at the competitive map of an industry, it is possible to identify distinctly five economic and competitive forces acting simultaneously upon it as illustrated in figure.



To compete effectively, a firm has to find how best to defend itself against these forces, even to the extent of devising ways of influencing them in its favor. In order to do this, the firm must first know where it is located on its competitive map of its industry, so that thereafter it can relate itself to each of the five competitive forces, viz.



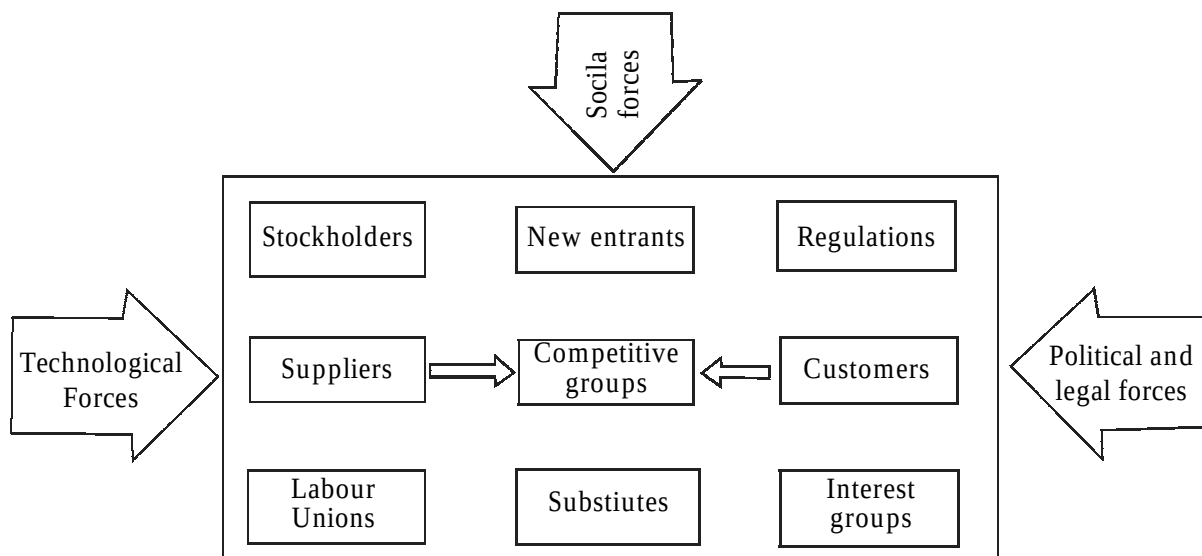
- Threats from potential entrants.
- Threats from substitutes;
- Threats from power of buyers;
- Rivalry and competition among competitors;
- Threats from suppliers;

It is in the context of the five dimensions of competitive environment that strategic decisions have to be made. The objective of such decisions is to obtain a proper strategic fit between the environment and the organization. Such a strategic fit obviously requires a proper understanding of

- the objectives;
- the ever changing environment; and
- the organization;

Perhaps it would be useful to consider this in greater detail. The competitive industry environment in which the company has to function could be detailed in Figure.

The Competitive Industry Environment



### The current product portfolio – outputs

The outputs of the value chain are goods or services or some combination of the two. Now, let us examine a firm's existing products.

### The Product Life Cycle

From the firm's point of view, a way of stabilizing its risk / return profile is to provide a number of different products, which have different financial and marketing characteristics. This mirrors and investor's concern to reach a desired trade-off between risk and return.

The profitability and sales of a product can be expected to change over time. The product life cycle is an attempt to recognize distinct stages in a product's sales history. Marketing managers distinguish between the following:

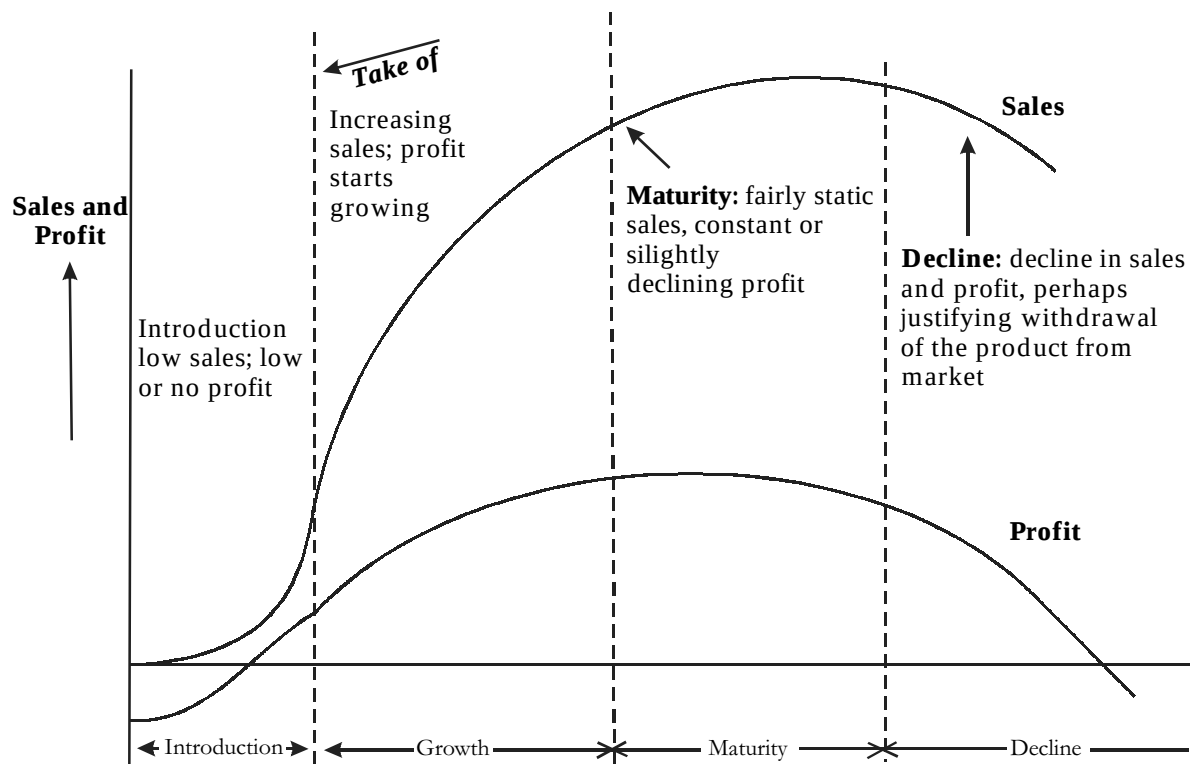
- Product class: this is a broad category of product.
- Product form: within a product class there are different forms that the product can take.
- The particular type of the product form. This is sometimes referred to as brands, but one must be careful about how one uses this word.

The product life cycle applies in different degrees to each of the three classes. A product class may have along maturity stage and a particular make or brand might have an erratic life cycle or not. Products forms, however, tend to conform to the classic life cycle pattern, commonly described by a curve as in Figure below:

### Introduction

A new product takes time to find acceptance by would be purchases and there is a slow growth rate in sales. Only low output and expensive sales promotion; there may be early teething troubles with production technology and prices may be high to cover costs as much as possible. The product for the time being is a loss market.

Product Life Cycle



**Growth**

If the new product gains market acceptance, sales will eventually rise more sharply and the product will start to make profits. As sales and production rise, unit cost falls. Since demand is strong, prices tend to remain fairly stable for a time. However, the prospect of cheap mass production and a strong market will attract competitors so that the number of producers is increasing. With the increase in competition, manufactures must spend money on product improvement, sales promotion and distribution to obtain a dominant or strong position in the market.

**Maturity**

The rate of sales growth slows down and the product reaches a period of maturity which is probably the longest period of a successful product's life. Most products on the market will be at the mature stage of their life.

**Decline**

Most products reach a stage of decline which may be slow or fast. Eventually, sales will begin to decline so that there is over-capacity or production in the industry. Severe, competitions occur, profits fall and some producers leave the market. The remaining producers seek means of prolonging the product life by modifying it and searching for new market segments. Many producers are reluctant to leave the market, although some inevitably do because of falling profits. If a product remains on the market too long, it will be unprofitable. However, there are some cases where positive cash flows will be received.

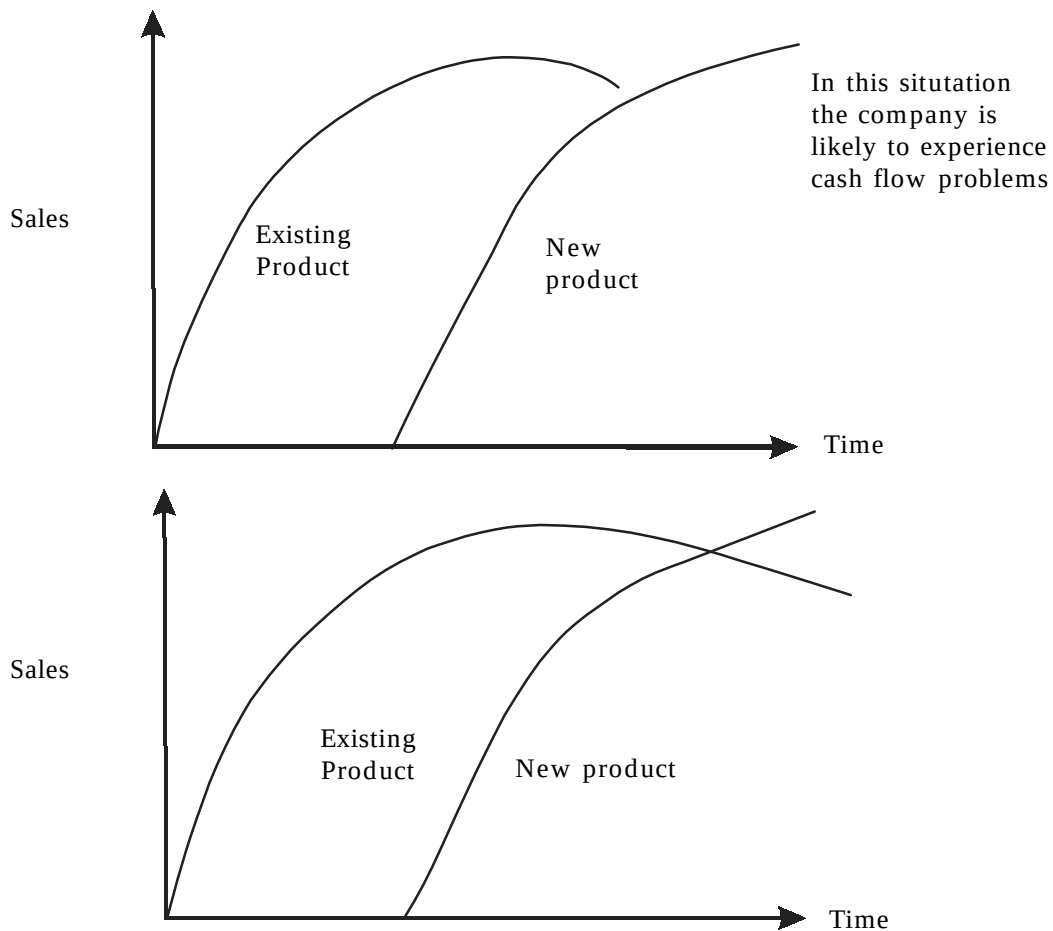
A company selling a range of products must try to look into a longer term, beyond the immediate budget period, and estimate how much each of its products is likely to contribute towards sales revenue and profitability.

Another aspect of product life cycle analysis is new product development and strategic planner must consider the following.

- a. How urgent is the need to innovate, and how much will have to be spent on R & D to develop the new products in time?
- b. Capital expenditure and cash flow. New product cost money to introduce. Not are there R & D costs, but there is also capital expenditure on plant and equipment and probably heavy expenditure on advertising and sales promotion. A new product will use up substantial amounts of cash in its early life and it will not be until its growth phase in under way even the maturity phase reached, that a product will pay back the initial outlays of capital and marketing expenditure.

It is essential that firms plan their portfolio of products to ensure that new products are generating positive cash flow before existing earners enter the decline stage consider figure:

### Timing for launch of a new product



By considering the product life cycle of the existing product, while planning the timing for launch of a new product, cash flow problems can be avoided.

It is perhaps easy enough to accept that products have a life cycle, but it is not so easy to sort out how far through its life a product is and what its expected future life might be.

- a. There ought to be regular review of existing products as a part of marketing management responsibilities.
- b. Information should be obtained about the likely future of each product and sources of such information might be as follows:
  - a. an analysis of past sales and profit trends
  - b. the history of the products





- c. market research
- d. if possible, an analysis of competitors

The future of each product should be estimated in terms of both sales revenue and profits.

1. Estimates of future life and profitability should be discussed with experts to give their advices. Accordingly, decisions must be taken about what to do with each product.

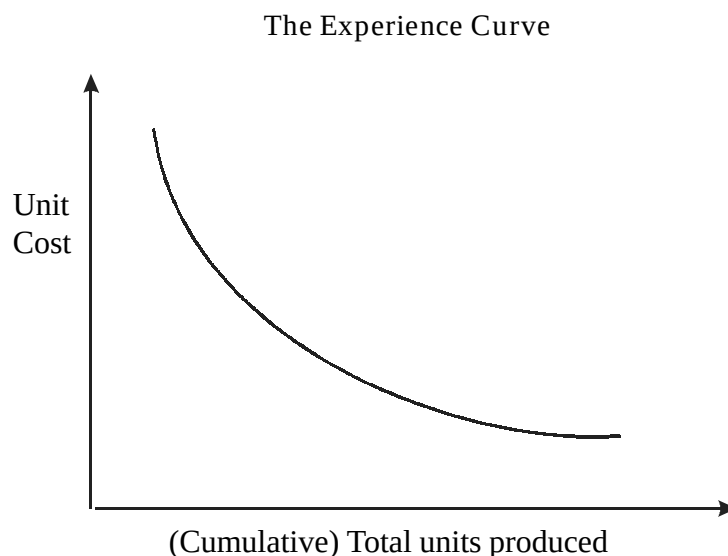
There are some legitimate criticisms of the product life cycle concept as a practical tool in strategic management.

2. How can market managers or other managers, recognize just where a product stand in its life cycle?
3. The traditional curve of the product life cycle does not always occur in practice.
4. Strategic decisions can change a product's life cycle.
5. Competition varies in different industries and the strategic implications of the product life cycle will vary according to the nature of the competition.

But, the product life cycle is a tool that can be applied to many aspects of a strategy formation process. Furthermore, the product life cycle concept can be applied creatively at the number of levels.

### **The experience curve**

The relationship between unit cost and total units produced over time resembles:



It should be noted in this connection that:

1. The total units produced means cumulative units over time;
2. The growth of unit cost tends to plateau with cumulative production.

The cost reduction is quite significant in magnitude. It is estimated that each time the cumulative production doubles, the cost decline is between 20 and 30 per cent net of inflation. Some of the reasons for this cost decline are as follows:

1. **The learning function** – Any one doing a job learns to do it better over time and given increased experience, labor cost should in fact decline about 10 to 15% each time cumulative experience doubles.
2. **Specialization** – As sale of production increases it becomes possible to split jobs into more and more specialized units. Doing half as much and twice as often equals the same amount of effort but twice the experience with the task.
3. **Scale** – The capital costs required to finance additional capacity diminish as that capacity grows.
4. Innovations of the production process
5. **Improved product mix** – As products are redesigned with cost saving in mind.

Though the experience curve has been observed in all sorts of industries, businesses and markets, as the name implies, however, the experience curve effect is personal dependent. The experience curve also implies that the same technology, process and equipment continue for a significant period of time. In these days of fast technological, process and equipment changes, however, a follower can fully or largely negate the benefits of the experience curve of the leader by effecting such changes.

## PORTFOLIO PLANNING

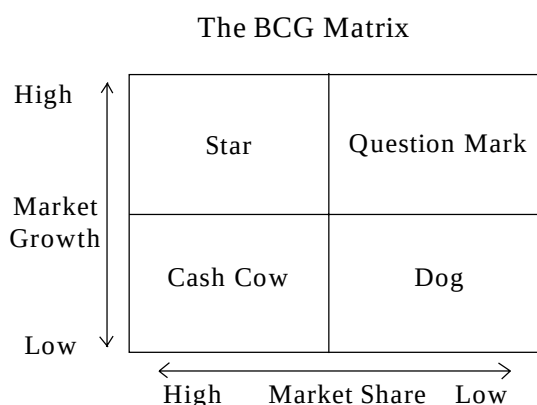
Portfolio planning is a term used in describing methods of analyzing a product – market portfolio with the following aims.

- a. To identify the current strengths and weaknesses of an organization's products in its markets, and the state of growth or decline in each of these markets.
- b. To identify what strategy is needed to maintain a strong position or improve a weak one.

Several matrices have been developed over the years to analyze market share, market growth and market position. Some of them will be discussed hereinafter:

### The BCG Matrix

The Boston Consulting Group (BCG) have developed a matrix, based on empirical research, which analyses products and businesses by market share and market growth. This growth/ share matrix for the classification of products into cash cows, rising stars and questions marks is known as the Boston classification.

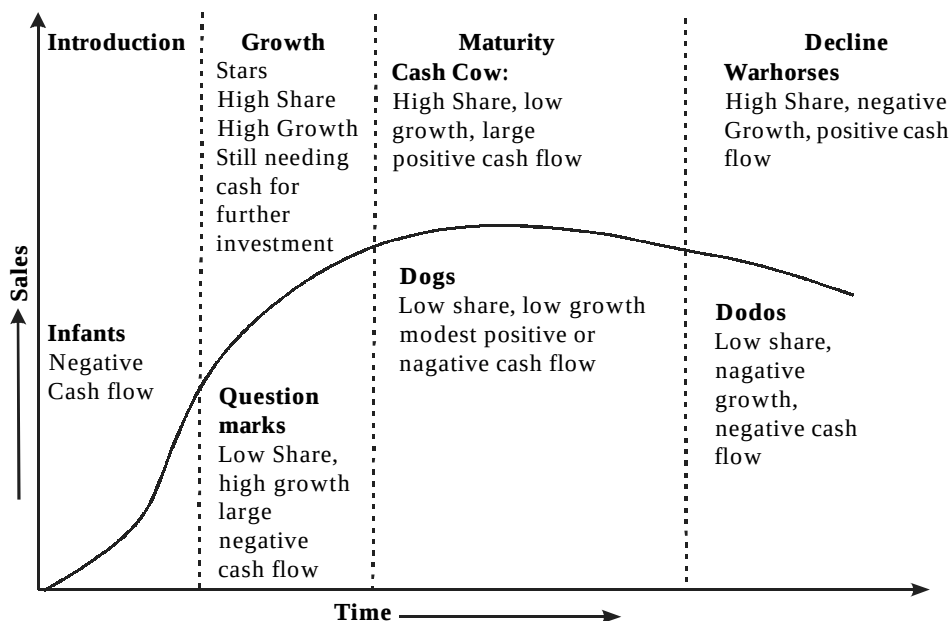




- a. **Stars** are products with a high share of a high growth, market. In the short term, these require capital expenditure, possibly in excess of the cash they generate, in order to maintain their market position, but promise high returns in the future.
- b. In due course, however, stars will become **cash cows**, with a high share of a low-growth market. Cash cows need very little capital expenditure and generate high levels of cash income. The important strategic feature of cash cows are that they are generating high cash returns, which can be used to finance the stars.
- c. A **question mark** (sometimes called **problem child**) is a product in a high growth market, but has a low market share. A decision needs to be taken about whether the product justifies considerable expenditure in the hope of increasing its market share, or whether it should be allowed to die quietly as it has been squeezed out of the expanding market by rival products. Because, considerable expenditure would be needed to turn a question mark into a star by building up market share, question marks will usually be poor cash generators and show a negative cash flow.
- d. **Dogs** are products with a low share of a low growth market. They may be ex-cash cows that have now fallen on hard times. Dogs should be allowed to die or should be killed off. Although they will show only a modest net cash flow or even a modest cash inflow, they are cash traps which tie up funds and provide a poor return on investment, and not enough to achieve the organization's target rate of return.
- e. There are also **infants** (i.e. products in an early stage of development) and **warhorse** (i.e. products that have been cash cows in the past, and still are making acceptable sales and profits even now) and **dodos** (low share, negative growth, and negative cash flow).

The product life cycle concept can be added to a market share / market growth classification of products as in Figure below:

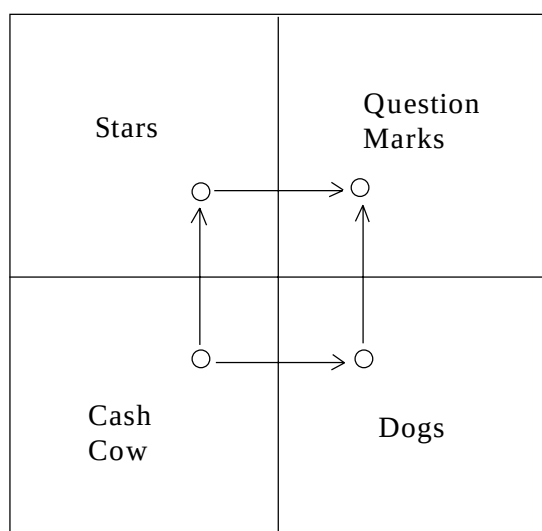
Product Life Cycle with market share / market growth classification



These matrices straightaway focus attention on the strategies most logical for investments in the four quadrants. Thus for stars, the logical strategy both from a long-term perspective as also for immediate business reasons, should be preferably to increase market share or at least to hold on to existing market share. For cash cows, in view of market growth, any attempt to increase market share, particularly, if it requires very substantial investment and cash outgo, is hardly a logical strategy. Over the years, these investments do not have very substantial growth prospects. The logical strategy, is therefore, to hold on to the market share and harvest as much cash as possible in the form of retained profit. For dogs, four strategies are feasible: invest to increase the market share and get into the question mark category; harvest; divest; invest to get into the cash cow category. For a question mark, two possible strategies exist: elevate itself into the star category; disinvest.

It will thus be seen that the logical progression of an investment should be anticlockwise, as shown in Figure below. Any progression in the opposite direction would be indicative of bad strategic management.

Logical Progression of Investment



In order to dominate a market, a company must normally gain that dominance when the market is in the growth stage of the product life cycle. In a state of maturity, a market is likely to be stable with customer loyalties fairly fixed. It is therefore, more difficult to gain share. But if all companies in the growth stage attempt to gain market share, competition will be very fierce; therefore only those companies prepared to invest in order to gain share will achieve dominance. This may well suggest that a company following the principles suggested by the BCG will need to price low and spend high amounts on advertising and selling in order to dominate such a strategy is one of high risk unless such low margin activity is financed by higher profit earning products. This leads to the idea of a product wise balanced BCG model for the growth share matrix as a tool for product portfolio analysis.



The matrix combines market growth rate and market share and thus directly related to the experience curve. Thus for a star, the high volume is likely to yield the benefits of the experience curve and a reduction in the cost. This benefit would not be available in case of question mark. In the case of cash cow again, the high volume would lead to the benefits of the experience curve yielding higher potential profit. Dogs are the worst of all combinations. They are often a cash drain and use up a disproportionate share of management time and resources. The implications for the analysis and evaluation of strategy are thus easy to see.

### Directional Policy Matrix the Nine-Cell G.E. Matrix

Directional Policy Matrix

|                         |              | Business Strength |                   |                                                 |
|-------------------------|--------------|-------------------|-------------------|-------------------------------------------------|
|                         |              | Weak              | Average           | Strong                                          |
| Industry Attractiveness | Unattractive | Divest            | Phased Withdrawal | Invest selectively to maximise cash generation  |
|                         | Average      |                   |                   | Invest for market share or withdrawal           |
|                         | Attractive   |                   |                   | Invest to retain market share as industry grows |
|                         |              |                   |                   | Priority products and services                  |

General Electric of USA, assisted by McKinsey, developed a nine-cell strategic planning grid which attempted to correct some of the limitations of the BCG matrix approach. This grid is illustrated in the above figure as the Directional Policy Matrix. Each dimension is a composite measure of several component factors. Industry attractiveness is a function of a number of factors. The procedure involves assigning each of the factors a weight depending on its perceived importance, followed by assessing how each business compared on each factor using a 1 to 10 rating scale, and then computing a weighted composite rating. The choice of the factors and the weights assigned to the factors vary from business unit to business unit.

The same approach is used to measure Business Strength where aspects relevant to competitive position are considered. Each of the dimensions is classified into three categories: high (strong); medium; low (weak); thus, creating nine cells. The Tables (Nos.1 and 2) below given a hypothetical illustration of rating of industry attractiveness and business strength. Each factor is assigned a weight. Rating of 1 to 4 considered as low; 4 to 7 as medium and 7 to 10 as high.



In the hypothetical case illustrated in Table nos.1 and 2, the total score of industry attractiveness is 6.75 and for business strength is 7.55 out of the maximum possible score of 10 for each. In other words, the industry attractiveness is medium and the business strength is high.

Table 1  
Industry Attractiveness

| Factors                      | Weight | Rating (1 to 10) | Value |
|------------------------------|--------|------------------|-------|
| Availability of inputs       | 0.20   | 7                | 1.40  |
| Overall market size          | 0.15   | 8                | 1.20  |
| Annual growth rate of market | 0.15   | 6                | 0.90  |
| Profitability                | 0.15   | 7                | 1.05  |
| Competitive intensity        | 0.15   | 6                | 0.90  |
| Technological requirements   | 0.10   | 7                | 0.70  |
| Capacity utilization         | 0.10   | 6                | 0.60  |
| <b>Total</b>                 | 1.00   |                  | 6.75  |

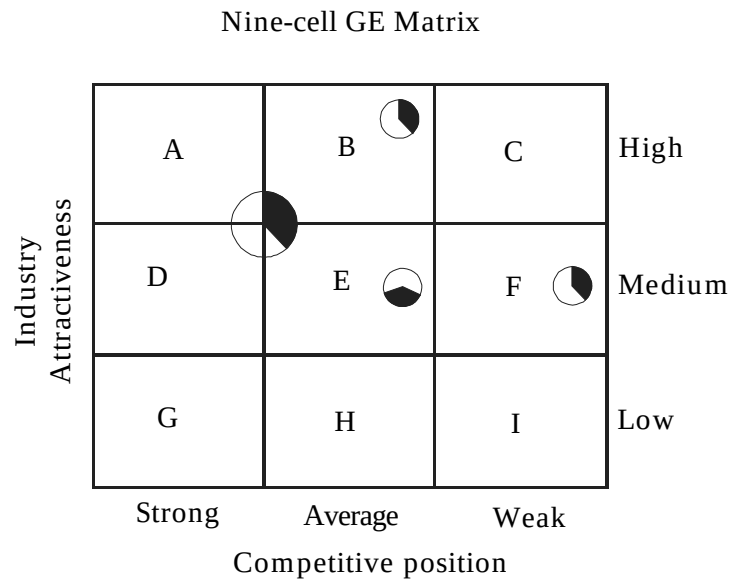
Table 2  
Business Strength

| Factors                  | Weight | Rating (1 to 10) | Value |
|--------------------------|--------|------------------|-------|
| Market Share             | 0.15   | 5                | 0.75  |
| Market share growth rate | 0.20   | 7                | 1.40  |
| Brand image              | 0.05   | 8                | 0.40  |
| After sales service      | 0.05   | 7                | 0.35  |
| Pricing                  | 0.10   | 7                | 0.70  |
| Distribution capacity    | 0.10   | 9                | 0.90  |
| Capacity utilization     | 0.10   | 9                | 0.90  |
| Product quality          | 0.10   | 8                | 0.80  |
| Technology               | 0.15   | 9                | 1.35  |
| <b>Total</b>             | 1.00   |                  | 7.55  |

The choice of the factors determining the industry attractiveness and business strength and the determination of weights are very critical in the analysis. Therefore, they often involve a lot of research. Companies will be successful to the extent that they go into attractive markets and



possess the required business strength to succeed in those markets. If one or the other is missing, the business will not produce outstanding results. Neither a strong company operating in an unattractive market nor a weak company operating in an attractive market will do very well. All the businesses of the company (hypothetical case stated above) are shown in a Nine-cell GE Matrix (Figure)



The sizes of the circles represent the size of the relevant markets. The company's market share in each of the business is represented by the shaded area. The position of the business in the matrix would suggest the appropriate strategy for the business. There are three possible strategies. Along the lower left to the upper right diagonal (cells G, E, C) representing SBUs which are medium in overall attractiveness. Selective investment may be appropriate. These are holding type strategy and would not, therefore, rank as a priority in resource terms.

The three cells below the diagonal (H, I, F) represents SBUs which are low in overall attractiveness. The appropriate strategy for them would be harvesting or divesting.

It will be seen that the overall attractiveness of products / services diminishes as one moves diagonally from the top left hand corner to the bottom right hand corner. Priority products in the top left hand corner are those which score highly on both axes. As a result they should receive priority for development and the resources necessary for this should be allocated to them. Products / services bordering on the priority box should receive the appropriate level of investment to ensure that, at least, the very market share is retained as the industry grows.

Products / services with a weak competitive position in an attractive industry are placed at top right hand corner of the matrix. They should be evaluated in respect of the potential to establish and sustain real competitive advantage. If the prospect seems good, the carefully targeted investment should be considered seriously. A method of targeting would be to select among the factors contributing to the total weighed score of the competitive position. Those, who's weighed scores are most significant, would receive priority.

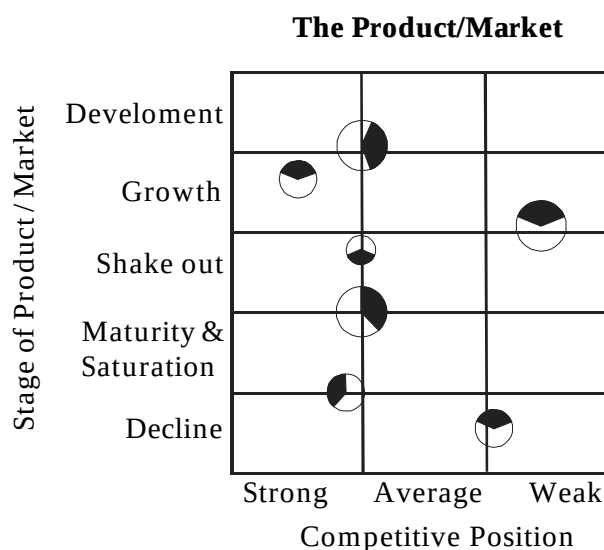
Products across the middle diagonal should receive cordial treatment. A good proportion of products are likely to fall in this category, indicating attempt to maximize cash generation with limited commitment of additional resource.

Currently profitable products with little future potential should be withdrawn gradually but retained as long as they are profitable and the resources committed to them cannot be allocated more effectively elsewhere

This model is an improvement over the BCG matrix in the sense that while BCG matrix bases industry attractiveness on a single variable (industry growth rate), in this model industry attractiveness is measure by a number of factors. Similarly while the BCG matrix bases business growth entirely on relative market share, in this model, the business strength is rated by considering a number of factors. Also, the Nine Cell model is a refinement of the four-cell BCG matrix (only high and low), which is too simplistic and in which the link between market share profitability is not necessarily strong. Low share business can be profitable and vice versa.

### **The Product / Market Evolution Matrix (HOFER MATRIX)**

In order to identify the developing winner, Hofer and Schendel suggest a fifteen cell matrix in which businesses are plotted in terms of their competitive position and their stage of product / market evolution. Such a matrix is depicted in Figure below:



As with GE matrix, circles represent the sizes of the industries involved, and the pie-wedges represent the market share of the business involved. Future positions can be plotted and used to identify the major strategic issues.

### **SPACE (Strategic Position and Action Evaluation)**

A.J. Rowe and others have developed a model based on four important variables:

- the relative stability / turbulence of the environment;
- industry attractiveness;





- the extent of any competitive advantage;
- the company's financial strengths

Scores are awarded to each factor and then diagrammed.

Arthur D. Little (ADL) presents a twenty-cell matrix identified by the competitiveness position of a business and its industry maturity. Competitiveness position is approximated by market share, share movement, technology, breadth of the product line, and special market advantages, and industry maturity is measured by considering industry growth, rate of technological change, stability of shares, and customer switching. Again, weights must be defined to calculate the matrix position of a particular business. The matrix location of each unit can then be used to formulate a natural strategy to accomplish the business goals of the firm. This model is shown in Figure below:

The life cycle Portfolio Matrix (A.D. Little)

| Embryonic                         |                                                    | Growth                                                                                                       | Mature                                                                                                                | Age-ing                                                                   |
|-----------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Dominant                          | Fast Growth<br>Start up                            | Fast Growth<br>Attain cost<br>leadership, renew<br>Defend position                                           | Defend position<br>Attain cost<br>leadership, Renew,<br>Fast growth                                                   | Defend position<br>leadership, Renew<br>Growth with<br>industry           |
| Strong<br>competitive<br>position | Start up<br>differentiate<br>fast<br>growth.       | Fast Growth<br>Renew, Focus,<br>differentiate                                                                | Attain cost<br>leadership, Renew<br>Focus Differentiate<br>growth with                                                | Find niche hold<br>niche hand on,<br>Growth with<br>industry,<br>Harvest. |
| Favourable                        | Start up<br>differentiate<br>Focus, fast<br>growth | Differentiate<br>Focus, Catch up,<br>Growth<br>with Industry                                                 | Harvest, Hang on<br>Fince Niche, Hold<br>Niche, Renew<br>turn around<br>Differentiate<br>Focus, Grow<br>with Industry | Retrench,<br>Turn around                                                  |
| Tenable                           | Start up<br>grow with<br>Industry, Focus           | Harvest, Catch up,<br>Hold Niche,<br>Hang on,<br>Fince Niche,<br>Turn around<br>Focus, Grow with<br>Industry | Harvest,<br>Turn around<br>Fince Niche,<br>Retrench                                                                   | Divest<br>Retrench                                                        |
| Weak                              | Find niche,<br>Catch up,<br>Grow with<br>Industry  | Turn around<br>Retrench                                                                                      | Withdraw<br>Divest                                                                                                    | Withdraw                                                                  |

Stages of Industry Maturity



**Note:** The lines across the figure indicate the growth history of different products of the company during life cycle.

In it, market situation is described in four stages – from embryonic to ageing. The competitive situation is shown in five categories ranging from weak to dominant. The purpose of the matrix is to establish the appropriateness of a particular strategy in relation to these two dimensions.

The position within the life cycle and the company is determined in relation to eight external factors or disciplines of the evolutionary stage of the industry. These are : market growth rate; growth potential; breadth of product line; number of competitors; spread of market share among the competitors; customer loyalty; entry barriers; and technology. It is the balance of these factors which determine the life cycle.

The competitive position of the organization within its industry can be established by looking at the characteristics of each category. Thus a dominant position usually results from quasi-monopoly. Strong organizations are those that can follow strategies of their own choice without too much concern for the competitors etc.

Within the general framework, however, strategies suggested by the various models may be quite different. There are three reasons for it:

- The portfolio position of a unit in the relevant matrix can differ due to different characteristics used in the classification schemes of the models.
- The GE and ADL models, have more potential classification than the BCG model, may generate more potential strategies for a business unit than the later.
- The models differ with regard to their treatment of risk. The McKinsey and ADL models both seek to incorporate some concept of risk in the matrix position of the unit. The BCG model downplays risk.
- Moreover, there are a number of theoretical problems associated with portfolio models. Some of the important ones are:
  - The assumption of independent business units ignores significant theoretical problems with the diversification ability of the firm into business units.
  - The assumption for the cost of capital appears to represent capital rationing and fails to consider risk.
  - The assumption of dominance tends to give excessive consideration to the relative competitive position of a business and minimizes the influence of other characteristics that affect profitability.
  - The assumption of industry attractiveness ignores special investment opportunities and downplays the importance of competitor's strategies.

### **Strategic choice**

We can identify three categories of strategic choices as:

- The competitive strategies are the strategies, an organization will pursue for competitive advantages. These determine how to compete.



- Product-market strategies determine where to compete and the direction of growth.
- Institutional strategies determine the method of growth.

### How to compete?

The environment within which many firms operate is characterized by the need to achieve competitive advantage. Competitive advantage is anything which gives one organization an edge over its rival.

A competitive strategy is intended to achieve some form of competitive advantage for the firm. Competitive strategy means taking offensive or defensive actions to create a defensible position in an industry, to cope successfully with competitive forces and thereby yield a superior return on investment for the firm. Firms have discovered many different approaches to this end, and the best strategy for a given firm is ultimately a unique construction reflecting its particular circumstances.

Porter suggests that there are three generic strategies for competitive advantage see figure.

**Cost leadership:** become the lowest cost producer for the market as a whole.

**Differentiation:** is the exploitation of a product or service which is unique in the market as a whole.

**Focus:** depends on segmentation and involves pursuing, within the segment only, a strategy of cost leadership or differentiation.

### Porter's Model of Generic Strategy

|                   |               | Competitive Advantage |                           |
|-------------------|---------------|-----------------------|---------------------------|
|                   |               | Low Cost              | Differentiation           |
| Competitive Scope | Broad Target  | Cost leadership       | Differentiation           |
|                   | Narrow Target | (a) Cost Focus        | (b) Differentiation focus |

**F O C U S**

### Cost leadership

A cost leadership strategy seeks to achieve the position of lowest cost producer in the industry. The competitive advantage that results from producing the lowest cost is that the manufacturer can compete on price with every other producer in the industry and can earn the highest unit profits. Bajaj Auto Limited and Telco appear to be following this strategy in India.



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## Differentiation

A differentiation strategy attempts to make the product unique in terms of attributes which are derivable to the customer, including customer service. The assumption is that competitive advantage can be gained through the particular characteristics of a firm's products will build up and customers are not so price sensitive. The firm can then sell its products at prices that are higher than the low cost producers. Bata shoe, Otis Elevators, Cini fans are some examples where the strategy seems to be dominant guiding force.

## Focus

Focus strategy is based on segmenting the market and targeting particular segments instead of trying to serve the entire market with a single product. It has been described as a 'pistol' approach as distinct from a 'short gun' approach. The competitive advantage which results is that the firm is thus able to serve its narrow strategic target more effectively and efficiently than competitors who are more broadly. As a result the firm achieves either differentiation from better meeting the needs of the particular target, or lower cost in serving this target, or both. Genteel, a liquid detergent for expensive clothes and Ponds talcum powder are some examples for this strategy.

**Competitive scope** refers to whether the organization chooses to target the entire market, or whether it chooses to concentrate on a more narrowly defined segment. **Competent advantage** refers to the route taken to serve the market or segment.

A firm pursuing a cost leadership strategy aims to be the lowest cost producer in the market as a whole or, in the case of a cost focus strategy, in a segment; cost leader cannot undercut on price, and can enjoy higher profitability.

1. Not every firm can be a cost leader and many choose to use differentiation, which is the exploitation of unique aspect or features of the product in the market as a whole or in a segment of it.
2. Porter argues that firms must choose between these strategies and a firm that may stick in the idle is doomed.
3. The choice of generic strategy is likely to be a long-term one. A firm can not realistically pursue cost leadership one year and differentiation the next.
4. Also, most firms' employ some form of market segmentation, and the model cannot identify which segments the firm should pursue if it follows a focus strategy.
5. The model can highlight confusions in the firm's existing strategy, if it is applied to the current competitive situation of the firm.

It would not be out of context that in the book, *Marketing Warfare*, Al Ries and Tack Trout have developed a war like analogy for marketing in competitive environment. The true nature of marketing today is not serving the customer: it is over witting, outflanking, outfitting your competitors. In short, marketing is war where the enemy is the competition and the customer is the ground to be won', says Ries and Trout. They suggest four ways to fight this war by following the principles of:

**The Defensive Warfare**

This is essentially recommended for market leaders. It aims at protecting against regularly provisions, industrial licensing restrictions, etc. According to authors, a leader has to spend more time in safeguarding its interests against government and public environment rather than the immediate next competitor. Thus for companies like Telco, Hindustan Lever, Bajaj Auto, the major worry may be the interference of the government. At the same time, a leader can not afford to overlook the moves of the competitors. A leader should also be able to attack itself. The three principles of defensive warfare are:

- Only the market leader should consider playing defence
- The best defensive strategy is the courage to attack yourself
- Strong competitive moves should always be blocked

**The Offensive Warfare**

Offensive warfare is almost like a mirror image of the defensive warfare. The number two of the industry are suggested to follow the offensive strategy by identifying a weakness in leader's strength and attacking at that point. Thus, very high prices of steel tubes of Tata Steel gave an opportunity to other pipe manufacturers like Zenith Tubes, Gujrat Steel Tubes and the likes to capture sizeable market at lower prices. The principles of offensive warfare are:

- the main consideration is the strength of the leaders position
- find a weakness in the leader's strength and attack at the point
- launch the attack on as narrow a front as possible

**The Flanking Warfare**

According to Rice and Trout, flanking is the most innovative form of marketing warfare. Over the years, most of the biggest marketing successes have been flanking moves. It is recommended to firms with limited resources. These firms cannot afford to fight the large firms holding number one or two positions on the same battle ground. The entry of Promise tooth paste with clove oil clout is an example of flanking warfare. Flanking can be achieved in any manner such as flanking with low price, flanking with high price, flanking with small size, flanking with large size, flanking with distribution, flanking with product from. One would see a parallel between a marketer cutting a niche and flanking. Basically, they mean the same thing, i.e., creating a distinctive position for itself and avoiding any head on collision with the leaders. The principles of flanking warfare are:

- a good flanking move must be made in an uncontested area
- tactical surprise ought to be an important element of the plan
- the pursuit is just as critical as the attack itself

**The Guerrilla Warfare**

The last form is the guerrilla warfare. Most of the players in a marketing war would be fighting in the market place like the guerrillas. According to Ries and Trout, smaller companies can highly be successful as long as they do not try to emulate the giants in their field. Like flanking form, there can be many guerrillas; geographic guerrillas, demographic guerrillas, industry

guerrillas, product guerrillas, high end guerrillas. In each state, one will find locally made suit cases and other luggage items along with the well known national brands. Local brands of rubber and plastic chappals are other examples of a low price end guerrillas. The principles of guerrilla warfare are:

- find a segment of the market small enough to defend
- no matter how successful you become, never act like the leader
- be prepared to buyout at a moment's notice

### Product-market Strategies (Ansoff's matrix)

A successful market must develop its products and markets, if it is to avoid eventual extinction. This calls for strategic decisions about product-market development and manufacturing. Ansoff drew up a growth vector matrix, describing a combination of a firm's activities in current and new markets, with existing and new products. He was mainly interested in growth, but firms in declining industries may wish to scale down their operations in existing markets or product areas. This is outlined in Figure as below:

|        |         | Ansoff's Matrix           |                            |
|--------|---------|---------------------------|----------------------------|
|        |         | Product                   |                            |
|        |         | Present                   | New                        |
| Market | Present | Market penetration<br>(a) | Product Development<br>(c) |
|        | New     | Market penetration<br>(b) | Deversification<br>(d)     |

The matrix identifies four different kinds of product market strategy that the organization can pursue, depending on whether the firm concentrates on existing products and / or markets or embraces upon new ventures.

**Market penetration** involves trying to milk more from existing products and existing markets. If the market as a whole is growing, this might appear a fairly low risk strategy to adopt. Where the market is stagnant, market penetration might involve increasing market share at the expense of other producers.

**Market development** uses existing products in new markets. Exporting is perhaps an example of this strategy. This might be attractive if the firm has to achieve high sales volumes to utilize capacity efficiently.



**Product development** involves offering new products to existing markets. Firms with an expensive distribution network may choose this to make most efficient use of it by marketing more products through.

**Diversification** involves moving into new market with new products. However, this need not always be as risky as it sounds, especially if the products and / or markets have some similarities to existing ones. Conglomerate diversification can sometimes be justified on the existence of synergies.

The Ansoff model is a framework for discussing alternative directions. It cannot take decisions, only managers can.

- As suggested, market penetration may not be possible if the markets are mature; only examination of the specifics will identify which is the best approach.
- Obviously, it is too general on its own to suggest which markets should be targeted.

**Johnson and Scholes** suggested the following principle and guidelines for product market planning.

- **The potential for improvement and growth:** It is a thing to eliminate unprofitable products but will there be sufficient growth potential among the products that remain in the product range?
- **Cash generation:** New products require some initial capital expenditure. Retained profits are by far the most significant sources of new funds for companies. A company investing in the medium to long term which does not have enough current income from existing products will go into liquidation, in spite of its future prospects.
- **The timing decision for killing off existing products:** There are some situations where existing products should be kept going for a while longer to provide or maintain a necessary platform for launching new models.
- The long term rationale for product or market development.
- **Diversification by acquisition:** It might pay to buy product ranges or brands in a takeover deal. If the product-market strategy includes a policy of diversification, then the products or services which the expanding company should seek to acquire should provide definite benefits.

The aim of product-market strategies is to close the profit gap that is found by gap analysis. A mixture of strategies may be needed.

### **Methods of growth**

Once a firm has made its choice as to which competitive strategies to pursue, and what product to place in which markets, it needs to choose an appropriate mechanism. Broadly speaking, it can:

1. develop the business
2. acquire or merge with an already existing business
3. cooperate in some way with another firm



The main issues involved in choosing a method of growth are:

**Resources:** A firm may not be able to go it alone, or it may have plenty of resources to invest.

**Synergy:** Two different businesses might have complementary skills.

**Speeds:** Does a firm need to move fast?

**Control:** A firm might wish to retain control of a product or process, rather than share control with another firm.

**Organization and culture:** Combining businesses not only involves integrated facilities and plant, but also people and organization culture.

**Risk:** A firm may either increase or reduce the level of risk to which it is subject. (However, this risk is not necessarily the same as the business risk involved with diversification).

### **Limitations of models**

All models are abstractions and simplification of real life situations, and it is best to consider them as aids to creative thought rather than scientific laws or axioms, which must be followed without question.

### **Porter's generic strategy model**

Porter's statement that no firm can pursue a stuck in the middle strategy is not entirely borne out by the facts. Instead, a variety of approaches can be adopted to rice and the differentiating product features. Some seem to prosper quite successfully. Firms do strive for cost leadership and differentiation at the same time.

1. Cost refers to internal measures, rather than the market demand. It can be used to gain market share; but it is market share, which is important, not cost leadership as such.
2. If cost leadership applies cross the whole industry, only one firm will pursue this strategy successfully.
3. Having low costs does not mean, one has to charge lower prices or compete on price. A cost leader can choose to invest higher margins in R & D or marketing. Being a cost leader arguably gives producers more freedom to choose other competitive strategies. Competitive advantage can only be achieved in terms of a products (or service) which is seen by a user to have an advantage. Its cost base is relevant only in so far as it may provide a means of enhancing that output in some way.
  - o Low costs give you more opportunity to differentiate to product.
  - o Low costs is also enable one to serve many segments, in other words to pursue a focus strategy (for many segments).

### **Differentiation**

Porter assumes that a differentiated product will always be sold at a higher price; however, a differentiated product may be sold at the same price as competing products in order to increase market share. Differentiation can be achieved by keeping costs down; the savings can be reinvested in unique products features. Two other points can be mentioned:



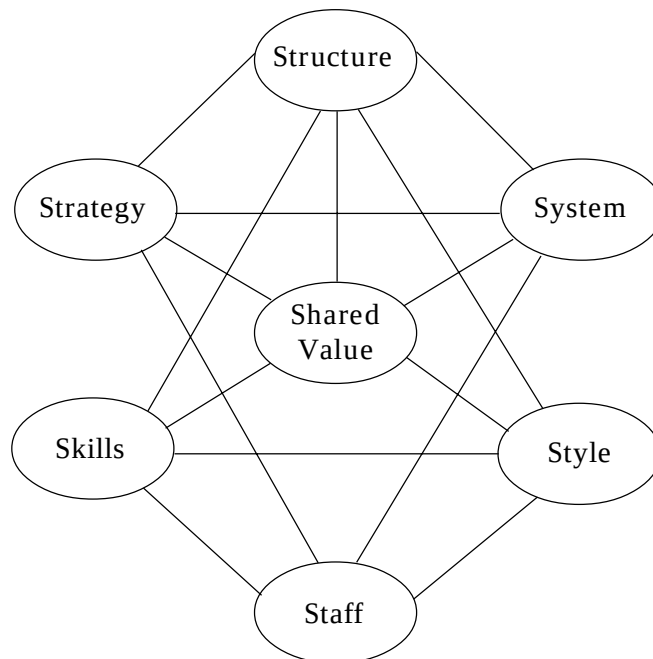


- **The object of differentiation:** The firm must discern who are its competitors? Where they serve other market segments and if they compete on the same basis?
- **The source of differentiation:** This can include all aspects of the marketing mix, not only the product. Restaurants aim to create an atmosphere or ambience, as well as serving food of good quality.

#### Ansoff's product – market matrix

- **No criterion for choice:** As indicated in (a), the matrix is only a frame work for identifying for product market opportunities. There is nothing to stop a firm carrying out all four strategies simultaneously providing it has the resources. A firm can pursue a penetrating strategy in its existing markets as well as diversifying into new ones.
- **Limited scope:** Another problem is that there are various strategic developments not covered in the matrix. New technology and manufacturing technologies can also alter the dynamics of the market: Henry ford made cars much cheaper than other producers massively expanding the market for them.
- It does not address the degree of change in each product market area; it suggests they are static.
- **Profit:** The Ansoff's matrix does not identify the role of profit.
- Withdrawing from a market or product is not offered as an option.

#### McKinseys's 7s Framework





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The model considers the criteria in success of a business organization and forms an interconnected framework of seven elements:

- Structure
- Strategy
- Skills
- System
- Staff
- Style; and
- Shared Values

Of these, the first two, strategy and structure, form the hardware of the organization, the remaining components constituting the software. The hard components are easily recognized as important, the soft ones, often barely recognized, are equally important and critical for the success of a firm.

Of these, shared values, system, style all relate to behavioral patterns involving staff (people) and their skill. These behavioral patterns act as the binding fabric that successfully holds the company's cohesive activities and strategies together. Four major aspects of the behavioral fabric are of crucial importance. They are: Power; leadership; culture and risk.

The successful implementation of a strategy requires the right align of a various activities and processes within the organization, viz., structure, resource allocation, staffing (both managerial technical), skills, styles and competencies rewards and incentives, policies and procedures, shared values and beliefs. The McKinsey's consultants call strategy and structure, the hardware of the organization and suggest that the other five-S, are the software and are often ignored by corporate strategists. While strategy and structure are important to the organization, they by themselves cannot assure success which comes about by corporate commitment. It is the other five-S which play an important role in creating a climate of commitment. The better the alignment between and among all the seven levers of the organization, the better are likely to be the results.

Shared values the central core of the framework, give rise to a certain spirit among organizational members regarding 'who we are and where we can headed.' The spirit permeating in the organization in turn is reflected in the values, attitudes and philosophy of its members. The corporate value defines the ideas and beliefs which guide the organizational operations. They lay down the foundation of the organization management philosophy and give rise to a particular culture.

The virtue of 7-S framework is that it highlights some important organizational inter connections and their roles in effecting change. Whether and to what extent the organization will be able to bring about the needed shifts in strategy would depend upon the extent of and pace of accomplishment of action plans in the sphere of seven-Ss. The seven-S framework illustrates in a simple way, that the real task of implementing strategy is one of bringing all seven-Ss in to harmony, when the Ss are in good alignment, the organization is poised and energized to



execute strategy to the best of its ability. The McKinsey model provides the convenient checklist for judging whether organization is ripe for implementing strategy. It also helps in diagnosing the results emanating from the implementation of a strategy fall short of expectations and therefore what new fits would be required. The framework helps strategists in evaluating their organizations along each of the seven dimensions.

The McKinsey company was not first to propose the multivariable model of organizational change. Harold Leavitt had many years ago proposed the model for analyzing change in organizations. According to that model, organizational change, whether it originated in the organizational structure, the tasks, the technology develop in performing the tasks of organization; human component was likely to have effects on the other three. The 7-S model, however, emphasizes a few other variables, which Leavitt had not considered. Though, the research base for the framework may be subject to considerable academic discussion and criticism, the framework is useful to practicing managers as it is easy to remember because of the alliteration and also because it provides useful checklist for a comprehensive look at managing organization change.

Thus, 7-S framework is a powerful expository tool. However, it may be stated that changing the culture of the organization which is pivotal to the McKinsey model is a difficult task. Even after prolonged efforts spanning a period of 5-7 years, the organization may achieve only partial success. Nonetheless, the organization must endeavor to recreate the culture if it is regarded as an important determinant of its success, as is envisaged in the 7-s model.

### **PIMS (Profit Impact of Market Share)**

**PIMS** was developed by General Electric in the sixties as a technique for internal analysis to identify those strategic factors that most influence cash flow investment needs and success. Its scope was extended by the Harvard Business School and eventually in 1975 the Strategic Planning Institute was established to develop PIMS for variety of clients.

PIMS is a very sophisticated computer model and its database is information submitted by clients. They provide about a hundred pieces of information about the business environment and the competitive position of each product, production processes, research and development, sales and marketing activities, and financial performance. From an analysis of the data; those elements that are most significant to the performance of each businesses are identified and the information is related back to the client. **PIMS** can be used for:

- Evaluating business performance in relation to competitors, and
- Establishing targets for return on investment and cash flow

It is claimed that variables in the PIMS models are available to explain some 80% of the variables in the performance of the business involved. According to Buzzel and Gale, PIMS approach is similar to portfolio analysis in that industry, characteristics and strategic position are being seen as important determinants of strategy and strategic success. However, PIMS was designed to explore the impact of a wide variety of strategic and environmental issues on business performance, and to provide principles that will help managers to understand how market conditions and particular strategic choices might affect business performance.



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## Major findings

Amongst the most significant findings that have emerged from the PIMS models are the following:

- High investment intensity is associated with low profitability, substantial investments create additional production capacity that companies seek to use. Quite often this results in low prices and low margins for products.
- High productivity and high return on capital are associated
- Additional investments in products and industries are not guaranteed to bring increased profits
- High relative market share has a strong influence on profitability, but is not the only factor
- High industry growth rates absorb cash and can have a harmful effect on cash flow.
- High relative product quality is related to high return on investment
- Product innovation and differentiation lead to profitability particularly in mature markets
- Vertical integration is more likely to prove successful in stable industries than in unstable ones
- The conclusions of the experience curve and sound

## Limitations

PIMS has certain drawbacks, which include the following:

1. PIMS assumes that short-term profitability is the prime objective of the organization.
2. The analysis is based on historical data and the model does not take into account future changes in the company's external environment.
3. The model cannot take account of interdependencies and potential synergy within organization.

Planning techniques can be extremely useful, particularly as they force managers and organizers to ask themselves many relevant and searching questions and compile and analyze important information. The techniques do not and cannot, however, provide answers; they merely generate the questions. The danger is that some managers may perceive the output of a technique such as PIMS or a matrix analysis as the answer to strategic issues.

## New concepts and models

The third wave during the last three decades has transformed the business world totally and the global market place is being keenly contested. The number of models and concepts available still are not able to cope up with the rapid transformation within the business internally and at the market place externally. W.Chan Kim and Rene Mauborgne, Gary Hamel and C.K. Prahalad are a few international management experts who have put forward certain new concepts and models which are breaking away from traditional thought.



### **Blue ocean strategy**

Blue ocean strategy as presented by W.Chan Kim and Rene Mauborgne breaks new grounds. As against the present strategy based on competition in the existing market place (Red ocean strategy) creating a market place where there is no competition is known as Blue ocean strategy. This strategy tries to make competition irrelevant, create and capture new demand and make a value-cost trade off. The tools and models for the purpose are:

1. **Strategy canvas:** This captures the current state of business relating to products, service, delivery and customer perception.
2. **Four actions framework:** This is developed to reconstruct value elements in crafting a new value curve to find answers for the factors which need to be eliminated, reduce such factors well below the industry standards, raise certain factors well above the industry standards and create new factors that are not offered currently.
3. **Eliminate – reduce – raise – create grid:** Develop the framework under 2 in to a grid to understand specifically the factors involved. Identify them and develop methods to implement the strategy.

### **Competing for future**

Hamel and Prahalad have developed a new strategy paradigm to include regenerating strategies, industry transformation and competing for opportunity share to meet the competitive challenge in the future. To enunciate what future is they recommend unlearning the past and develop strategy for foresight and opportunity share. When mobilization is made for the future they go beyond present concept of strategy as fit and resource allocation to strategy as stretch and resource accumulation and leverage. The most important factor they point out is get in to the future earlier than the competitor so that a company is in a position to shape the future industry structure, core competence leadership, maximizing the rate of new market learning while minimizing time to global preemption. When they are discussing about customer types as served and un- served, and customer needs as articulated and unarticulated. Competing for future should go for unexploited opportunities for the existing customers who still have unarticulated needs, un-served customers with articulated needs and un-served customers with unarticulated needs.

### **Confrontation strategies**

With the globalization of markets entering uncharted territories would require definite strategies to avoid unexpected failures. Sun Tzu's strategy for confrontation in different terrains in case of war offers clues for business strategies also when we have cross border investments where the environmental factors of political, social and geography of the terrains have major impact. The following steps are relevant in introducing a new product in a new territory:

1. A company should introduce a proven finished product and not a product under development
2. Identify the proper time and place and go fast with the entire team assigned for the purpose
3. Look for immediate success



4. Introduce the product at chosen places and not all over the place
5. Enter the territory before the competitor enters
6. Identify allies in the new territory

In conclusion the tools and models which have been discussed in this chapter aid either in decision making process or for analyzing the impact of environment on business. The table below will be helpful in selecting the particular tool or model based on the strategic assignment undertaken by the company:

| <b>Name of tool / model</b>                | <b>Decision support</b> | <b>Environmental analysis</b> |
|--------------------------------------------|-------------------------|-------------------------------|
| Balanced score card                        | √                       | √                             |
| Bench marking                              |                         | √                             |
| Core competencies                          | √                       | √                             |
| Critical success factors                   | √                       | √                             |
| Experience curves                          | √                       | √                             |
| Life cycle analysis                        | √                       | √                             |
| Mc Kinsey                                  | √                       | √                             |
| Multiple scenarios                         | √                       | √                             |
| PESTEL                                     | √                       | √                             |
| Porter's 5F                                | √                       | √                             |
| Portfolio classification analysis          | √                       | √                             |
| Reengineering                              | √                       | √                             |
| Simulation                                 | √                       | √                             |
| SPACE                                      | √                       | √                             |
| Value chain analysis                       | √                       | √                             |
| SWOT                                       | √                       | √                             |
| Econometric models                         |                         | √                             |
| Sensitivity                                | √                       |                               |
| GE matrix                                  | √                       | √                             |
| HOFEL matrix                               | √                       | √                             |
| Ansoff                                     |                         | √                             |
| PIMS                                       |                         | √                             |
| Blue ocean                                 |                         | √                             |
| Competing for future by Hamel and Prahalad |                         | √                             |
| Sun Tzu                                    | √                       |                               |



## STUDY NOTE - 6

### MARKETING STRATEGY

**This Study Note includes:**

- **Marketing philosophies**
- **Market orientation**
- **Marketing mix**
- **E-Marketing**
- **Brand, brand equity and its value**
- **Market research and intelligence**
- **Data warehousing and data mining**
- **Successful customer outcomes**

### INTRODUCTION

In the common parlance Marketing has been defined as the promotion of products especially advertising and branding. However, this term has a wider meaning in that marketing is customer oriented. Products are designed to meet the desires of groups of customers or even in particular cases for specific customers.

#### Evolution of marketing philosophies

| <b>(4+3+4)= 11 P's</b>                                                                                                                                                                                                                                                                                | <b>3 D's</b>                                                                                                                          | <b>4 C's</b>                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Product</li> <li>• Pricing</li> <li>• Promotion</li> <li>• Placement</li> <li>• People</li> <li>• Process</li> <li>• Physical evidence</li> <li>• Personalization</li> <li>• Participation</li> <li>• Peer-to-Peer</li> <li>• Predictive modeling</li> </ul> | <ul style="list-style-type: none"> <li>• Design right proposition</li> <li>• Deliver value</li> <li>• Develop capabilities</li> </ul> | <ul style="list-style-type: none"> <li>• Customer solution</li> <li>• Customer cost</li> <li>• Convenience</li> <li>• Communication</li> </ul> |

E. Jerom McCarthy divided marketing into four general sets of activities. This has been universally recognized as the 4P's and the four activity sets are as follows:



1. **Product:** The aspects of product marketing which deal with the specifications of the actual product or service and how it relates to the customers' needs and wants. This scope can be extended to include warranties, guarantees and support.
2. **Pricing:** The process of determining monetary price of a product including discounts or even exchange for another product or service can be included under this head.
3. **Promotion:** This includes advertising, sales promotion, publicity and personal selling and also extends to identification of various modes of promoting a product, brand or company.
4. **Placement:** This can be defined as distribution also and refers to how the product or service reaches the customer and which customer / group. For example, the point of sale placement or retailing. The "placement" has also been some times connoted as "place" relating to the channel by which a product or service is sold. For example, online or retail, which geography or industry, to which segment, gender, families, business people, etc.

These four elements are normally identified as marketing mix, which can be used for developing a marketing plan. The 4 P's model is more useful for developing a marketing plan for low value fast moving consumer goods (FMCG). The industrial products and high value consumer products require adjustments to this model, as technological invention needs to be focused.

Services marketing also require delineation of the unique nature of services and demonstration when required.

Industrial or business-to-business (B2B) marketing normally are pursued through long-term contractual agreements, which are in the nature of supply chain transactions.

Relationship marketing attempts to do this exercise by looking at the long-term relationship perspective rather than individual transactions.

However, there are limitations to this 4P's model as Morgan in his book "Riding the waves of change (Jossey – Bass, 1988) suggests that one of the greatest limitations of 4P's approach is that it unconsciously emphasizes the inside out-view (looking from the company outwards), where as, the essence of marketing should be the outside-in approach". However, the 4P's model offers a platform for developing a framework for major categories of marketing activity and to obtain a broader perspective from the marketer's angle.

### **Retailing concepts**

The term retailing originates from the French word "retailleur" meaning one who cuts and makes pieces of cloth. Levy and Witz have defined retailing under the concept of the value chain focusing on the value addition done to the end customers. According to them there are four key areas, which puts the concepts of retailing into distinct compartments:

- **Bulk breaking:** A retailer buys in bulk and breaks the bulk into more meaningful consumable portions for the benefit of the customer. Bulk breaking can also refer to non-goods like service. For example, a travel agent buys airline journey time in blocks and breaks it for the benefit of the ultimate travelers. Buying in bulk reduces the overall costs and benefit arising there in is shared with the customers appropriately.





- **Assortment:** Providing a variety of goods and services is another specialty of a retailer. The retailer considers the customers requirements and attempts to provide daily or long term consumption goods under one roof with as much assortment and variety as possible. This also depends on how the retailer positions himself. Present day customers would like to get all that they want under single roof. Assortment in this context would refer to the depth of merchandise such as all the options, styles, sizes and brands, which can be brought under the category, eg. Men's shirts – full sleeves, half sleeves, varying sizes, varying colors, various brands and so on. Variety would then refer to the breadth of merchandize like men's shirts, women's apparels, kids wear, and home needs, groceries. Retailing concepts are slightly different from marketing concepts with respect to product mix and product line. Product mix and product line may appear to look like assortments and variety respectively. The main difference is that product line and mix deal with a single company say P&G where assortments and variety can deal P&G, HLL, Cavin Kare, Sara lee and Nike etc. This would mean that a retailer deals with more than one manufacturer. Besides, some retailers have their own labels physically positioned in their own show rooms along with leading international brands.
- **Holding inventory:** A retailer benefits manufacturers and suppliers by holding inventory reducing their carrying costs. The retailer also gets an advantage in bulk buying through higher discounts. Thus this is a win-win situation.
- **Providing service:** Retailers provide additional services such as promotional benefits, repairs, replacements, information, comparison etc. This benefits both the manufacturers and service providers by not having to maintain facilities all over the geography. The retailers also provide home delivery service and after sales service at the customer premises.

With the services marketing coming to the fore and developing into a major contributor to any country's gross domestic product, the marketing philosophy has included three more P's namely, people, process and physical evidence.

5. **People:** Any person coming into contact with customers can have an impact on overall satisfaction. Whether as a part of supporting service to a product or in total service itself, people become particularly important, because in the eyes of the customer they are inseparable from the total service. In effect these people are solution providers and as such they should be appropriately educated and trained in the application of product or service. Some times fellow customers are also referred to people as they provide their own experiences as information.
6. **Process:** This is the process or processes involved in providing a service and the behavior of the people that is crucial to customer satisfaction. This will entail planning the sequence of processes for delivering the service as also disseminating the necessary information to the customer and proper maintenance of the product if it relates to servicing a product.
7. **Physical evidence:** Unlike a product a service cannot be experienced before it is delivered which makes it intangible. This means that potential customers could perceive greater risk when deciding whether to use a service or not. To obviate this perception of risk



and improving the chances of success that is often vital to offer potential customers the chance to experience what a service would be able to offer. This is done by providing physical evidence such as demonstrations, case studies, testimonials, etc

The original 4P's concept idea was developed to help marketers manage the marketing mix. With the Internet making its appearance Idris Mootee devised a new 4P's model in 2001 to supplement the traditional marketing 4P's. They are personalization, participation, peer-to-peer and predictive modeling.

**Personalization:** The author here refers to customization of products and services through the use of the Internet. Early examples include Dell online and Amazon.com and this concept has been further extended with emerging social media and advanced algorithms. Newer technologies are pushing this idea further.

**Participation:** This is to allow customer to participate in what the brand should stand for: What should be the product directions and how advertising campaign should be run? This concept is laying the foundation for disruptive change through democratization of information.

**Peer-to-Peer:** This refers to the customer networks and communities where advocacy happens. The historical problem with marketing has been that it is "interruptive" in nature, trying to impose a brand on the customer. This is most apparent in television advertising. "Active customer communities" will ultimately replace these "passive customer bases". The brand engagement happens with in those interactive parleys. Peer-to-Peer is now referred as "social computing" and will likely to be the most disruptive force in the future of marketing. This depends on the adoption of Internet as a medium of communication in widest possible manner. As of date in India only 2% of the population has access to Internet.

**Predictive modeling:** This refers to predictive algorithms such as neural network that are being successfully applied for solving marketing problems. This essentially embraces forecasting methods through application of statistics (classification, correlation, regression, exponential smoothing, and non-linear Markov chains) and Vector mathematics thrown in.

As has been indicated in the beginning that products are made for customers and it is absolutely necessary that companies deliver the superior customer experience. While majority of companies believe that they deliver superior customer experience, only insignificant percentage of their customers agree to this view. This gives the correct picture in that the customer asks for very much more than what a company normally gives and also thinks it gives.

With these in the background the market leaders have started pursuing three imperatives to improve customer experience<sup>1</sup>:

### 1. Design right propositions

The design essentially improves the process of segmentation of customers and designing value propositions for each of the segments. In this specific segmentation the companies not only take into consideration the customers relative probability, but also the possibility of these customers to act as advocates for the company. The segmentation virtually turns passive buyers into active promoters and the customer himself promotes the design specifically offered.

<sup>1</sup> Adapted from "Tuning into the voice of your customer", Harvard Management update, Volume 10, Number 10, October 2005

**2. Deliver value:**

A well-designed proposition may fail with the customer if it is not effectively delivered to the customer. Cross-functional teams involving marketing as well as supply chain management and a proper system to gauge the customer interaction through data mining and customer relationship management systems. This will help in effective delivery adding value to the customer. The crux of the approach is to integrate the delivery system with the marketing and customer interaction again with the design group.

**3. Develop capabilities:**

Reliability or repeatability is one of the important features of the quality function and also developing customer loyalty to a company. This is particularly important in that superior customer experience is not static but dynamic and requires regular injection of innovation. Continuous improvement in design propositions based on the feedback from the customers can be made possible only with proper tools to measure the customer experience as also customer advocacy.

The 4P's and then the 3P's and finally the new 4P's along with the 3D's all have represented the view points of the sellers and their strategies taking into consideration customers responsiveness. However, Robert Lauterborn felt that the seller's 4P's should correspond to the customer's 4C's namely, customer solution, customer cost, convenience and communication.

**1. Customer solution**

The first P namely the product should meet the requirements of the customer and solve his problems. In other words, when the customer is looking for a solution the product should come as a boon.

**2. Customer cost**

With the globalization of markets, competition has become very keen and price has become market driven. Besides the target price, which a customer is ready to pay should include a consumer surplus and so the customer cost is really target cost and not the manufacturers cost. The manufacturer has to apply value engineering and value analysis to bring down the cost to the customer's perspective of cost. This relates to the second P namely Price.

**3. Convenience**

A customer wants a product or service to be offered to him where and when he needs. A product to be available on time and in time is what the customer desires. Dead lines as well as the place of delivery assume greater importance from the angle of the customer and this has to be built into the 4P's. This aspect relates to the third P, Place.

**4. Communication**

Customer is no longer satisfied with hearsay information and they want to be educated about a product – cost, USP, method of application etc. Towards this communication, the seller should be precise and must remove all doubts about the product or service being offered. Often the relative advantage over a similar product in the market becomes more important as a competitive edge for the seller. This can be brought home to a customer only through proper communication. This relates to the fourth P, Promotion of a product. May be the customer would desire one to one communication through demonstration.



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## **PRODUCTION ORIENTATION VS. MARKET ORIENTATION**

Production orientation for a product to be put on to the market is based on the concept that customers prefer products, which are available freely and at low cost. But this orientation has given way with the customer driven strategy coming to the fore. So the market orientation stems out of the concept that the company should be more effective than the competitors in creating, delivering and communicating superior customer value to the target markets. This change in the orientation has come about mainly due to the globalization of the market and liberalization of economies all over the world. This has resulted in multiple options being available to the customer and other things being equal the customer now articulates his own option to create a new product, as he has become “the boss”.

## **A FRAMEWORK AND MANAGEMENT OF MARKETING MIX**

Management of marketing mix necessarily requires development of a framework that will cater to the four strategic dimensions namely

- Marketing strategy formulation
- Marketing strategy implementation
- Marketing tactical plans and
- Marketing value through financial analysis

### **1. Marketing strategy formulation**

Four steps are involved in creating such a framework:

- Define the market
- Assess the situation
- Analyze the strategic position
- Create strategic options

#### **i. Define the market**

Market definition follows the nature and application of the product and its life. Fast moving consumer goods, industrial products, capital goods, commodity goods and so on, have different target markets. Any strategy, tactics or value creation can be suited only to the target markets and not otherwise.

#### **ii. Assessment of situation**

This assessment involves again four steps:

- Laying down planning assumptions on the basis of the variables involved in the marketing
- Value chain
- Profiling
- Segmentation

### **Laying down planning assumptions on the basis of the variables involved in the marketing**

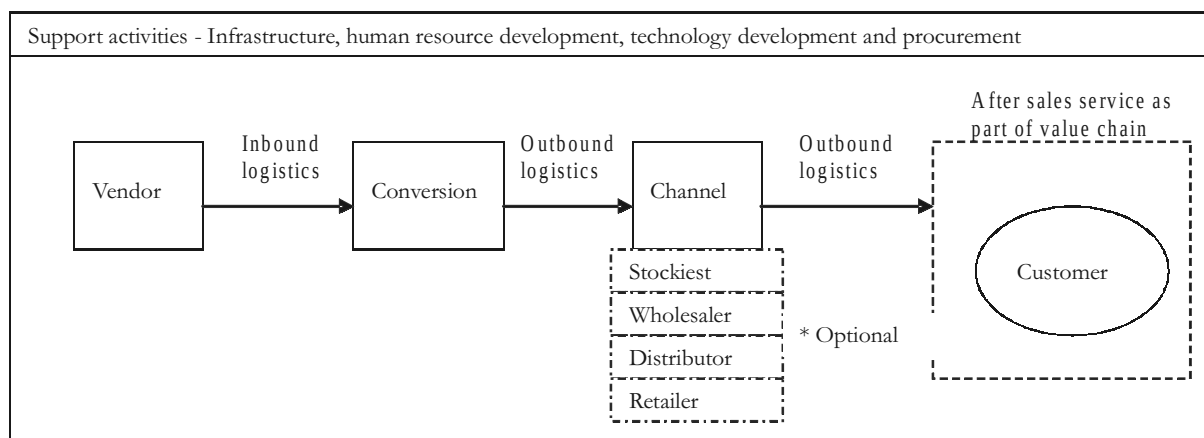
Planning for marketing of a product necessarily entails assumptions, both temporal and spatial. The planning can be either a short term or a long term or even a promotional programme.



Accordingly the *time span* of the plan assumptions relating to resources allocation, customer reach, communication, etc will have to be specific. On the *spatial angle*, specifications of the product, certification either statutory or otherwise, standards either be domestic or international, and the product new or existing, whether promotion into the existing markets or new markets assumption have to be drawn in detail.

## Value chain

The value chain essentially includes inbound logistics, conversion of raw materials to product and outbound logistics, distribution through channels, sales and service. The supporting activities are normally materials management, administration, human resources management, finance, research and development.



The value generated by the various activities in the chain needs to be understood and whether those activities that are generating no value, less value and high value are customer centric or not. With the customer driven strategy it is necessary to eliminate those activities that are not adding value and enhance the value of those activities where customer has specific preferences. According to Michael Porter value chain can be used as a tool for identifying ways to create more customer value. A value chain has normally nine activities out of which five of them namely inbound logistics, operations, outbound logistics, marketing and sales, service supported by four activities, infrastructure, human resource development, technology development and procurement.

The company's task is cut out in that it has to examine the value chain and integrate it with the marketing strategy, tactics and value. It also beholds the company to identify the core business processes in the value chain that will have immediate impact on the marketing function. Those processes include:

- Market sensing process, these include various activities, which help in gathering market intelligence that can be communicated to the different layers of the organization. This will help the specific value chain activities to respond to such information in design and production of the product.
- New offering realization process, this specifically identifies research and development operations and commercializing the same either through a prototype or pilot plan



- A customer acquisition process, this relates to all activities, which are involved in identifying target markets and prospecting new customers
- Customer relationship management process, this activity is both proactive and reactive. It reacts to the customer response based on questionnaires, customer complaints, etc. It is proactive by providing after sales service as part of regular marketing process to gain customer confidence, identify any weaknesses in the product or service delivery and offer corrections then and there before the customer himself points out the problem
- Fulfillment management process, this is an activity for maintaining order book and follow up there on. This forms a basis for receiving and accepting orders and shipping the product on time and collecting the payment there for

**Value Migration is another important aspect in value chain.**

As the term value it is not absolute but relative, the significance of the value has been changing corresponding to the changing customer needs. So it becomes relevant to understand the concept of value migration, especially as understanding this aspect ahead of his competitors gives a competitive edge.

There are three types of value flows – between the industries, between companies and between divisions of a company. These need to be monitored on a continuous basis so as to detect and measure the changes happening. The three stages in value creation are value inflow stage, when the value is absorbed from other companies or industry; value stability stage, when there is a competitive equilibrium between market shares and profit margins; value outflow stage, when company tends to lose their market share, reduce the profit margins and outflow of talent and other resources. These stages can be identified through lead indicators to take proactive steps.

**Profiling**

The profiling of the characteristics of the customers helps both in design of the product and channel. Their number, demographic distribution, income, shopping habits and reactions to different selling methods can provide a fairly good profile of a customer. For example, if it is a low-income segment, it may be necessary to reach out to them directly to reduce channel costs and pass the same on to them. Again if it is a very high-income segment that are in the habit of ordering materials online, then it may be necessary to have the products or services delivered at the customer's door. Again the product characteristics also may have to be modified according to the customer profile, e.g., McDonald had to change their recipe to suit particular customer segments.

The bases adopted for profiling are:

- Behaviors, preferences and attitudes shown for a product category
- Behavior and attitudes towards brand selection
- Attitudes of the customers about themselves and environment



### **Segmentation**

A market segment consists of a group of customers who share a similar set of needs and wants. Segment marketing helps in creation of fine tuned product or service, as the target segment is fully known. Again, the company can also select better distribution and communication channels in tune with the segment to be addressed. The four basic criteria for market segmentation are:

- The segments must physically exist in the environment and should not be imaginary
- Segments must be identifiable on a consistent basis
- Segments must have reasonable stability over a time span
- The company must be able to reach the segments through specifically tailored initiatives in regard to communication and distribution

Segmentation of a market are done by two methods namely, a-priori and post-hoc methods.

A-priori method classifies customer groups by generally accepted procedure related to variations in customer usage of the product category.

Examples of a-priori segments are:

1. Standard industrial classification groups (SIC)
2. Basic demographic groups (Age, sex and household composition)
3. Usage groups (Volume users, lean users, and non-users)
4. VALS (Values and lifestyles classification system) and
5. PRISM (Geo demographic classification system)

Post-hoc method is empirical and is based on research studies undertaken for the specific purpose of segmentation. Research can be based on the basis of questionnaires and interviews. There are three different classes of algorithms for conducting post-hoc segmentation studies based on cluster analysis, correspondence analysis and search procedures.

Examples can be:

- Preferences to product attributes and values
- Patterns of product purchase and usage
- Brand preferences and brand loyalty
- Price sensitivity and so on

However, segmentation has its own limitations, as the similarities in wants are a dynamic proposition and undergoes change disproportionately. So a flexible market offering has to be designed in two parts:

1. Naked solution, which provide the products and service elements based on the segment consensus





2. Discretionary options allow modifications to suit some of the segment's customers who are at variance with the majority. For example, community-building models that are special websites developed to create special interest community where users may provide information for products or services. The same website can bring consumers/users to concise location making them more available for communication by a company. This creates social bonds and enhances customer relationships by mass customization.

### iii. Analyze the strategic position

Strategic positioning is the act of designing the company's product and image to occupy a distinctive place in the mind of the target market. Towards this, analysis will have to be made under the following four areas:

- Attractiveness criteria
- Critical success factors
- Competitor analysis
- Differential advantage analysis

**Attractiveness criteria:** The product as perceived by the customer will be mainly on the basis of the features, which attract the customer. Such features can be utility, price, quality and unique selling proposition.

**Critical success factors:** These factors can be both absolute and relative. They are absolute to the extent of maintaining the required level of attributes as per the standards like Bureau of Indian Standards, International Standards Organization, and etc. But these levels are only the eligibility criteria for entering into the competitive arena. In the market, superior quality compared to the competitor is the critical success factor. In the same manner pricing a product is no longer in the manufacturers' domain and critical success factor in this regard will be the target price (lowest price) of product in the market. Other criteria remain equal such as quality, applications, service and deliverability.

**Competitor analysis:** The strategic positioning of a product fundamentally requires an understanding of the existing competitors and their strengths and weaknesses. The information needed for such an analysis will be concept design strengths, physical resources available, marketing capabilities and structure, financial resources and structure, managerial style and scope.

**Differential advantage analysis:** Taking all the three above into consideration a comparison will show clearly where exactly the particular company has the edge, which can be converted into a differential advantage consistently and on a sustainable basis. It may turn out that the particular company has an edge in cost leadership or differentiation or in focus or technology.

### iv. Create strategic options

- **Determining criteria:** Creating strategic options after assessing the situation and strategic position analysis normally is a-fait-accompli. However, two other criteria also are





needed to fine tune strategic options. They are the determination of the stage of the product life cycle and the stage of the industrial life cycle. These will definitely indicate the strategic options to be pursued, as the management accountant would like to be part of this strategy. He would have worked out the total cost of the product over the life cycle and a cross functional team can determine as to how this cost can be recovered over the life cycle of the product taking into consideration the situation and strategic position analyses.

- **Developing options:** The options can be share building, market concentration, harvesting and skimming through cost leadership, focused cost leadership, differentiation and focused differentiation. These options will have to be punctuated against the life cycle of the product, strategic positioning criteria and the situation assessment.
- **Selecting options:** It is very clear that a single option may not always be the solution and options will have to be applied selectively, temporally. In the embryonic stage of the product the option will be to build market share using cost leadership or a penetration price. In the growth stage, margins are increasing due to economies of scale and greater advantage can be taken if it's a pioneering product by using skimming option. If the product is of very high value and volumes are low, then focused cost leadership or focused differentiation will be the options. In the maturity stage of the product, the product has become a cash cow and as such the strategic option will be to maintain profitability and divert funds for research and development to produce a new substitute. In the decline stage, focused differentiation and harvesting are the options, as the product has to be phased out.

## **2. Marketing strategy implementation**

Having selected strategic options, implementation of the same would involve four levels, namely functional, business, global and finally corporate in the sequential order. These four level strategies are already been discussed in detail in earlier module. The relevance of these to the marketing strategy will include the timing of these strategies, as there are three overlapping lifecycles, namely, trade cycles, industry cycles and product cycles. Functional level strategy implies implementing the required option with in the company and graduate to the next level of business taking the total domestic market into consideration.

With the globalization of activities selected strategic option will have to implement taking into consideration the cross border markets and their ramifications, if the company has exports or presence internationally. In the fourth level all the three levels have to be properly integrated in a holistic fashion for the corporate as a whole.

## **3. Marketing tactical plans**

The holistic exercise referred to in the previous paragraph can be broken in to

- Key programmes and
- Operational plans.

These lay down the tactics to be followed while implementing corporate level strategy. The key programmes will highlight product promotion, positioning, introduction of substitutes



etc. The operating plans can be a package of physical targets, financial targets and the modalities and the timing of each stage or events to be monitored. These plans can both be long term and short term. Care should be taken whenever a short-term plan is prepared it has to be properly dovetailed with the long-term plan already approved. Finally, from the short-term plan, annual exercises in the form of operating budgets are to be prepared for control purposes.

#### **4. Marketing value through financial analysis**

Implementation of strategic options for marketing can be two fold:

One time exercise

Continuing exercise

One-time exercises are those when market surveys are conducted, new products are introduced, harvesting is done or a new market is established. These exercises can be stand-alone exercises and their viability criteria will have to be established independent of other activities. The financial analysis also will be a stand-alone exercise with specific resource allocation, utilization of funds, monitoring the efficiency and computing the results in terms of value.

The Continuing exercises are the marketing and sales of existing products for which demands have already been identified, markets have been segmented and geographical sectors have been marked out. The continuing exercises would involve pricing exercises and adjustment for the same for inflation, identifying marketing costs like distribution and selling costs and laying criteria for the same. The marketing budget will thus have profitability exercises arising out of sales and the marketing cost monitoring for selling and distribution expenses including logistics.

### **E-MARKETING**

Judy Strauss and Raymond Frost's e-marketing model defines e-business as a continuous optimization of a firms business through digital technology.

$$EB = EC + BI + CRM + SCM + ERP$$

Where, EB is electronic business, EC is electronic commerce, BI is business intelligence, CRM is customer relationship management, SCM is supply chain management and ERP is enterprise resource planning.

EC uses digital technologies to enable buying/ selling, BI uses digital technologies for collecting primary / secondary information, CRM is strategy to satisfy customers and build long lasting relationships on the basis of high interaction with customers. This high interaction has been enabled through webinars and web conferences. SCM relates to delivery of products efficiently and effectively both by the vendors to the manufacturers and manufacturers to the distributors/ customers. The high interaction with vendors and customers has been possible through EDI (electronic data interface), paper less transactions. ERP has helped optimization of business processes and lowering costs. Order entry and purchasing, invoicing and inventory control have been speeded up and also optimized through MRP, JIT, Kanban, etc using digital technologies.

**BRAND**

A brand has two faces that are verbal and non-verbal. A brand is a combination of name, color, sign, symbol or design intending to identify a company offering goods or services that help in differentiating the company from other companies in the market place. The key to building brands is not through intuition, but by adopting a scientific approach. This methodology combines forward-looking market segmentation with a better comprehension of customers and a brand identity. The gamut of information about customers and their buying patterns need to be analyzed by sophisticated statistical tools to develop a database for branding. Adopting quantitative techniques sometimes may affect creativity for developing a brand. But the more analytical a company approaches the customer needs, the brand identity helps to direct new thoughts into areas that make a difference.

Analysis of the customer needs and habits often lead to spotting of meaningful trends, which can be translated to growth projections for a new insight or a range of products under one brand. The changing trends of customer, tastes, fashion and wants may create most promising future segments, which may become the basis for building a brand. Cost effective brand building depends on knowing precisely what the customers need, want and take delight. This will help the brand building exercise for defining a brand with conceptual clarity and delivering it to the customers.

In short a brand involves emphasizing its key benefits and attributes for the customers. This will be possible only when the companies recognize a brand is made up of functional attributes - tangible and intangible, emotional benefits coupled with its identity that will serve the basis of a powerful global brand.

Successful brands combine features that are important to the consumers and also differentiated from the competitors. This combination needs to be cost effective as otherwise the benefits of brand may not be significant. So trade offs are necessary to match the cost of building a brand against the corresponding potential returns over a time horizon. For such computations quantitative tools are available. Apply social science techniques to identify the drivers, which drive brand attributes to create loyalty among customers. For this pathway modeling, developing structural equations, relying on basic regression techniques have helped efficient brand building. Proper comprehension can be developed by forming structural equations using diverse factors giving information through loyalty programmes, consumer surveys, electronic point of sale data, attitude based research, etc. The pathway modeling has allowed quantification of the potential impact of brand initiatives on customer loyalty. This quantification can be converted through value imputation in the form of dollars or rupees. So the companies can make approximate estimates about the return on their investments for building brand equity.

Brands relationship to Strategy can be gauged from the fact that they lend greater meaning to the strategy due to the following factors:

1. Brands can be identified as a basic entity for financial analysis, where there is a range of products that cannot be identified severally
2. Brands are more relevant to strategic analysis as they have longer lifecycles than the products



3. Brands help in the determination of the value of the product range
4. Brands help a company enter un-chartered areas of market more speedily with less risk

Kotler (1997) has classified five brand strategies as follows:

1. Line extensions: Applying existing brand name to new sizes or flavors or colors of a product. These are known as brand variants also.
  - a. Advantages
    - Cost of brand support is absorbed on higher sales
    - Helps continuity of a brand
    - Improves the rate of survival of new products
  - b. Limitations
    - By line extension brand loses its specific meaning
    - Too much emphasis on brand is often deleterious to sales of new products
2. Brand extensions: The existing brand is also used to launch a product under new classification. An example is Parry's confectionary and Parry's fertilizers.
  - a. Advantages
    - As a brand is known the new product gains earlier recognition and acceptance
    - Launching costs are lower
    - The brand gets strengthened with an array of products of different classifications
  - b. Limitations
    - A bad new product can have a harmful impact on the original product
    - Extension of brand may not be appropriate to the new product
    - Indiscriminate extension of brand may lead to brand dilution
3. Multi-brands: A company offers different brands under same product category. Food products companies, publishers, and detergents, so on practice this.
  - a. Advantages
    - Accessibility to sub segments with different price points
    - It is used as a barrier to entry
    - Protects major brands by introducing fighting brands
  - b. Limitations
    - Cannibalization of market may happen
    - Cost of promotion is higher
    - Uncalled for competition among the brands of the same company
4. New brands: A new product category is introduced under a new brand name.
  - a. Advantage
    - A break away from the old brand identity
    - Can introduce new value additions
  - b. Limitations
    - Cost of establishment of new brand is more expensive



- Takes more time to establish
  - The brand must be extendable or it may be expendable
5. Co brands: Brands can be combined in an offer.
- a. Advantage
    - Helps both the products with each others reputations if they are complementary
  - b. Limitations
    - Unless the products are complementary this method will not work

**Brand equity and its value**

The endowed added value provided to all products and services is brought under the concept of brand equity. There fore brand equity is the added value share of every brand in comparison with other brands. It can also be said that it depicts the differentiations in terms of value additions existing or proposed as perceived by customer. Brand equity can be equated with recognition of the brand through the number of customers, who are satisfied with the brand, customers who value the brand and see it as a friend and those customers who are devoted to the brand. Brand equity is essentially an asset and can be defined as the differential effect on a customer whose response to a product or service is through the knowledge of the brand. In essence brand equity makes a customer show a preference for one product over another when they are congruent.

Brand valuation is estimation of the total financial value of the brand. The estimate for valuation is based on the price premium the brand commands multiplied by the extra volume it is able to market over an average brand.

**Brand valuation can be done in five ways:**

1. Add up all costs of research and development and marketing expenditure of the brand over a specific time horizon. This method has certain limitations in that it is difficult to identify all expenses that relate to the brand and only quantifies the cost and not the value
2. Based on the present value of the price premium that a brand commands over the unbranded product. This is the first approach, which brings in the additional value earned by a brand. However,
  - a. It is difficult to identify a proper unbranded good for comparison
  - b. It does not recognize the stability attribute brought in to the earnings by the brand
  - c. The possibility of a brand being a barrier to the entry and this aspect in terms of value is not included
3. If the brand were to be auctioned the value that may be fetched by such auction. Conceptually, this method is very sound but it may not be practicable for brand market is very narrow and accurate valuation is not possible
4. Computation of value based on intangible measures such as esteem, recognition and awareness. While the approach sounds interesting, translating these intangibles into commercial value is extremely difficult and the methods of quantification through use of statistics can be flawed



5. Discounting future potential earnings for brand valuation. This method virtually includes all the information from the earlier four methods and in addition has to develop a reliable forecast of future earnings and growth. Here it is difficult to gauge the life of the brand and the time horizon to be set apart from quantifying the earnings.

## **MARKET RESEARCH AND INTELLIGENCE**

Organized intelligence is to obtain information by coordinated organizational activity to monitor specific aspects of the environment. Companies have either in house capability to collect the above information in a systematic manner and analyze competitive intelligence. Some other companies delegate this task of collecting, collating, analyzing and disseminating the pointers to outside agencies to reduce their fixed cost. Decision-making requires both formal and informal information. So, systematic collection of data as indicated above may not suffice the requirements for decision-making. The informal information collection is either through grape vine or unconfirmed news items, which can be reliable and unreliable.

For an organized intelligence system to be established it is necessary to lay down certain criteria.

- The level of knowledge regarding domestic competitors among the top executives of the company
- The level of knowledge of the middle management about competitors and industry
- The level of knowledge of peer members about their own activities within the organization
- Availability of proper dissemination of continuing developments of the competitive markets through regular bulletins
- The level of knowledge about global competitors and market developments among the top executives of the company
- Availability of online databases with the company
- Availability of surplus data and the necessity to eliminate irrelevant information

Apart from providing information, formal research is required for making long-term decisions in a company. Developing a research plan may use different techniques that are available; they are demand pattern analysis, income elasticity measurements, and estimation by analogy, comparative analysis and cluster analysis.

## **DATA WAREHOUSING**

Devlin (1997) has studied evolution of data warehousing over three decades and has divided this time span into four definite intervals.

- Pre historic times (before 1980's): Before the emergence of personal computers, the information systems department of any company maintained collection of information and related database. Cost of collection was high as also the lack of domain knowledge of the systems department surplus information had to be gleaned into wasting valuable time.
- The middle ages (1980 – 1990): Data warehousing had its beginnings and the use of data modeling approaches and tools came into existence. Operational systems and information systems emerged distinctively.



- The data revolution (starting from 1990): Globalization of markets and liberalization of economies in various countries took place during this period, in effect technological developments in data modeling, data bases and applications development came into center stage.
- The era of information based management (21<sup>st</sup> century): A consolidated information source, distributed information availability, information in a business context, etc forged into the concept of business intelligence has taken shape. Presently, a data warehouse offers structured information by:
  - Presentation of standard reports and pictorial representations from required sources
  - Dimensional analysis and user friendly format for comparison of results across different dimensions including a time horizon
  - Introduction of the process of data mining

## **DATA MINING**

Data mining is essentially the discovery of purposeful information for decision makers. By application of information technology knowledge discovery in databases (KDD) have been able to lay bare the required insights from maize of data. The technique searches for invisible relationships, patterns, correlations and interdependencies. It also uses specific tools to solve specific questions.

## **INNOVATION BASED ON SUCCESSFUL CUSTOMER OUTCOMES (SCOs)**

According to Mark McGregor and Steve Towers in their book “Thrive”, three straightforward steps can be used as the basis of action plan that can help any organization to place the customer at the center of its activities. The emphasis is not just in the words that the organization uses but in everything that the company does, from the way that it structures itself, through performance rewards, to innovation. Being a business driven by SCOs also means moving away from the constraints of Industrial Age thinking – big hierarchies, functional stovepipes and limiting improvement to the best practice seen in competitors.

### **1. Work out the customers whose needs you are trying to meet, and understand those needs well**

A fundamental requirement for defining good SCOs is to make sure the marketers are concentrating on the right “C”. It is important to differentiate between core customer and enabling customers. It would mean that the focus should be on the core customer without losing the sight of the enabling customer.

### **2. Keep everything clear and simple and focus on customer**

Every company should express the purpose of its existence in clear concise statements and explain about their products in simple transparent straightforward language.

### **3. Align the organization to SCOs**

This is ability of an organization to manage change. SCOs are possible only when the company is dynamic to take the changing customer perspective and align themselves quickly. Towards this the organizations have to be agile and flexible.





## STUDY NOTE - 7

### APPLICATION OF MANAGEMENT ACCOUNTING IN STRATEGIC MANAGEMENT

**This Study Note includes Learning focus:**

- **Value engineering**
- **Kaizen costing**
- **Activity based management / costing**
- **Product development**
- **Budgeting and budgetary control**
- **Material management**
- **Logistics**
- **Human resources**
- **Total cost management**

### APPLICATION OF MANAGEMENT ACCOUNTING IN STRATEGIC MANAGEMENT

Management accountant in the 21<sup>st</sup> century finds himself at the cross roads. From the ivory tower of purely accounting, the management accountant has now to confront challenges which are cross functional. He has become a change agent and also a catalyst to the growth of any company. The cross functional status requires the management accountant to be familiar with all the lines of activities, namely marketing, production, human resources, research and development. In short, the management accountant has to equip himself in the following ways to be a strategic cost management accountant:

- Needs exposure to multi-disciplines: Functional milieu has changed and water tight compartments do not exist. Team work with peers in different areas is a must
- Be the change agent: Help understand environment and introduce necessary changes within the system to cope up with the fast changing world in the context of the third wave
- Help build strategic cost management: Develop analytical skills for benchmarking exercises, SWOT analysis, activity orientation, target costing, focus on both cost leadership and product differentiation
- Integrate customer satisfaction into total cost management using value chain analysis: This aspect identifies the area of maximum value addition and the need to relate value to customer satisfaction in quantitative terms
- Be part of the management team: Step outside the ivory tower and mingle with the main stream to introduce total cost management practice. This aspect incorporate use



## APPLICATION OF MANAGEMENT ACCOUNTING IN STRATEGIC MANAGEMENT



of cost tables, shop floor exercises, interpretation of technical and efficiency improvements in terms of value

- Especially, in the context of business strategies the role of management accountant as a change agent has been indicated earlier. However, it will be useful to define the role of the management accountant in the entire strategy formulation and implementation exercise. The following table gives a contribution of the management accountant at each stage of strategy building exercise:

| Strategy building exercise                                                                                                                                                                                                                         | Contribution of the management accountant                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Validation of vision                                                                                                                                                                                                                               | Be part of feedback sessions for validation to identify the impact of financial aspect                                                                                                                                                                                                      |
| Validation of mission                                                                                                                                                                                                                              | Be part of feedback sessions for validation to identify the impact of financial aspect                                                                                                                                                                                                      |
| Environmental scan and SWOT analysis                                                                                                                                                                                                               | Research, collect and collate information on key environmental factors including statutory regulations and competitive activity                                                                                                                                                             |
| Strategic change portfolio                                                                                                                                                                                                                         | Be part of cross functional team to lay down strategic initiatives in a chronological order over the time horizon of the strategy                                                                                                                                                           |
| Identify critical success factors (CSF) <ol style="list-style-type: none"> <li>Set targets</li> <li>Prepare annual budgets to dovetail to long range forecasts</li> <li>Identify tools for measurement both financial and non-financial</li> </ol> | Is fully involved in all the activities as his role for developing both targets, measures and interpretation of deviations through proper tools like Balanced scorecard, EVA, strategy maps, etc.                                                                                           |
| Sustain Kaizen                                                                                                                                                                                                                                     | <ol style="list-style-type: none"> <li>Be part of cross functional teams to identify assumptions and CSFs which need revision</li> <li>Be part of the cross functional team to identify critical business process which need specific attention for modification and improvement</li> </ol> |

Thus the management accountant takes on the strategic change portfolio to a great extent because he is the thread which runs through formulation, implementation and sustaining momentum for further modification and improvement. In this portfolio, his practices embrace five critical areas:



1. Planning as a key business process
2. Be part of cross functional team to achieve excellence
3. Develop models for various financial aspects of the strategy from formulation to implementation
4. Develop tools for monitoring and managing change
5. Communication to all stakeholders e.g., shareholders, customers, creditors, board of directors, etc.

With the customer focus and customer driven strategies taking the centre stage, the value chain of business functions has the following areas:

- Customer service
- Distribution
- Marketing
- Production
- Product and service and process design
- Research and development

The first three areas relate to marketing strategy, while the later three areas relate to operations management strategy. Management accountant being the fulcrum has to device a financial strategy, which has to expose marketing strategy and operations management strategy in a tandem. The financial aspects of the above two strategies have to be conceptualized, before developing a structure for the financial strategy.

### Concepts

In any business the source of the company's earnings needs to be understood from the strategic perspective. Normally, earnings are traced to a sale of a product, which again can be divided into the quantum of sale of the product and price of the product. This definition has been from time immemorial been adopted for accounting purposes. From the marketing strategy perspective, customer has become the source of earnings. In that, without a customer visiting an outlet a sale cannot take place. Either more customers or a customer repeated visits are necessary for increasing the earnings. So the emphasis has shifted from the product to the customer as far as commercial success through bigger sale is concerned.

Until towards the last decade of the 20<sup>th</sup> century, product pricing was essentially a part of push strategy. Manufacturing to stock on the basis of an assured demand with adequate protection to tariff walls from the government, especially, Indian entrepreneurs produce goods at their own cost and provided their margin and fix their selling price on the "cost plus pricing" basis. However, this approach came in for a rude shock when the information technology revolution or the "third wave" as it is called engulfed the entire world. While on the one hand, developed countries found their market shrinking due to stagnation in their population, but had surplus capacity to produce world class goods, they had to look for new markets. The third wave came in as a boon and the entire world shrunk. Logistics no longer was a problem and the delay in reaching the customer was totally removed. Liberalized economies meant breaking down tariff walls and the markets became open. Now the customer has many options for buying a product as numerous producers were queuing up with quality products. Pricing of product was no longer the prerogative of the manufacturer, but of the customer. Pricing thus became market driven and a product of pull strategy.



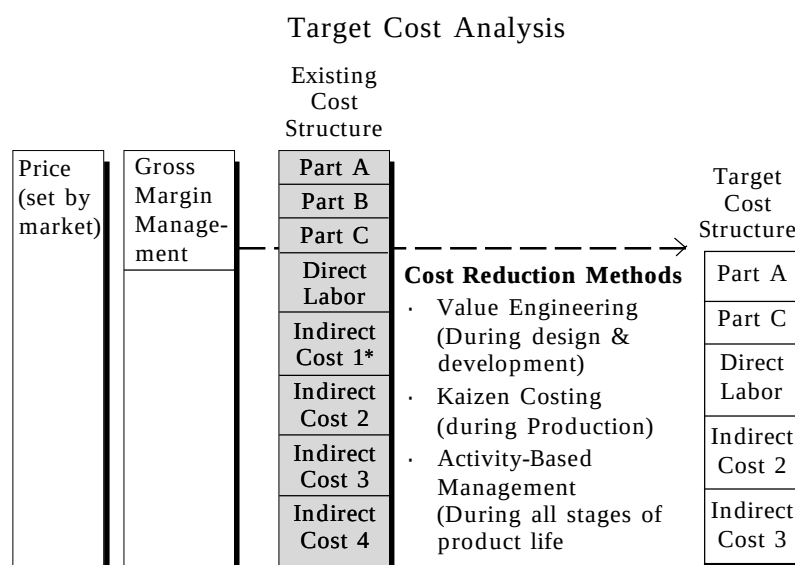
From the point of view of the management accountant the market driven price is the target price at which the manufacturer has to market his products and source his earnings. At the same time the management accountant has also understood that if a business has to be carried on, it has to earn a return on capital employed (ROCE) or return on investment (ROI) at a higher level than the average cost of capital. Having quantified this return per unit of sale this element is deducted from the target price to yield the target cost. This area is the battle ground where the higher existing costs needed to be brought down to a level of the target cost for which a financial strategy has to be developed.

This financial strategy would involve cost reduction at all levels and thus would involve analysis of marketing costs and profitability on the one hand, product development policy and strategy on the other hand. Towards this, the main thrust of cost reduction is a three pronged exercise:

- Value engineering during design and development
- Kaizen costing during production
- Activity based management and costing during all stages of product life

### 1. VALUE ENGINEERING DURING DESIGN AND DEVELOPMENT

Besides, with the globalization of markets, availability of range of products has brought in virtually perfect competition. As a result price of a product is market driven and set by the market. Fixation of selling price is no longer in the domain of the manufacturer of the product. At best he can set the gross margin to be earned on the product as the minimum viable return on his investment. Taking the market driven price and deducting there from the viable gross margin computed by the management the target product cost is arrived at. This target cost will be significantly lower than the existing cost structure and as such substantial cost reduction will be necessary to bridge the gap. This gap can be eliminated through application of value analysis and engineering, Kaizen costing and activity based management.





It is generally felt that cost control and cost reduction are used frequently and interchangeably. Though there is a major difference between these two terms, most of the people have failed to understand the concept of these two terms. The former deals with the reporting and review of variances arising because of comparison made between actual results and set of norms. Whereas the later deals with the methods by which the cost is reduced. The differences between cost and cost reduction are given below:

| <b>Cost control</b>                                                                                                                                                          | <b>Cost reduction</b>                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| This process undertakes the competitive analysis of actual results with established norms.                                                                                   | This process finds out the substitute by finding new ways or methods.                                                                                                                   |
| Under this process, the variances are appraised and reported and necessary course of action will be taken to revise norms, standards etc.                                    | Under this process necessary steps are taken for further modification in the method                                                                                                     |
| It starts from established cost standard and attempts to keep the costs of operation of a process in line with those standards                                               | It challenges the standard forthwith and attempts to reduce cost on a continuous basis                                                                                                  |
| The main stress is on the present and past behavior of costs                                                                                                                 | The emphasis is partly on the present costs and largely on future costs                                                                                                                 |
| It has limited applicability to those items of costs for which standards have already been set. The items for which standards are set mainly relate to productive operations | It is universally applicable. It should be applied to every area of the business. It does not depend on standards, though target amounts may be set                                     |
| It attempts to achieve the best possible results at the least cost under given conditions                                                                                    | Under this no condition is considered to be permanent where a change will secure a lowest cost figure                                                                                   |
| Cost control is a preventive function. Costs are optimized before they are incurred                                                                                          | Cost reduction is a corrective function. It operates even when efficient cost control system exists. There is room for reduction in the achieved costs                                  |
| Cost control some times lacks dynamic approach                                                                                                                               | It is a continuous process of analysis by various methods of all factors affecting costs, efforts and functions in an organization. The main aim is to have continuous economy in costs |

A distinction is made between value engineering and value analysis although commonly these two terms are used in the same sense.

Value analysis aims at reducing cost by economizing expenditure and increasing productivity and it probes into economic attributes of value and through continuous process of planned action aims to improve performance and increase the value in a product, and there by reduce costs. Value engineering concentrates mainly on direct costs. Value engineering may be applied in the production stage, i.e., the design and development stage but value analysis applied to existing products already being marketed.

Terms and definitions used in Value Analysis:

- Objective: The purpose or reason that the product or service exists



- Basic function: A basic function, if eliminated, would render the product useless in terms of its stated objective
- Secondary functions: Secondary functions exist to support a basic function because of the way the particular product was designed

For example, in opening a tin can, we might have the following:

1. Objective: remove contents
2. Basic function: open can
3. Secondary functions: cut lid

In order to remove the contents of a can, we must open the can; thus “open can” is a basic function. There are other ways to seal a can, however such as using a screw lid or a plastic top. In these cases, the secondary function would change because a different approach is used to accomplish the basic function. Identifying basic and secondary functions is at the heart of value analysis. As an exercise, try to identify the basic and secondary functions of a stapler and a cup.

After identifying basic and secondary functions, the cost of each basic and secondary function is determined. Then creative alternatives are developed to reduce the cost or to improve the value of the product. This is done by consolidating, revising, or eliminating secondary functions, which improves the value ratio.

For example, in the can opening example above could a way be found to remove the contents of the can without cutting the lid? One idea is a pull tab arrangement to open the top; another is a flip top which can be easily removed.

If these ideas improve the value ratio, they are better ways to accomplish the basic function, with a different secondary function, than the current method.

### Value tests

Establishment of set of Value Tests, being the first step in the development of systematic approach for value engineering a set of value tests will have to be applied to a product which is slated for value engineering.

- Does the use of product / component contribute value?
- Is the cost of the product / component proportionate to its usefulness?
- Do the component / product need all its features?
- Is there a better alternative or substitute?
- Is any one buying the component / product for a lower price?
- Can a usable part be made by a low cost method?
- Is there an alternative supplier to provide the component / product at a lower price?
- Does the material, reasonable labor and overhead add up to target cost?
- Are the component / product made on proper tooling taking the quantum of production into consideration?
- Can a standard product available in the market be substituted?

Honestly, answering these questions, there is unsatisfactory value with considerable room for improvement. This can be achieved only through a structural approach developing a job plan.



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## Value engineering job plan

In this plan there are seven phases, corresponding in part to the chain saw's course of development. The specific phases of the job plan are:

1. General phase
  2. Information phase
  3. Function Phase
  4. Creation Phase
  5. Evaluation Phase
  6. Investigation Phase
  7. Recommendation Phase
- **General Phase:** This phase gives an overview of the entire job plan. Job Plan is broken up into: (A) A description of the process and the techniques of each stage of production or a cost centre. (B) Identification of any bottlenecks by products and waste products which are to be overcome and the structure of human resources and any stresses and strains are recognizable affecting good human relations and inspired team work.
  - **Information Phase:** Information relating to bottle necks, by products and waste products, raw materials, conversion costs will have to be obtained in an exhaustive manner. The specifications and requirements and the current costs incurred in these areas will have to be quantified accurately.
  - **Function Phase :** Two techniques of this phase are a major part of Functional Approach:
    - Define the Function - Every function must be defined in two words, one verb and one noun
    - Evaluate Function Relationships -This is accomplished by taking the functions as defined in the above technique and the information and data secured in the information phase and establishing a relationship between them.
  - **Creation Phase:** Creativity or Brain Storming. Two techniques simply point up the vital areas:
    - Establish Positive Thinking – Mind comprises 2 parts – Judicial & Creative. Necessary to turnoff the judicial part during the creative phase
    - Develop creative ideas – Cultivate uninhibited thinking and developing a multitude of ideas and approaches for accomplishing the defined functions. Large Quantity of Ideas desired
  - **Evaluation Phase:** Techniques of this phase must be undertaken with care and diligence. Judicial part of the mind is brought into active use.
    1. Refine and Combine Ideas.
    2. Establish Cost on All Ideas.
    3. Develop Functional Alternatives.
    4. Evaluate by Comparison.



The combined creative ideas that have been refined to basically workable solutions and have the greatest potential return on further invested time are subjected to the techniques of the Investigation Phase.

- **Investigation Phase:** This technique provides selected ideas into workable and saleable solutions providing lower cost methods of performing the required and desired functions through the application of additional, vast resources of knowledge.
- Use Company and Industrial Standards.
- Consult Vendors and Specialists
- Use Specialty Products, Process and Procedures

These are to be evaluated and used when they provide a lower total cost than standard products, processes, and procedures would.

- 7. Recommendation Phase:** This phase and its techniques are the culmination and wrap-up of all previous efforts exerted throughout the Job Plan:
- Present Facts
  - Present costs
  - Motivate Positive Action

The Presentation of these facts and costs and the motivation of positive action are accomplished in one of three ways – verbal form, written form or in combination of both.

Final combined form is recognized as best and contains sufficient data for the decision makers to determine the course of action to be taken. Changing things is central to Leadership, and changing them ahead of anyone else is Creativeness.

## 2. KAIZEN COSTING

Kaizen costing is a Japanese term for continuous improvement during production. This involves setting up annual targets for achievement in various elements of costs in conversion as part of production. For example, optimization of total cycle cost is a typical Kaizen attempt. The total cycle can be broken up as follows:

$$\text{Total cycle time cost} = \text{Set up time cost} + \text{Process time cost} + \text{Move time cost} + \text{Delay}$$

Each element of this cost is subject to continuous improvement. Especially, in the context of lean manufacturing systems **set up time costs** were higher at the beginning per unit of production, especially as the through put was much lower than in mass production where economies of scale could be achieved. Set up costs have been under investigation and the concept of SMED (Single Minute Exchange Die) has been accomplished. This has been possible through application of ergonomic principles, time and motion study and work study. Each movement contributed to a time span and as such elimination of unnecessary movements led to lower set up time resulting in lower set up costs.

**Process time cost** again relates to the conversion of raw material to finished product in stages and at each stage certain operations are performed using labor, supervision and consumables. Time being the main parameter, quicker time meant that the operating cycle was compressed. For achieving this compression process analysis has to be initiated, where





after application of new technologies or techniques to improve the process capabilities and the time of conversion can be successful.

**Move time cost.** Any process is made up of one or two operations and between the operations the work in process needs to be moved from one stage to the other. This involves move time, which actually does not add any value. This move time has to be reduced as it cannot be eliminated. Reduction is achieved through better layout of a shop floor or using faster mechanisms to move their work in process, e.g. belt conveyers, elevators, pneumatic conveyers, etc.

**Delay time cost.** Any operating cycle is affected due to non availability of raw materials, absenteeism of labor, power interruptions, etc. These delays not only do not value to the customer but also affect delivery schedules so a meticulous planning of work schedules, inventories as well as avoiding power interruptions through stand by power is some of the methods adopted to reduce this cost.

### 3. ACTIVITY BASED MANAGEMENT / COSTING

The management accountant's role in optimization of total cycle cost is very significant in that as part of the cross functional team, he has to evaluate various alternatives and present the value implications thereof for decision making. The methodology adopted for evaluating the costing of these activities is by use of activity based management and costing (ABC), especially for indirect costs. This methodology involves again process analysis, cost drivers and innovative approach to effect reduction of costs. For example, in marketing costs like distribution, warehousing, outbound logistics, after sales service, promotional costs need to be analyzed and linked to marketing strategy rather than as a stand alone exercise. Activity based management is born out of pull technology and is totally customer oriented. The activity analysis is done to identify activities that add value and activities that do not add value from the customer's perception. It is in this area life cycle costing becomes an important tool for application. Recovery of marketing costs over the life cycle needs to be related to the various stages of life cycle, life start up, growth, maturity and decline. As the target price is market driven, the total income during the life cycle will be completely dependent on the target price. But the costs of production and marketing are going to vary according as the stage of the life cycle and the management accountant's role is very significant in this regard.

Application of supply chain management principles the costs of distribution or warehousing can be optimized on the basis of the nature of the product being marketed. Outbound logistics costs are also scrutinized applying the logistics models as to how to reach an ultimate customer earlier than the competitor and offer him the product along with service. The principles of consolidation, containerization, optimizing inter modal transfer, etc have been successfully applied. The operating margins have been improved by determining the mode of transfer of product from the manufacturer to the customer by proper tier management.

**Direct product profitability** is another interesting concept which has been used in dealing with the marketing costs. CIMA defines direct product profitability as "the attribution of costs other than the purchase price, (e.g. distribution, warehousing, retailing) to each product line. Thus the net profit as opposed to gross profit can be identified for each product..." (CIMA: Management accounting official terminology, PP. 31, 32)

DPP can be computed by the following methods:

- Determinants of sale revenue depend on price of the product, the frequency of buying the product and the quantum of sales returns.





- Determinants of cost especially to the retailer include unit price charged by supplier, ordering costs, holding costs, outbound logistics cost from the warehouse to the retailer, cost of arrangement in the store and the wastages, obsolescence and breakages costs

DPP identifies the cost drivers so as to manage them. They are the size of the product, probability of the demand, delivery cycle and the mode of ordering.

### PRODUCT DEVELOPMENT POLICY AND STRATEGY

This involves four phases namely, concept development, product planning, product/ process engineering, pilot production/ ramp up. This entire exercise takes a gestation period, which can be from few months to few years. This also involves approval at various levels for both technical and financial concurrence. In the first stage, when a prototype is built, tested and verified, approval for the design is taken. Next stage for refining and modifying the prototype and also establish the process design, approval for product and process is jointly taken. When the pilot plant and the quality function deployment (QFD) are completed for the final product, approval for the first commercial sale is taken. Before the full commercial production is started, the final commercial approval is obtained. In all these four stages of approval, two aspects of approval from the financial angle need to be appraised. They are the commitment costs and the actual expenditure to be incurred. The relationship between the commitment and the expenditure is very important from the strategic angle, as this will determine the infusion of funds periodically, as also the total funds to be employed.

In commercialization of technologies it becomes relevant that the management accountant has to tackle this area from two stand points:

- Whether the product is being developed from in house research and development
- Research and development strategy has to be based on the following tenets:
  - The research project has been selected after sufficient brain storming, understanding target market requirements and the product architecture
  - The end product will be developed with in a time horizon (say 2 to 3 years) well with in the life cycle of the product
  - The people who run the successful research group have the necessary core competence
  - This strategic policy will have to be converted into a programmed budget by the management accountant so that the management is in a position to understand the total commitment of funds required as well as the mile stones to be reached during the entire programme culminating to the development of the final product
- Whether by purchasing state of the art technology from external sources
- When a management is not in a position to ear mark separate funds for research and development or wishes to cut short the gestation period by acquiring a technology, then purchasing the state of the art technology becomes very relevant. Here again proper strategy needs to be developed according to the psyche of the organization
- Licensing of technology. This is a least cost approach as the licensee is allowed to use the technology in a particular geographical area but does not own the technology. The management accountant here again has three strategic options as to
  - Pay for the technology in a lump sum or
  - Part lump sum or part royalty or
  - Only royalty for a longer period



These alternatives are to be examined thoroughly in relation to the technology being proven or unproven and the product life stage, which will determine the residual number of years the product, will be able to command a market

- Joint venture. If the company is particular that the technology should be owned as well as updated from time to time, the route of joint venture for strategic alliance becomes significant. Here again the evaluation of the joint venture exercise financially becomes very important in projecting future profits to be shared between the joint venture partners and the type of risk adjusted discounting rate to be applied.

### **Pricing policies and strategies**

The price fixation for the first time takes place when:

- A company develops or acquires a new product
- Introducing existing product into a new geographic area or a new distribution channel
- A service company bids for a new contract work

For fixation of price the decision of the company regarding positioning of the product becomes important according to the nature of the product. Product quality has a bearing on the price. Nine price-quality strategies

|                     | <b>Quality High</b> | <b>Quality Medium</b> | <b>Quality Low</b> |
|---------------------|---------------------|-----------------------|--------------------|
| <b>High price</b>   | • Premium           | • Mega value          | • Ultra value      |
| <b>Medium price</b> | • Overcharging      | • Average value       | • Fair value       |
| <b>Low price</b>    | • Rip off           | • Deceptive           | • Economy          |

Essentially, the strategies High-High (a), Medium-Medium (e) and Low-Low (i) can exist in a market at the same time as there is logic in pricing. The strategies (b), (c) and (f) are a consumer high surplus. The strategies (d), (g) and (h) lead to over pricing to take advantage of a temporary shortage market.

All these strategies must follow a structured approach in the following manner:

1. Selecting the pricing
2. Determining the demand
3. Estimating costs
4. Analyzing competitors
5. Selecting the price for the second time
6. Selecting the final price

The pricing policy will also have to set out the objective clearly as the strategies to be adopted will be determined by the following objectives:

1. Survival
2. Skimming the market



3. Maximum current revenue
4. Maximum sales growth
5. Product quality leadership

**Sensitivity analysis** in respect of price elasticity is yet another aspect, which should be taken care of for pricing. The price elasticity will vary according to following conditions:

1. No substitutes are available
2. Market is indifferent to incremental pricing
3. Customers buying habits are die hard
4. Customers equate high quality with high prices

The management accountant will always be involved in the pricing exercise and the relevance of the exercise is determined by the sensitivity analysis based on adequate reliable data.

## BUDGETING

At the outset, under strategy formulation and implementation the importance of annual budgets to form part of strategic plan has been reiterated. These annual exercises of budgeting are not standalone exercises but are a genuine part of achieving milestones in a strategic plan. So annual exercises have to build up and reach the target set in the strategic planning horizon. Towards this compounded annual growth rate (CAGR), assumptions regarding environmental factors like inflation, business cycles, etc will have to be reflected in the annual budgets also according to stage of the life cycle.

Budget essentially, is a document that sets out physical targets, translated into value imputations and finally present a total picture of the business in terms of profit and loss plan of revenue income and expenditure and a balance sheet projection of assets and liabilities. Classification of budgets can be done under three heads:

- According to time (E.g., programmed budgets, annual budgets, quarterly budgets, monthly budgets, etc)
- According to function (E.g., Sales, Production, Purchase, Human resources, R & D, capital expenditure )
- According to flexibility (E.g., Budgets at various levels of capacity utilization)

The types of budgets can also be developed depending on the purpose involved:

1. Zero based budget: Unique budget which tries to answer a management's question "suppose we are to start our business from scratch, which activities should be phased out, which activities should we spend more money and which activities should be continued as they are"
2. Programmed budget: Essentially for research and development as well as projects which extend beyond a single accounting period or more accounting periods and will have to be taken up for decision on a holistic manner taking the programme in its entire team including both capital expenditure and revenue income / expenditure
3. The regular annual budgets as part of a strategic programme tying each year to a milestone and level of achievement as targeted in the strategic plan



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## **BUDGETARY CONTROL**

Whenever a budgeting exercise is completed the functional budgets are available to each area for monitoring the actual performance against the budget. Budgetary control is essentially the comparison of actual level of performance against budget and reporting variances to provide basis for future course of action. Variance analysis can be done under various heads like price variance, quantity variance, mixed variance, yield variance, overhead efficiency variance, overhead volume variance, etc. The aim of budgetary control is to fix responsibility for cost control purposes for the responsibility centers like cost center, profit centre and investment centre. Responsibility accounting principles will be based on budgetary control as per the following steps:

- Fix targets for each responsibility centre
- Compare actual performance with target
- Analysis of variances
- Take corrective action

## **MATERIAL MANAGEMENT**

With the opening up of markets there has been keen competition leading to lowering of prices and the market driven target prices. This necessitated cost reduction exercises and one of the major areas identified is reduction in the material management costs. It has been estimated that about 30% - 50% of the cost of material issued to production is made up of material management cost and as such is a fertile area for management accountants to institute cost reduction exercises. Evolution of economic order quantity (EOQ), lot sizing, material requirement planning (MRP I), just in time management (JIT) and manufacturing resources planning (MRP II) have been mainly aimed at continuously reducing the cost of purchasing and holding materials. These methods will have to be applied with a proper strategic fit as each method is applicable to any business under specific conditions only, namely

- Make to stock
- Make to order
- Make to assembly

Again, the selection of the method depends also on the process as to whether it is continuous or intermittent. Some of the methods like MRP II and JIT require a lot of data and coordination as they develop plans for coordinating the various functions of production, maintenance, H.R and material management. These are very cost intensive for installation and can be afforded by big businesses.

## **STRATEGIC ROLE OF LOGISTICS**

As part of value chain, logistics assumes a big role through both inbound logistics and outbound logistics. Inbound logistics arise through procurement of raw materials and components from the vendors to the factory for conversion / assembly. Outbound logistics take place when the finished product or service has to reach the customer from the point of production or creation. The challenge of logistics is to develop a logistical strategy which will achieve and maintain operational flexibility. Flexibility is required both to provide a high level of basic customer



service and develop sufficient reserves to meet any extraordinary situations that may arise. Such a strategy would require an integration of location structure, warehouse location patterns, transportation economies, inventory economies and optimization of total costs.

The importance of location varies with each type of industry. Whether to have a location at the point of consumption or at the point of raw material availability the material index concept has been used successfully. The material index concept has been developed on the assumption as to whether the manufacturing process was weight gaining or weight losing. Another important factor for location has been the capacity and availability of transportation so that the community becomes economically self sufficient. This would entail that the services provided both for the process of manufacturing and marketing would permit economies.

Warehouse should be established in a location where it has either service or cost advantage or both. The purpose of warehousing is to gain time and place utility and from the strategic view point marketing impact is increased and the total cost is reduced. The fundamental principle justifying establishment of a warehouse is transportation consolidation and transportation economies. The variables involved in the location of a warehouse are:

- Processing cost of volume shipment
- Transportation cost of volume shipment
- Warehousing cost of average shipment
- Local delivery of average shipment
- Number of average shipments per volume shipment
- Processing cost of average shipment
- Direct freight cost of average shipment

Inventory level and velocity are directly related to the location. There are two classes of inventory namely, the base inventory and the transit inventory. These vary with different locations. The overall impact of the base inventory in an increasing number of warehouses versus the lower transit inventory due to more number of warehouses will have to be matched.

The least total cost design takes into consideration the total inventory cost and the total transportation cost which are inversely related for different networks of warehouse locations. The network that incurs the least total cost taking both inventory and transportation together is to be selected.

**Service sensitivity analysis** can be applied to the least total cost logistical design for a number of variables like variation in the number of warehouses in the system to change in one or more performance cycles for improving speed or consistency of operations, change in inventory policy regarding base stocks.

## HUMAN RESOURCE STRATEGY

The human resource (HR) strategies in a competitive environment are based on innovation strategy, quality enhancement strategy, speed strategy and cost reduction strategy. For all the strategies mentioned above costs are involved and in the highly competitive market situation



the HR strategy leads to total cost design without compromising on any of its components. The primary objective is to improve productivity by reducing the unit cost of output per employee. This would include optimizing costs in the areas of man-machine relationship, structuring wage levels, employing part time labor, outsourcing, flexibility in job assignments, introducing automation, etc. Arising out of HR strategy certain costs especially due to employee behavior becomes important. They are

1. **Costing employee absenteeism:** Employee absenteeism is a factor which is prevalent in all the organizations with varying degrees. This absenteeism has two fold affect on the corporate strategy both physical and financial. Physical non-availability of employee affects work ethics, productivity and delivery systems. The financial implications are the cost of total hours lost due to absenteeism including employee benefits as also the cost of overtime paid to substitute absentee worker. This will have to be reduced to a minimum through a benchmarking exercise and also identifying the reasons for absenteeism which are controllable.
2. **Costing employee turnover:** Employee turnover has three elements namely separation costs, replacement costs and training costs. Attrition is high in certain industries leading to high cost of employee turnover, in which case benchmarking exercises will help reducing the cost of employee turnover. It will be more relevant where the benchmarking exercise indicates that the employee turnover is high in a particular organization more due to inherent factors than industry related factors.
3. **Cost of change management:** When ever strategies are formulated and implemented resistance to change, fear of loss of jobs, cultural trauma, etc among the employees tend to stall the change over. The management account as a part of cross functional team should be able to quantify the cost of transformation through provision of safety net for separating employees, retraining costs for existing employees, recruitment costs for inducting new employee in particular positions for acquiring core competence in specific areas, educating employees on the change over to new strategy to reduce cultural trauma.
4. **Cost of high performance work practices:** A change over to a new strategy is necessarily to introduce radical transformation in work performance. This requires high performance work practices. The high cost of introducing high performance work practices need to be matched with the benefits through productivity improvements. The management accountant needs to do a cost benefit analysis and present to the management the implications of the various alternatives before a decision is taken. While the cost of introduction involves outflow immediately the benefits will be spread over a time horizon in the future which need to be discounted and matched.

## STRATEGIC TOTAL COST MANAGEMENT

Alignment of various strategic exercises is in operations, marketing or finance needs to take the entire organization into consideration. Besides, these strategies will have to inculcate a paradigm change from the traditional approach to the world class approach. The role of cost management has undergone a sea change as below:

## APPLICATION OF MANAGEMENT ACCOUNTING IN STRATEGIC MANAGEMENT



| Traditional approach                                                       | World class approach                                             |
|----------------------------------------------------------------------------|------------------------------------------------------------------|
| Cost plus pricing                                                          | Target pricing                                                   |
| Domestic standards                                                         | Global benchmarking                                              |
| Production oriented policies                                               | Continuous improvement in customer satisfaction                  |
| Confronting attitude to stake holders                                      | Partnering relations to stake holders                            |
| Ex-post cost measurement<br>Work in process<br>Defects rework and spoilage | Ex-anti target costing<br>1. Product design<br>2. Process design |
| Feedback controls                                                          | Real time controls                                               |
| Top down command and control                                               | Leadership values and goals                                      |
| Conformance to standards                                                   | Creating new standards                                           |

The world class approach to cost management would require understanding the total production management, total quality management and align the total cost management on the lines of the other two strategies. This will ensure that all the aspects of the corporate strategies are translated in terms of values and control in the total cost management strategy. The following table shows the relationship among the three strategies:

| Process                           | Product /service definition                                                              | Product / service development | Material sourcing and inbound logistics                                                                           | Production or servicing                       | Support functions (HR/IT and Finance) | Marketing                                                                     | Sales and outbound logistics                                                                           | Service                |
|-----------------------------------|------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------|
| TQM strategy                      | Quality function deployment and value engineering                                        |                               | Statistical and managerial tools for TQM accident and loss prevention                                             |                                               |                                       | Customer relationship management, complaints and redressal                    | Adherence to schedules                                                                                 | Ensure service quality |
| Total Production management (TPM) | Ensure manufacturability, identification of required plant and machinery, proper vendors |                               | Reduce cost of quality, improve plant availability through preventive and productive maintenance, waste reduction |                                               |                                       | Respond to marketing inputs relating to customers and develop pull technology | Work in coordination with the marketing function in regard to logistics as well as after sales service |                        |
| Total cost management (TCM)       | Reduce design related defects and associated costs                                       | Reduce time to market         | Eliminate costs related to defective inputs                                                                       | Eliminate costs related to rejects and rework | Ensure internal customer satisfaction | Ensure external customer satisfaction                                         | Optimize logistics expenditure                                                                         | Reduce service cost    |





Utilizing cost as a part of marketing strategy would require comprehension of the impact of various cost analysis on product differentiation and cost leadership. The following table depicts the importance of various strategic cost inputs vis-à-vis product differentiation and cost leadership:

|                                             | <b>Product differentiation</b> | <b>Cost leadership</b> |
|---------------------------------------------|--------------------------------|------------------------|
| Product costing as a measure of performance | Not very important             | Very important         |
| Flexible budgeting and variance analysis    | Moderate to Low                | High to very high      |
| Achieving budgetary targets                 | Moderate to Low                | High to very high      |
| Marketing cost analysis as a tool           | Critical to success            | Not so important       |
| Pricing decisions based on product cost     | Low                            | High                   |
| Competitor cost analysis as a tool          | Low                            | High                   |

From the above it is clear using cost as a strategy definitely pays as long as the type of cost inputs which are required for the type marketing strategy. Again this is a case of proper alignment of cost strategy and marketing strategy in a long run and on a continuing basis.

When total cost management strategy is to be implemented, it is necessary that certain new concepts are understood. Classification of costs has always been into variable, semi-variable, fixed categories. When cost as a strategy is to be implemented it presupposes that there is a time horizon which is longer than a few accounting periods. In such a time span even the so called fixed costs tend to vary e.g., rent, taxes, salaries, etc. So, the total cost management strategy has evolved a new classification namely, **bed rock fixed costs** e.g., depreciation, patent, amortization; **managed costs** rent, taxes, salaries and wages, maintenance, travel, advertising, etc. and **truly variable costs** include materials, royalties, freight, overtime costs, etc. This classification helps arriving at break even points which are more credible and take into consideration the changes in the costs over a period. A single break even is not possible and not acceptable in the total cost management. Another very important feature of total cost management is that almost all costs are manageable through cost strategy as even period costs tend to vary over time. For instance, rents which are considered period costs as fixed under normal parlance are treated as managed costs in total cost management strategy. This is particularly so, because the quantum of rent variation can be managed through leasing, rent or own strategies, tax planning, etc.

Introduction of total cost management strategy can embrace many different areas in business and as such there are specific tools to be employed for the implementation as follows:

- **Enterprise wide cost system:** Depicts beginning to end costs starting from designing, sourcing, manufacturing and delivering a product or set of products to the customer
- **Production cost management:** Aims at reduction of total cost of design, material management, production by Kaizen method of optimizing each cost component
- **Marketing cost management:** Identifies products, brands, segments and markets that augur greater growth with least incremental marketing costs



## APPLICATION OF MANAGEMENT ACCOUNTING IN STRATEGIC MANAGEMENT



- **Support cost management:** Aims at improving productivity and efficiency of all line functions while reducing the resources needed to provide such improvements
- **Transformation cost management:** Identifies and drives the efforts of change management towards avenues where they will have the maximum impact on costs for reduction

Implementation of total cost management has a time span and has to be done in following steps:

| Business life cycle            | Cost management initiatives | Total cost management techniques |
|--------------------------------|-----------------------------|----------------------------------|
| Recognition of opportunity     | Establish objectives        | Business planning                |
| Statement of objectives        | Formulate plan              | Cost estimation                  |
| Identification of requirements | Define responsibilities     | Cost engineering                 |
| Search for technologies        | Operationalize initiatives  | Programme management             |
| Evaluation of alternatives     | Correct deviations          | Planning and scheduling          |
| Research and development       | Control costs               | Change management                |
| Development of concepts        |                             |                                  |
| Building of facilities         |                             |                                  |
| Begin and continue operation   |                             |                                  |
| Modify and improve             |                             |                                  |
| Decommissioning                |                             |                                  |
| Phase out and disposal         |                             |                                  |

Total cost management strategy emphasizes that enduring cost benefits will accrue to a company only when the organization aligns its information systems objectives to its strategic goals. The enterprise resource planning (ERP) concept stems from this tenet and introduces automation in areas where the human intervention may not be so efficient but more costly. For instance, automation in data entry, billing, payrolls, accounts receivables, etc may entail an initial hefty investment but the transformation benefits with the total cost management ushered in will be in the form of reduced inventories, improved customer services, lower logistics costs and thus improved product margins. Though the ostensible purpose of ERP is not just cost reduction but open up new vistas for growth in the future. The efficiency and effectiveness in business activities through online and real time decision making leads to cost reduction benefits.



## STUDY NOTE - 8

### RISK MEASUREMENT AND MANAGEMENT

**This Study Note includes:**

- **Uncertainty and risk**
- **Risk management strategy formulation and implementation**
- **Risk pooling and diversification**
- **Diversification of risk**
- **Probability of ruin**
- **Macro economic factors**

#### INTRODUCTION

Uncertainty and risk are two terms which are anathema to every manager. To expect the unexpected and handle the same successfully is Hallmark of a Good Manager.

#### UNCERTAINTY AND RISK

Certainty and uncertainty are the two extremities on a continuous platform and risk is identified somewhere between the two extremes. Uncertainty is a totally indefinable happening and is also unexpected. An uncertain situation is faced when the variables are many and their interaction can be innumerable. For example different people behave and react differently to the same situation and uncertainty arises.

**Risk** expressed mathematically is the dispersion of a probability distribution: how much do individual outcomes deviate from the expected outcome. A simple measure of dispersion is a range of possible outcomes, which is simply the difference between upper most and the lowest outcomes. This is mathematically measured as standard deviation.

Physically, risk can be identified as an event which has different probabilities of happening, but the time of the event is not known as also the impact of such risk can vary.

Japan has been a country which has suffered many earthquakes over centuries and risk of earthquake is known or it can be said that Japan is earthquake risk prone. However, when an earthquake will take place is not known and to that extent it is uncertain. Again along the Indian Coast, Nagapattinam in Tamilnadu, Ongole in AP, Balasore in Orissa, Chittagong in Bangladesh have suffered through storms and thus this coast along the Bay of Bengal is Storm Risk Prone. In the same manner the uncertainty factor about the storm is the way it builds up or it does not build up and ends up in a low pressure trough needs to be understood in greater detail to face such risk.

While uncertainty cannot be quantified a risk can be quantified through mathematical models, probability models, correlation, etc. and also measured through quantitative models and technological tools.



### Objectives of risk management

Objectives can be classified under two heads, namely post-loss objectives and pre-loss objectives.

#### Pre-loss objectives

1. Understanding environment
2. Fulfillment of external obligations – statutory requirements
3. Reduction in anxiety through preventive measures
4. Social obligations to make people aware of the risks

#### Post-loss objectives

1. Survival of the organization
2. Continuance of the organization's operations
3. Initiate and improve the income /earnings
4. Obligation to society

## RISK MANAGEMENT STRATEGY FORMULATION AND IMPLEMENTATION

Under the pre-loss and post-loss situations it becomes necessary to develop management strategy both on the prevention front as well as containment respectively. Three steps in this direction are as follows:

1. Develop strategy for risk management
2. Develop tools for measurement and evaluation
3. Implement a strategy using tools

### 1. Develop strategy for risk management

Risk management strategies are seven fold and they are: Avoid Risk, Reduce Risk, Retain Risk, Combine Risks, Transfer Risk, Share Risk and Hedge Risk.

#### Avoid Risk

Avoid risk is the prevention method and proven method. This method results in complete elimination of exposure to loss due to a specific risk. It may involve avoidance of an activity which is risky. This can be approached in two ways

1. **Do not assume risk:** This means that no risky projects are undertaken. E.g., the Government has clearly mandated that no hazardous chemical industry can be put up near a populated area. This is a proactive avoidance.
2. **Discontinuance of an activity to avoid risk:** While a proactive avoidance follows a sound decision knowing fully the perils of the risk, abandoning a project to avoid risk midway is a decision taken while handling the project. E.g., A PVC plant was being put up on the basis of alcohol as a raw material to be converted to an intermediate product known as ethylene di chloride. Unpredictability of alcohol supplies suddenly



became risk due to a distillery which was supposed to come up in this area did not materialize. So the root of using alcohol was abandoned half way through the PVC product and ethylene-di-chloride was imported to be processed to PVC.

### **Reducing Risk**

Reduction of risk is attempted to decrease the quantum of losses arising out of a risky happening e.g., earthquake, storm, floods, etc. Risk reduction can be achieved through

Loss Prevention and  
Loss Control.

**Loss Prevention:** Prevention of loss is the most insignificant of dealing with the risk, prevention systems like fire sprinkler systems, burglar alarms, etc., are typical prevention measures to reduce the risk of fire burglary. Other measures are the understanding of the risk or the comprehension of the risk arising out of an activity is environment and relationship between the activity and the environment. This will help in the following way:

Modify the risk involved in the activity itself through improved design or technology;

Tailor the surroundings where the risky activity is to take place by isolation or notification or proper layout;

Identify the linkage between the activity and the environment and institute suitable safe guards through training of people, safety devices and providing knowledge and institute mock exercises, etc.

**Loss Control:** Is accomplished through measures which will douse the fire in the case of fire accident, e.g. using fire hydrants, fire extinguishers. Loss control is also accomplished by on line process control which operates in the event of a risky happening, e.g., Gas leaks fires.

### **Retain Risk**

Risk retention is adopted when it cannot be avoided, reduced or transferred. It can be a voluntary or involuntary action. When it is voluntary it is retained through implied agreements, involuntary retention ensures when the organization is unaware of the risk and faces it when it come up.

### **Combine Risks**

When the business faces two or three risks the over all risk is reduced by a combination. This strategy is prevalent mainly in the area of financial risk. Different financial instruments being negative risk return of co relation like Bonds and Shares are taken in a single port folio to reduce the risk. A physical risk of non-availability of a particular material is often solved by having more than one supplier.

### **Transfer Risk**

Normally in projects assignments or multifaceted exercises, execution is fought with risks. Different agencies work together and these agencies take care to transfer risk in their areas to another agency which is better equipped to take care of a risk for a consideration. Here the concept of core competence curves in and whenever a particular agency, individual or a firm finds that it is dealing in a area where it does not have the core competence to deal



with it seeks the help of another agency which has the specific core competence to transfer its own risk. The risk may be in the form of loss of reputation or sub quality performance and this risk is taken care of through transfer.

### **Sharing Risk**

Insurance is a method of sharing risk for a consideration, viz., premium insurance loss, undertakes to share the risk with the companies and share their own risk through re-insurance with other companies. Some times big conglomerates share risk among their own group of companies in proportion to their risk bearing strengths by creating a corpus instead of paying premium to insurance companies.

### **Hedging Risk**

Exposures of funds to fluctuations in foreign exchange rates, interest rates, prices, etc. bring about financial risks resulting in losses or gains. The downside risk is often taken care of by hedging. Hedging is done by an agency taking over the risk for a consideration for a period and select band of fluctuation.

### **Risk optimization**

Risk optimization means utilizing information on risk to compute precisely what types and combinations of risk to take. It also develops the precise trade off between risk and reward and the corresponding appropriate product pricing to reflect the risk taken.

## **2. Develop tools for measurement and evaluation**

Tools for measurement can be identified based on the type of risk.

### **Types of Risk**

Mark Dorfman has defined “risk management as the logical development and execution of a plan to deal with potential losses”. The risk can include both upside and downside. Potential risk management often refers to reducing downside potential and enhances the returns on topside.

Risks are of many types as follows:

1. **Physical Risk** like natural calamities: fire, tsunami, floods, earthquake, etc.
2. **Business Risk** which is inherent to a business due to its nature and susceptibility to environment, e.g., change of fashion, business cycles, conflicts like war, insurgency, cross border terrorism, technological obsolescence, etc.
3. **Financial Risk** arising out of the nature of financial transactions and conduct of business and investment.

### **Measurement of risk**

#### **Physical Risk**

Physical risks are measured by the application of technological tools. Earthquakes are measured in the Richter scale. Floods are measured through level monitoring and marking danger levels. Risk of fire is often monitored through measurement of flash point, fire point, ignition temperatures and propulsion temperatures. Spontaneous ignition temperatures are



yet another measurement to identify fire risk, e.g., coal dumps, oil installations, explosive godowns, etc.

Physical risk arising out of Social, Political, Economic and Legal Environments are often identified through the performance of lead indicators. In the Social arena lead indicators can be pestilence, expedencies, social upheavals, etc., measurement of these social risk are done on the basis of the impact on the Society, i.e., increase in crimes, violence and accidents, etc.

Political risk is often identified with the change in Government policy capitalistic, democratic or totalitarian and can be measured by the impact of such government policy on the economic activity, e.g., Government Industrial Policy and Labor Policy.

Economic risk may arise out of commercial transactions, foreign exchange currency variation, capital market fluctuations, trade cycles, etc. The lead indicators risks are like variation in GDF, IIP, Balance of Payments, Stock Market Indices, etc.

Legal Risk arises out of the implication of various statutes affecting business, Anti Trust Bills, Factory Acts, Industrial Disputes Act, and Foreign Exchange Management Act (FEMA).

### **Business Risk**

Business risks refers to variations in earnings due to demand variability, price variability, variability for input prices, etc, that are essentially external and are market driven. Measurement of this type will be discussed in greater detail under Corporate Risk Management section latter.

### **Financial Risk**

Financial risk arises out of financial leverage. Capital structure having a high degree of financial leverage will have greater proportion of debt, increasing the financial commitment of the company. Such companies are exposed to the financial risk which is normally measure as a capability to repay loans and service the loans. Measurement of this type will be discussed in greater detail under Corporate Risk Management section latter.

### **Risk Evaluation**

Risk evaluation helps in quantifying the possible consequences of risk in value terms or in other words physical measurement can be translated into value. Risk evaluation is based on two steps:

1. Developing a benchmark in relation to the importance of the risk to the company
2. Apply this yard stick for evaluation of all risks

The effect of consequences of a risk is computed in terms of variable as well as fixed costs. For example, wherever an exposure to risk involves a loss as in the case of a break down in a factory, the direct cost as a result of the breakdown will have to be calculated. At the same time, if the factory comes back to production only after a period, the standing charges during the period of shutdown will be the fixed cost not recovered.

Mathematical models as well as statistical analysis have been helpful in risk assessment. While applying statistical analysis, two concepts are applied for assessment of risk:



1. Measures of Central Tendency and
2. Measures of Variation

### Measures of Central Tendency

Aim of this concept is to arrive at one single value that will denote the characteristics of the total data collected. Such a value is known as the Central Value or Average and can be expressed as Mean, Median and Mode according as the nature of risk being measured.

### Measures of Variation

From the Central Tendency or the average is to study the dispersion or scatteredness. The statistical analysis is based on following methods (a) Range (b) Mean deviation (c) Standard deviation (d) Variance (e) Co efficient of variation.

### Mathematical models

As risks are of different types, probabilistic models have been used for obtaining expected values, e.g., launching of a new product with uncertain demand, launching of a product in a known area where competition is keen with penetration prices, etc.

Frequency distribution of a random variable can be discrete or continuous. When the random variable is discrete the probability function is known as *probability mass function* and its distribution is known as *discrete probability distribution*. If the random variable is continuous, then its probability function is known as *probability density function* and distribution as *continuous probability distribution*.

Distribution can be classified as follows:

1. Binomial Distribution
2. Poisson Distribution
3. Normal Distribution.

**Binomial Distribution** is a probability distribution which identifies the probability of success or failure. Bernoulli Process is applied in this case.

**Poisson distribution** is a discrete probability distribution which is applied when a chance of an individual event being a success is minimal. This distribution is used to delineate the behavioral events like number of accidents which are rare.

**Normal Distribution** is useful for understanding continuous random variables.

### Financial model

#### Time Value of Money

Conversion of the above values can relate to different points of time in the future and as such cannot be given the same credence in terms of value. For this discounted cash flows have been computed for ascertaining the present value of such future losses or earnings. This type of computation is known as *time value of money*.

### Risk adjusted performance measurement (RAPM)

The best practice recommendation on risk management was enunciated in the G30 report on derivatives. The recommendations have been considered very sound and are very much in use currently. They include:



- a. Involve senior management
- b. Establish independent risk managers for market and credit risk
- c. Market to Market on a daily basis with consistent valuation measures
- d. Measure and limit market and credit risk rating using value at risk (VaR) techniques to estimate probable loss over a period of time
- e. Strengthen operational controls, systems and training
- f. Make investment and funding forecasts
- g. Identify revenue sources and next conduct stress testing

The above recommendations ensure that adequate information could be available for the management to manage risk and avoid nasty surprises. RAPM framework brings together and measures the trade off between risks and rewards. This is discussed in greater detail under financial risk measures in risk insurance chapter.

### **3. Implement strategy using tools**

Data collection and analysis will have to be selectively exercised and quantification of risk is done in the following manner:

1. Using entire probability distributions
  - a. Normal Distributions
  - b. Monte Carlo simulation of distributions
2. Correlation analysis
3. Discounted cash flow analysis

#### **Using probability distributions (Loss distributions)**

Often analysts focus on characteristics of loss distributions, such as

1. Expected Loss
2. Standard Deviation of loss
3. Maximum probable loss

Sometimes information about the entire probability distribution is available and useful. Two main approaches for probability distribution are:

1. Approximate loss distribution assuming losses are normally distributed
2. Use Monte Carlo simulation to approximate the loss distribution

#### **Approximate loss distribution assuming losses are normally distributed**

Most Loss distributions are not normal; however, from the central limit theorem using the normal distribution will nevertheless be appropriate when

1. Number of exposures is large
2. Losses across exposures are independent





For example, where a firm has large number of employees and workers suffer injury losses and firms having large fleets of cars suffering automobile accident losses.

If Losses are normally distributed with

$$\text{Mean} = m$$

$$\text{Standard deviation} = s$$

Then Probability (Loss <  $m + 1.645 s$ ) = 0.95

$$\text{Probability (Loss < } m + 2.33 s) = 0.99$$

For example, worker compensation losses for a steel company

Sample mean loss per worker = Rs.300

Sample standard deviation per worker = Rs. 20,000

Number of workers = 10,000

Assume losses are independent

It is reasonable to assume that total losses are normally distributed. Find what is the expected total loss and standard deviation of total loss?

Total loss =  $\sum L_i$ , where  $L_i$  = loss due to worker  $i$

Expected total loss =  $\sum E(L_i) = \text{Rs.}300 \times 10,000 = \text{Rs.}3 \text{ million}$

$$\begin{aligned} \text{Standard deviation of total loss} &= [\text{Var}(\sum L_i)]^{1/2} \\ &= [10,000 \times \text{Rs.}20,000]^{1/2} \\ &= \text{Rs.}2 \text{ million} \end{aligned}$$

The expected value and standard deviation can then be used to find the maximum probable loss at the 95 per cent level:

$$\text{Rs.}3 \text{ million} + 1.645 (\text{Rs.}2 \text{ million}) = \text{Rs.}6.3 \text{ million}$$

### **Use Monte Carlo simulation to approximate the loss distribution**

The following steps are to be taken to quantify the total cost of loss:

- Make assumptions about distributions relating to the severity and the frequency of the individual losses
- Draw samples randomly from each distribution and compute the company's total losses under alternative risk management strategies
- Iterate a number of times to obtain a distribution for total losses under each of the alternative strategies
- Compare the distributions

### **Correlation analysis**

Develop correlation coefficient between X and Y variables.

$$\text{Correlation coefficient between X and Y} = \text{Cov}(X, Y) / \text{STD}(X) \text{ STD}(Y)$$



Correlation is always between -1 and +1.

If Correlation = 0 it means that there is no relationship between X and Y

If Correlation = 1 it means that X and Y always move together and are fully correlated

If Correlation = -1 it means that X and Y always move in opposite directions and are negatively correlated

### **Discounted cash flow (DCF) analysis**

This financial tool computes the present value of future cash flows over multiple periods using a discount factor. The formula for net present value of alternative decisions can be computed as below:

$$NPV = \sum_{t=0}^n \frac{E(NCF_t)}{(1+r)^t}$$

Where

E (NCF<sub>t</sub>) = Expected net cash flow in year t

r = opportunity cost of capital (reflects the risk of the cash flows)

For example, consider a compound wall's

Upfront cost = Rs.1,50,000

Compound will reduce theft loss by Rs.55,000 each year for 3 years

Security expenses will be reduced by Rs.15,000 each year for 3 years

Discount rate = 10%

NPV = (1, 50, 00 – [1x 70,000 + 0.909 x 70,000 + 0.826 x 70,000]) = +12936

Thus NPV is positive.

## **RISK POOLING AND DIVERSIFICATION**

Whether it is the individual, an insurance company or insurer or a corporate, which necessarily has to insure all its risks, the proper way to look at the exigencies is to pool the risk. The concept of pooling risk is the process of identification of separate risks and put them all together in a single basket, so that the monitoring, combining, integrating or diversifying risk can be implemented.

Monitoring becomes easier when the specific agency put in charge knows that all the risks have been identified and they are being monitored according to the system drawn up to quantify the total risk through pooling and with a control figure. i.e., plan the way to monitor, actually monitor, and then check whether there are variations from the monitoring exercise and then act to correct the deviation. This correction act can be combining risks or integrating risks or diversifying risks.

For example, whenever a project is put up insurance (Marine insurance) is taken for shipping the various plant and machinery from the manufacturers to the port near the project site. The logistics from the port to the project site is taken care of by the carrier and he insures (transit insurance) the risk for that segment. The material is received at site and stored until erection



(storage insurance). During erection of different plant and machinery, mechanical, electrical, etc, risk is covered (erection insurance). The erected plant and machinery is then tested and trial runs are taken for guarantee purposes on continuous run as per the contract. The risk during this period is covered as risks for commercial run. All these risks put together is pooling and each separate policy has a risk value and premium and conditions attached there to by the insurer and insured has to carry out those obligations. This is the process of monitoring. To reduce risk after pooling it can be combining through a comprehensive policy for the plant and machinery Freight on Board (FOB) to the completion of final commercial guarantee run. Integrating risks will take care of all the foreign shipments together, inland transit risks together so that these risks which are similar are taken together.

### **DIVERSIFICATION OF RISK**

This involves identifying that fraction, which is systematic and the remaining unsystematic. Systematic risk is that inherent and peculiar to the type of business or the organization and can be reduced or diversified by acting within the organization, which is through functional level strategy. The unsystematic risk, which is the market risk is external to an organization and is also termed as market risk. The identification of characteristics of market risk through statistical correlation “Beta”, which is a measure of market risk, lends itself for manipulation through portfolio management.

### **PROBABILITY OF RUIN**

Probability of ruin is essentially a study of risk of insolvency for a company with multiple business activity facing heavy claims from creditors. For this purpose, the company is permitted to transfer resources between business lines. But such transfers are restricted by transaction costs. Insolvency or ruin occurs when the negative positions in one or more business lines cannot be compensated by capital transfers. Such problems are normally solved on the basis of intermittent or continuous process. Mathematically, actuarial calculations are involved in such exercise. A clear expression of Laplace transformation of the finite type, for computing ruin probability is one such method. Another model developed by Clayton Levy Copulas takes into consideration the interdependence of components of risk.

### **IMPACT OF MACRO ECONOMIC FACTORS AND RISK**

Relationship between risk and return can never be over emphasized, higher the risk the return needs to be higher and the computation of the risk premium has always been a million dollar question. However, risk perceptions of investors tend to be different with the onset of business cycles. In recession, investors tend to be conservative as their appetite for risk is reduced and they go after growth sectors which have lower risk. In a security market, low risk growth sector have always been the biggest gainers in terms of returns. This explains that onset of recession upsets the risk return balance.

Macro economic factors like change in interest rates, inflation, money supply and index of industrial production have a big impact on the investors risk perception. Analysis has shown that in a regime of high interest rates and high inflation low risk sectors perform better than high risk stocks. As the interest rates and inflation decline the high risk sectors tend to do better.



## STUDY NOTE - 9

### RISK INSURANCE

**This Study Note includes:**

- **Insurance, insurability of risk and insurance contracts**
- **Risk analysis**
- **Insurance industry**
- **Insurance products**
- **Functions**
- **Pricing**
- **Utility theory**
- **Re-insurance**
- **Liability exposures**
- **Role of management accountant**

#### INSURANCE, INSURABILITY OF RISK AND INSURANCE CONTRACTS

Insurance can be defined as transferring or lifting of risk from one individual to a group and sharing of losses on an equitable basis by all members of the group. In legal terms insurance is a contract (policy) in which one party (insurer) agrees to compensate another party (insured) of its losses for a consideration (premium). Exposure to loss is the insured's possibility of loss.

Insurance is a means whereby a large number of people agree to share the loss which a few of them are likely to incur in the future. Insurance is also a means for handling risk. There is an uncertainty related to the risk. The business of Insurance is related to the protection of the economic value of any asset. So, every asset that has a value needs to be insured. Both tangible goods and intangibles can be insured.

##### **Requirements of an insurance contract**

Four requirements are laid down for a valid insurance contract as below:

**Agreement** must be for a legal purpose, i.e., the contract of Insurance should not violate the principle of Insurable Interest and it is a contract of Uberrimae Faide (Utmost Good Faith)

**Parties** must have legal capacity to contract; Minors, Lunatics, Insolvents, Intoxicated persons, etc. do not have the legal capacity and cannot enter into an insurance contract

There should be a **valid offer** and **acceptance** and

There must be **exchange of consideration** in response to an agreement which defines the quantum of possible loss to the insured. The premium amount is paid by the Insured by way



of consideration on the basis of the policy risk insured. The Insurer's consideration will be a promise to indemnify the loss of the insured on the occurrence of the insured's risk.

### **Characteristics of insurance contract**

Following are the unique characteristics which are distinct from other forms of contract.

- **Aleatory contract (Dependent on chance):** The values exchanged by the contracting parties in an insurance contract are unequal as they are dependent on chance or in other words in an insurance contract result depends entirely as risk. If the loss arises, compensation is paid by the Insurer on the occurrence of peril. If it doesn't occur insurer does not pay any compensation while the premium gets paid to the insurer. The question of paying compensation does not arise.
- **Conditional Contract:** Insurance contracts lay down conditions like providing proof of insurable interest, immediate communication of loss, proof of loss, and payment of premium by the insured
- **Contract of Adhesion:** Legally obligatory on the part of the insurer to explain the terms of contract fully to all the parties. This is particularly important as under contract of adhesion, any ambiguity in the wording of the agreement will be interpreted against the insurer as he had laid down the terms
- **Unilateral Contract:** Insurer is the only party to the contract who makes promises that can be legally enforced.

Generally, Non life insurance contracts are usually annual contracts and have to be renewed each year. Each time the policy is renewed a new contract is issued by the Insurer.

### **Rights and responsibilities of insurer**

The Insurer has the right to collect the premium from the Insured and also lay down conditions to the agreement. He has the responsibility to pay compensation to the insured against a valid claim.

### **Rights and responsibilities of insured**

The Insured has a right to collect compensation from the Insurer against a valid claim. He has the responsibility to pay the premiums to the Insurer, disclose all relevant data to the Insurer in utmost good faith and should comply with the terms and conditions laid down by the Insurer.

### **Insurance terminology**

Certain terms under insurance have specific meanings:

**Loss:** Insured loss is a reduction of economic value arising out of chance undesired and unplanned.

**Direct Loss:** These are immediate result of a insured risk, e.g., a factory has been insured against fire, the loss of factory is a direct loss.

**Indirect Loss:** These are the consequential losses arising out of the secondary effect of the insured's peril. For e.g. – during inundation of a house for which necessary insurance has



been taken the additional cost of the incumbents of the house living in alternate accommodation while the house is rebuilt is an indirect loss.

**Chance of Loss:** Is defined as the probability of loss. This probability can be worked out based on past data or on the basis of any probability estimate known as *apriori*. *Apriori* estimates are based on causality of the event.

**Peril:** Is defined as the cause of a loss like earthquake, inundation, price, heart attack, mutiny, etc.

**Hazard:** A hazard is condition that creates or increases the severity of the frequency of a loss arising from a given peril. Emission of toxic gases, radiation out of nuclear reactor, land slides, etc.

**Moral Hazard:** Dishonesty of the insured leading to risk exposure, e.g., suppression of vital facts relating to risks.

**Morale Hazard:** An indifferent attitude to losses that results out of an insured peril reflects a callous attitude tending to morale hazard.

**Proximate Cost:** Proximate cost of a loss is the first peril in the sequence of events resulting in a loss or it is root cause.

### **Nature of insurance**

The uncertainty of risk has its behavioral aspects and the tendencies arising out of such behaviors.

**Pooling:** For a single period, many insured contribute premium to an insurance company and thus the insurance company pools all the premiums to pay for the losses as and when they occur during the ensured period. This pooling of resources is a fundamental aspect of insurance.

**Bonding:** Insurance contract is a legal bond between the insurer and the insured.

### **Insurable Loss Exposures**

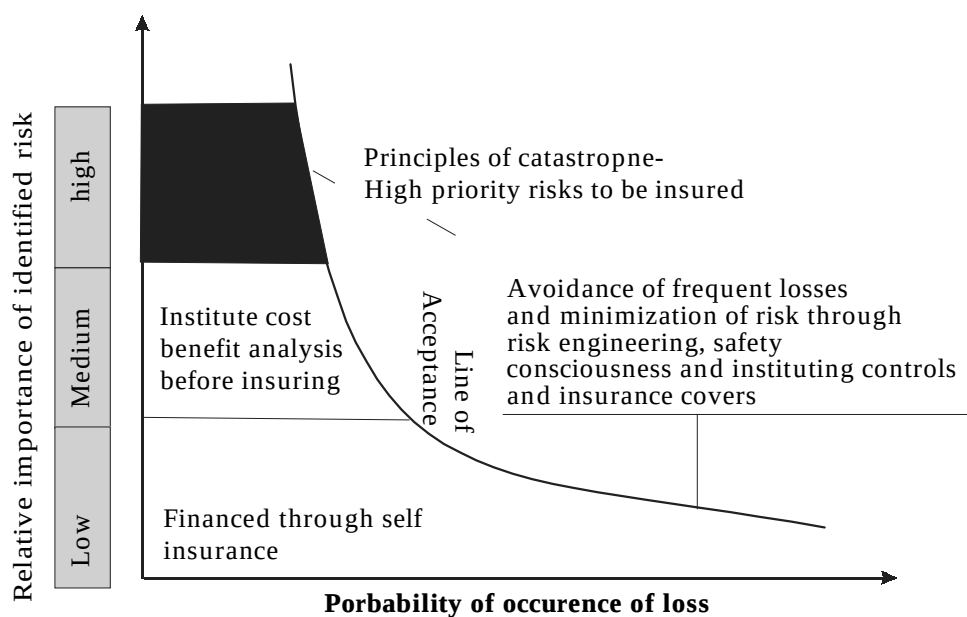
The characteristics for an exposure to be covered by Insurance are as follows:

- **Pure Risk:** These are classified into *personal risk*, *property risk*, *liability risk* and *loss of income risk*.
- *Personal Risk* – Can happen due to premature death, old age, sickness or disability and unemployment.
- *Property Risk* – Can be classified as loss of property, loss of use of property, additional expenses arising out of loss of property.
- *Liability Risk* – Can arise as injury to people or damage to property or negligence or carelessness.
- *Loss of Income Risk* – Consequential loss of income arising out of personal or property losses.
- **Similar Exposures:** Prediction of losses through application of statistical computations with the help of theory of probability require a sizeable population of similar exposures.



This is particularly important in that estimation of probabilities for the happening of an event needs an adequate large sample, as accuracy increases with bigger sample.

- **Accidental Losses:** Insurance contracts allow payments only for accidental losses which are beyond the insured's control. Losses taking place unintentionally alone are covered by Insurance. Suppression of information of a known risk will not entitle for compensation.
- **Definite Loss:** A definite loss has three facets. It should be recognizable and should be susceptible to verification. The loss should be measurable. This is particularly important in that premium are computed mainly on the estimated quantification of losses.
- **Large Loss:** As there is always a consideration in the form of a premium for receiving a compensation for a loss, care should be taken that the premium to loss ratio is sufficiently favorable.
- **Catastrophic Losses:** Catastrophic losses from natural disasters have two main characteristics :
  - They are limited to geographic area where the impact has taken place.
  - Prediction of the event is very difficult. For example storms and floods or earthquakes etc. can create catastrophic losses as such an Insurer will have to take special precautions of calculating the premiums. Even then the loss may be so huge that the consumers normally resort to sharing the risks through reinsurance as also ensures dispersion of risks over a larger geographical area. To estimate the frequency and severity of the catastrophic losses probability analysis is resorted to:





## RISK ANALYSIS

### Analytical tools for risk analysis

In insurance contracts risk arises from insurance policies for life, property and corporate. The analytical tools for these types of risk can be classified as follows:

| Type of risk     | Narration                                                                                                              | Models                                                                    |
|------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Life             | Unexpected increase in life claims can create a risk of loss                                                           | Surplus testing models                                                    |
| Catastrophe      | Due to catastrophe like earthquakes, fire, inundation, storms, etc, risk of loss to property and life can be very high | Simulation, exceedence probability models                                 |
| Non- Catastrophe | Due to unexpected increase in non-catastrophe claims like car accidents, fire, etc                                     | Frequency severity modeling, payout pattern analysis using loss triangles |
| Event            | Risks of loss due to natural disaster, legal litigation, fraud, etc                                                    | Extreme value theory                                                      |

### Financial risk measures

Return on risk-adjusted capital (RORAC) – target ROE measure in which the denominator is adjusted depending on the risk associated with the instrument or project.

Risk-adjusted return on capital (RAROC) – a target ROE measure in which the numerator is reduced depending on the risk associated with the instrument or project.

Economic capital – market value of assets minus fair value of liabilities. Used in practice as a risk-adjusted capital measure; specially, the amount of capital required to meet an explicit solvency constraint (e.g., a certain probability of ruin)

RAROC – expected net income divided by economic capital (thus, the more technically correct label is RORAC – see above – but in the insurance industry, RAROC is the term commonly used). RAROC is typically to evaluate the relative performance of business segments that have different levels of solvency risk; the different levels of solvency risk are reflected in the denominator. Evaluating financial performance under RAROC calls for comparison to a benchmark return; when the benchmark return is risk-adjusted (e.g. for volatility in net income), the result is similar to RARORAC (see above), though the term RAROC is still applied.

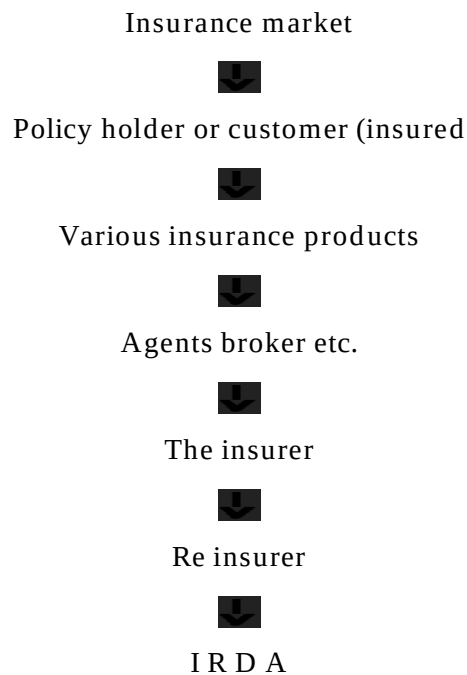
Embedded value – measure of the value of business currently on the books of an insurance company; it comprises adjusted net worth (the market value of assets supporting the surplus) plus the present value of expected future profits on inforce business. (Embedded value differs from appraisal value in that the latter also includes the value of future new business.) The performance measure is often expressed in terms of growth (i.e., year on year increase) in embedded value.





## **INSURANCE INDUSTRY AS SERVICE SECTOR**

In Service Sector the Insurance Industry ranks very high and is particularly relevant to a growing economy like India. As the insurance Industry encourages and mops up Savings of the Society and also provides a safety net for personal and institutional risks this industry needs to be properly run and the structure properly regulated. In this regard, structure of the insurance industry is given below:



Insurance is classified into the following types: Non-Life (General) Insurance, and Life Insurance in most of the countries except in USA. In USA the insurance industry is classified into Property & Casualty, Life and Health. In India, General insurance includes Property & Casualty, Fire, Engineering Projects, Motor, Aviation and Marine Insurance.

General Insurance also includes legal liability to others like collision liability, employers' liability, etc. The Insured gets compensation only if the event occurs. The insured does not get any return if the event does not occur. Almost all insurance contracts are annual contracts other than the individual life insurance contracts which are long term contracts

## **INSURANCE PRODUCTS**

According as insured being a person or institution the products offered depend on various risks covered. Personal risk insurance policies cover life insurance, accident, sickness, old age, etc. Property insurance covers risks against fire, marine, liability, casualty and surety. While the personal insurance is taken under life insurance policy, Property insurance is termed as General Insurance in India.

In India insurance has been broadly categorized under two heads, life and general insurance. Until recently Life Insurance Corporation of India (LIC) was holding a monopoly. Recently,



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Government of India liberalized foreign direct investment in insurance sector and the entry of foreign insurance companies has been allowed..

**Products of life insurance** for the individual cover the personal risks and the products are as follows:

- Whole life schemes
- Endowment schemes
- Money back policies
- Joint life plans
- Investment plans
- Capital market plans
- Group insurance
- Social security scheme
- Pension plans

All these schemes are aimed at covering personal risks individually or collectively. The collective schemes like group insurance schemes, pension plans and social security schemes pooled risks under such are able to offer benefits for a very low premium.

General Insurance Corporation, a Government of India enterprise and other foreign companies with Indian entrepreneur participation offer commercial, industrial, liability and social products.

**Commercial insurance** involves the following major products:

1. Jewelers block policy
2. Bankers indemnity policy
3. Shop keepers policy
4. Marine cargo policy

**Industrial insurance** involves the following major products:

- Fire policy
- Burglary policy
- Machine break down policy
- Contractors all risk policy
- Electronics equipment policy
- Consequential loss of profit policy

**Liability insurance** involves the following major products:

- Public liability policy



Product liability policy

Professional indemnity policy

**Social insurance** involves the following major products:

Rural insurance policy

Student safety insurance policy

Child welfare policy

Medi-claim policies

Women marriage welfare policy

An analysis of the array of the products shows that risk management in the case of each category varies according as the main risks and the associated risks. Only in the case of life, the compensation for loss of life can vary as the value on life can never be indemnified and is price less. So, the compensation normally paid by the insurer is based on the face value of the policy. However, the risks covered are clearly signified and insurable interest also is identified. The insured has to act as a man of normal prudence and follow the conditions laid down by the insurance company. Apart from life cover other insurance policies are in the nature of investments quantified by the insured and advised by the insurer e.g., endowment schemes, money back, medi-claim, etc.

For commercial and industrial insurance policies the main risks are identified as also the allied risks. This is particularly relevant as much as an industrial fire policy may also have an adjunct as consequential loss of profits. These aspects need proper categorization of the hazards and the corresponding tariff for that e.g., non- hazardous, hazardous, explosive, etc. In the case of a claim the loss measurement or adjustment becomes a special assignment and they are carried out by qualified and approved surveyors.

There are new products as part of derivatives to cover catastrophic losses. These are catastrophe bonds and options (CAT bonds). CAT bonds belong to the group of hybrid instruments like derivatives. Investors get their returns on these CAT bonds on the incidence of a calamity that is underwritten. The return to the investor will be based on the direct loss to the insured because of the loss or on the basis of an accepted industry index. This CAT bonds can be traded in the exchanges and are sensitive to the incidents of catastrophes.

## FUNCTIONS OF INSURERS

The function of insurers can be classified as follows:

**Receiving applications** from intending individuals or institutions for insurance cover and the offer of cover to individuals after due evaluation and procedures.

**Under writing** involves evaluating the application forms submitted by intending individuals or institutions on the basis of the information provided by them. The veracity of the information will be scrutinized and after confirmation key aspects, if necessary, underwriting is resorted to. The objective of the underwriting is to ensure that the insurer will not incur losses that are different from the pattern on the basis of which premium rates are calculated. Under writing is done by judgmental method or numerical method.



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## Insurance pricing

### Principles of Insurance

Compensating the exact loss that arises due to the event insured against is referred to as **Indemnity**. Indemnity is security against financial loss. An insurance policy is designed to place the insured in the same financial position as he was before the occurrence of the event insured against. In case of loss, the insured shall be fully indemnified. The measure of indemnity depends on the basis of the contract like the replacement value or the agreed value as stated in the policy. The compensation is given to the insured only if an event occurs – otherwise the insured does not get any other returns. A peril or contingency specifically excluded from the terms of the policy is called an exception.

**Insurable Interest:** A legal or equitable financial interest in property or in the happening of some event. Any party who suffers a financial loss due to the occurrence of the event has insurable interest like Owners, Partnership or joint ventures, Institutions granting loans or mortgages, etc.

### IRDA

This institution came into existence on the basis of Insurance Regulatory and Development Authority Act (IRDA), 1999. Providing Licenses for transacting insurance business and reviewing premium rates are the twin activities of IRDA. IRDA is consumer friendly and protects the interests of the consumer through adequate checks, premium rates, products, procedures and investments made by the insurance companies.

The Insurance Regulatory Authority of India (IRDA) regulated the general insurance covers for over a decade. Owing to the increase in the number of players in the Indian insurance market in the last few years and the fierce competition in the General Insurance segment, IRDA wanted to de tariff the market in January 2007 and Insurers were given greater freedom to price the three insurance covers that were still regulated by IRDA: fire, engineering and motor. Policies can now be priced on a standalone basis, and therefore match the risk. The second phase of de tariffing will allow the Insurers to structure their products as well where they may be allowed to offer some optional covers in addition to the compulsory covers. In other countries like U.S.A. where product structuring is allowed, factors like the colour of the car also can influence premiums.

De tariffing would allow Insurers to lower premiums. For policyholders, de tariffing is always beneficial. For the same amount of premium, customers can get a higher sum insured. The industry can also benefit from this, since lower premiums will lead to increased sales and thus product penetration.

### PRICING

The process of determining or fixing the rates of premium for a particular product is known as pricing. Traditionally, premiums have been calculated based on tariffs set by the Insurance Regulatory Authority. The rates are derived based on various factors like past loss ratio, location of the asset, type of asset, as well as exposure to the risks. Rate is the pricing factor upon which the premium is based. For example, car insurance policies are priced based on factors such as make and model of the car, purpose for which the car is used, etc.



Premium is calculated using the formula

$$\text{Premium} = \text{Annual Rate} * \text{SI}$$

The annual rate is usually given per thousand SI.

Where SI is Sum insured.

Traditionally, for motor insurance, the parameters that are used to price a policy have been model of the car, age of the driver, location of the car and purpose for which the car is driven, etc.

The industry will eventually move from price rating to risk rating. The pricing for each individual will be based on their track record. For example, for 'own damage' in a car insurance policy, the pricing parameters will be the model of the car, driver's age and engine capacity.

This is of particular importance to a management accountant as it is in the nature of pricing a product. The insurance premium can be broken up into four parts:

Cost of payment for losses

Cost of operation and maintenance of insurance pool

Reserve for contingencies

Return on Investment.

In the life insurance, calculation of insurance premium is very complicated exercise as the variables involve are many, e.g., factors aggravating mortality rates, like smoking, drinking, drugs and other habits, age of the insured, occupational hazard, etc. This computation is normally through actuarial computations involving mortality rates. Premium rate is often referred as rate per unit of exposure.

## **DEMAND FOR RISK MANAGEMENT (UTILITY THEORY)**

The destruction caused by any unforeseen event is referred to as "Risk". In the insurance business, people exposed to the same risk form a group and share the loss together. Insurance companies collect the shares (Premiums) in advance from the group and create a fund. This fund is utilized to pay for the loss (Claims) that is incurred by any member of the group. Risks can be classified into various types:

- a) Financial and non-financial risks
- b) Dynamic risks
- c) Speculative risks

Risk cannot be avoided through insurance but may be considered as a means to transfer the risk. It is also a mechanism to compensate the financial and economic loss due to risk. Safety measures and damage control management can be adopted to mitigate or eliminate the magnitude of risk. The fundamental principle of insurance is to share the losses and to substitute uncertainty with certainty.



Expected utility theory emphasizes that the demand for insurance is a demand for certainty. The conventional specification of the theory perceives that the buyers of insurance prefer certain losses to actuarially equivalent uncertain losses. But certain other surveys indicate that individuals actually prefer uncertain losses to actuarially equivalent certain losses.

This can be explained by saying that “the purpose of any insurance policy is to convert an uncertain, but potentially large loss into a certain small loss. Such a conversion benefits the consumer, if greater losses cause progressively larger declines in utility (i.e., if there is diminishing marginal utility of wealth)” – Newhouse, 1978, page.19. For example, insurance against fire peril where the bigger part of the loss will be insured that is uncertain for a specific premium today.

Another approach evaluates a conventional expected utility theory explaining the demand for insurance by an individuals demand for an uncertain *payoff* of income in a pre specified state. This can be explained through the demand for health insurance. According to this theory, becoming ill fundamentally changes preferences. Thus an insured customer is able to transfer income into the ill state where the marginal utility of income is greater.

## **REINSURANCE**

All insurance companies have a risk appetite i.e. a limit on the amounts that they can settle for any given claim that is made by the Insured. Any claims made beyond this specified limit by the insured is settled by another company referred to as a Reinsurance company. Thus, Reinsurance is insurance for insurance companies.

Reinsurance is the transfer of part of the risk that a direct insurer assumes by way of an insurance contract on behalf of the insured, to a second insurance carrier, the Re-insurer who has no direct contractual relationship with the insured. Direct insurers need reinsurance to limit annual fluctuations in the losses they must bear on their accounts and to protect the assets of the company in the event of a catastrophe. Direct insurers take on hazards and risks from the policy holders. Re-insurers take on hazards and risks from the direct insurer.

Insurance companies typically enter into an agreement with the Re-insurer and sign a Re-insurance Treaty which states all the terms and conditions of the agreement. The Re-insurer agrees to accept a certain fixed share of risk upon terms as set in the agreement. The well-known Reinsurance companies in the world are Swiss Re, Munich Re, and Zurich Re.

For example, an Insurance company has a risk appetite of Rs.1 million. but has issued a general insurance policy for an engineering project where the sum insured is Rs.4 million. If a claim is made on this particular policy, the claim will be settled for Rs.4 million. Rs. 1 million will be paid by the Insurance Company that issued the policy and the remaining 3 million will be paid by the Re-insurer.

## **LIABILITY EXPOSURES AND ISSUES**

Liability exposures can be defined as those losses, which are caused due to the failure to accomplish legally imposed obligations rather than enjoy the rights. The limit of liability of the Insurers under a policy is the sum insured. If there is a dispute in the settlement of a claim made by the insured, the matter can be taken to the court of law seeking a fair settlement.



The cases of liability arising while performing various duties are given below:

- While possessing a land a liability can arise from ownership or use and the extent of liabilities are dependent on the three categories of visitors namely,
- **Trespassers:** A person entering the premises without any permission is termed a trespasser and as such the land owner is not held responsible for any loss or injury sustained by the trespasser after entering the premises. But trespassing children are an exception to this rule and the land owner will be absolutely responsible for the injuries to trespassing children
- **Licensees:** As a licensee is an individual permitted to visit the premises, the land owner is liable for any loss or injury to the licensee
- **Invitees:** Invitee is again an individual who is permitted to visit the premises. So the land owner has a liability for any loss or injury to the invitee on entering the land
- **Liability arising from business:** Liability arises when certain promises made in regard to products or services offered. In order to protect the interests of the customer, statutory authorities have put in place stringent regulations to compensate the customer for the losses incurred by him due to failure of promises by the seller (Warranty)
- **Professional liability:** A professional applies his special knowledge and skill in practice like a lawyer. Therefore a client or a patient can sue a professional for negligence or wrong doings
- **Vicarious liability:** This exposure arises due to the acts of the agents who are appointed by the principal. The principal is always liable for the agent's actions.
- **Bailey liability:** Liability of a bailey is caused by any damage to the property or goods transferred to him in the course of business temporarily
- **Contractual liability** is caused when promises are made to deliver particular goods or services at a price already determined and at certain time. The liabilities can be two fold:
  - Post completion contractual liability: A liability arises when an agreement is made by a contractor for a performance of an agreed service, e.g., building contractor
  - Professional services liability: A professional applies his special knowledge and skill in practice like a lawyer. Therefore a client or a patient can sue a professional for negligence or wrong doings
- **Employer - Employee liability:** In our country this relationship has been statutorily governed through the following statutes:
  - Minimum wages act
  - Payment of wages act
  - Workmen's compensation act
  - Provident fund act



- Gratuity act
- Shops and establishments act
- Industrial disputes act
- Trade union act
- Factories act
- **Liability for ownership of motor vehicle:** These liabilities are caused through negligence in use as well as no fault liability regardless of the person's involvement in the act
- **Nuisance liability:** Public nuisance can involve criminal liability through actions, which are detrimental to the community at large. Private nuisances may attract civil action arising out of noise pollution, pets, storing explosives, etc
- **Agro and Bio liabilities:** The basic liability issues arise as follows:
  - Farmers credit liability
  - Consequential losses liability
  - Genetically modified crop seed liabilities
  - Consulting expenses and royalty liabilities
  - Casualty liabilities on farmers assets
  - Latent deficiencies liabilities (public and professional liabilities)
  - Inflation liabilities (dynamic risks in risk management) affecting the farming community

Dr. M.S. Swaminathan committee has identified insurance as a panacea for the above liabilities and the possible steps can be:

Recognizing agriculture as an “open roof” industry and bringing in concepts of industrial liability insurances

Pre-harvest hedging

Cross dimensional liability coverage for inability

Linking of life assurances of farming community with their property and casualty insurances

## MANAGEMENT ACCOUNTANT'S ROLE IN INSURANCE RISK MANAGEMENT

The management accountant wears two hats, a management accountant in an insurance company and a management accountant in an insured company. Both of them have the responsibility for managing the risk from their own company's angle. A management accountant in an insurance company has to fully comprehend the computation of premium rates for different insurance products as also fully define the character of losses to be covered as a cross functional process along with the Actuarial professionals. Value imputation of the risks to be covered by the insurer's company has two aspects:





- Quantifying the total risk to be covered for calculating a premium as a definite fraction of the risk value covered by the policy
- If the quantification of risk is so high and the corresponding premium is likely to be also high enough for an insured to back out, then develop a framework where the insurer's company can re-insure itself for the policy risk with another insurance company. This will help in reducing the premium for the insured

A management accountant in an insured's company has his task cut out very clearly in two directions. At the time of covering the risk he has to work very closely with the cross functional team to identify the direct values of the risks involved and the indirect consequential values of the risks involved. For example, firstly, the replacement cost of a plant being insured is a direct cost and has to be quantified by proper methodology and secondly, the consequent loss of profits due to the stoppage of plant due to breakdown of the plant being replaced. In a service company it may be a cessation of a service being offered due to a peril such as fire or earthquake, etc and the consequential loss of profits there of.

Management accountants where ever they are need to be conversant with the use of mathematical models quantifying risk, financial cannons like Time value of money, dynamic programming, cost slopes and crashing, etc.



## STUDY NOTE - 10

### CORPORATE RISK MANAGEMENT

**This Study Note includes:**

- **Traditional risk**
- **Asset liability model**
- **Tools and models**
- **Enterprise risk management**
- **Project risk management**

#### CORPORATE RISK MANAGEMENT

Any corporate activity involves risk and according as the risk involved in the corporate activity return needs to be computed for the investment made. Normally, an individual is risk averse and prefers liquidity to the extent of scheduled commitments. Always the individual keeps his money safely at a place where it is risk free, say a scheduled bank. He gets a return for keeping the money in a bank and that interest rate is “risk free rate”. The incentive to invest this money in an activity involving risk could be to get a higher return for the increased risk. This is known as “risk premium”.

#### RISK IN A TRADITIONAL SENSE

The risk is understood as the sacrifice made by an individual by deferring the use of money to a future day by investing that money in a venture promising a higher return which has uncertainty. The forces that contribute to the variations in return can both be external or internal to a company in which an individual has invested. These forces can partly be controllable and the remaining uncontrollable. The uncontrollable portion, which is essentially external, is known as systematic risk and the controllable internal risk is known as unsystematic risk.

The external or systematic risk can be classified as three types of risk:

**Market Risk:** Variability in return on investments in the market is referred to as market risk. This is caused by investor reaction to the tangible as well as intangible events. Tangible events like economic, political, social events and intangible events arising out of a market psychology or the other factors like interest rates and inflation also form part of the forces behind market risk.

**Interest Rate Risk:** This risk refers to the uncertainty of market volumes in the future and the quantum of future income caused by the variations in the interest rates. These interest rates are normally controlled by the Reserve Bank of India in our country and the exigencies for changing the interest rates arise out of many economic factors which are monitored by the central bank i.e., R.B.I. Normally, when the interest rates increase the companies with higher quantum of borrowed money will have to pay out higher quantum of interest reducing their earnings and vice versa.



**Purchasing Power Risk:** Purchasing power risk is the uncertainty of the purchasing power of the monies to be received, in the future. In short purchasing power risks refers to the impact of inflation or deflation on an investment. Prudent investors normally include a premium for purchasing power risk in their estimate of expected return.

**Exchange Risk:** With the globalization of market cross border transactions are on the increase. Balance of payments comprising the net effect of exports and imports are subject to fluctuation in the various currencies. As recently, the strengthening of Rupee against the Dollar imports has made imports cheaper and exports costlier. The need to recognize this exchange risk is obvious as the international trade operations may be profitable or loss-making unless this risk is taken care of.

**Unsystematic Risk:** Unsystematic Risk is that fraction of total risk which is unique to a company or an Industry due to inherent internal factors like managerial capabilities, consumer responsiveness, Labour unrest, etc. The operating environment of the business and the financing modalities involve this unsystematic risk. The first one is known as the *Business Risk* and the second is the *Financial Risk*

**Business risks** can be again divided into internal and external business risks. Internal business risk is mainly due to the variations in the operational efficiency of the company. The external business risks arise out of circumstances imposed on the company by external forces like business cycle, certain statutory restrictions or sops

**Financial risk** is associated with the modalities adopted by a company to finance its activities. For instance the financial leverage like the Debt Equity Ratio or the type of borrowings and the variations thereof introduce financial risk. Lower the debt less is the financial risk

### ASSET - LIABILITY MODEL

Financial risks arising out of **assets and liabilities** need to be aggregated. A composite risk picture has to be drawn by following an approach known as “building block

Asset liability management is a technique to compute matching of assets and liabilities by which a prudent management of an investment portfolio can be properly taken care of. Asset liability management is defined as “maximizing the risk adjusted returns to shareholders over the long run”. It is also defined as management of total balance sheet in terms of size and quality (composition of assets and liabilities).

#### Liquidity risk management through asset liability management

It is difficult to measure liquidity risk as it entails expecting likely inflow of deposits, loan dispersals, changes in competitive environment, etc. The most commonly used techniques for measurement of liquidity risks is the gap analysis. The assets and liabilities are arranged according to their maturity pattern in time brackets. The gap is the difference between the maturing assets to the maturing liabilities. A positive gap indicates that maturities of assets are higher than those of liabilities. A negative gap indicates that some rearrangement of funds will have to be done during that time bracket. It can be from sale of assets or issue of new liabilities or rolling over existing liabilities.

#### Exchange rate risk management through asset liability management

At a particular exchange rate assets and liabilities of a financial institution match exactly. As the exchange rate fluctuates this balance gets disturbed. A simple solution to correct this risk



is to match assets and liabilities of the same currency. Many financial institutions do not have foreign exchange exposure as all their assets and liabilities are in rupee currency. The risk of foreign exchange borrowings of these institutions are passed on to the lenders through dollar denominator loans. The uncovered loans are hedged at the time of contracting them through forward covers for the entire amount.

### **Risk vs. exposure**

Risk is the changes in price of assets, whereas exposure is the sensitivity to changes in the price of assets. The risk perceptions in a corporate body differ from organization to organization depending upon nature of business.

### **Risk perceptions**

According to the type of business activity and the stakeholders involved risk perceptions can vary and can be manifold as below:

- Default risk
- Transaction risk
- System risk
- Legal risk
- Accounting risk
- Country risk / Sovereign risk
- Political risk
- Management risk
- Off-balance sheet risk
- Racial risk

## **RISK MEASURES, TOOLS AND MODELS FOR MANAGEMENT**

**Measures** relating to risk profiling are related either to the solvency aspect of organization or the performance areas.

- *Solvency-related* measures (these measures concentrate on the adverse “trail” of the probability distribution – and are relevant for determining economic capital requirements)

Probability of ruin – the percentile of the probability distribution corresponding to the point at which the capital is exhausted.

Shortfall risk – the probability that a random variable falls below some specified threshold level. (Probability of ruin is a special case of shortfall risk in which the threshold level is the point at which capital is exhausted.)

Value at risk (VAR) – the maximum loss an organization can suffer, under normal market conditions, over a given period of time at a given probability level. VaR is a common measure of risk in the banking sector, where it is typically calculated daily and used to monitor trading activity.

Expected policy holder deficit (EPD) or economic cost of ruin (ECOR) – an enhancement to the probability of ruin concept (and thus shortfall risk and VaR) in which the severity of ruin is also reflected. Technically, it is the expected value of the shortfall.

Tail Value at Risk (Tail VaR) or Tail Conditional Expectation (TCE) – an ECOR-like measure in the sense that both the probability and the cost of “tail events” are considered.



Tail events – unlikely but extreme events, usually from a skewed distribution. Rare outcomes, usually representing large monetary losses.

Performance-related measures (these measures concentrate on the mid-region of the probability distribution –see “risk profile” above – i.e., the region near the mean, and are relevant for determination of the volatility around expected results):

Return on equity (ROE) – net income divided by net worth

Operating earnings – net income from continuing operations, excluding realized investment gains

Earnings before interest, dividends, taxes, depreciation and amortization (EBITDA) – a form of cash flow measure, useful for evaluating the operating performance of companies with high levels of debt (when the debt service costs may overwhelm other measures such as net income).

Cash flow return on investments (CFROI) – EBITDA divided by tangible assets.

Weighted average cost of capital (WACC) – the sum of the required market returns of each component of corporate capitalization, weighted by that component’s share of the total capitalization.

Economic value added (EVA) – a corporate performance measure that stresses the ability to achieve returns above the firm’s cost of capital. It is often stated as net operated profits after tax less the product of required capital times the firm’s weighted average cost of capital.

| Risk Measure                | Formula                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shortfall Risk              | $\frac{\sum_{i=1}^n [\text{if } (x_i \leq T) \text{ then } 1, \text{ else } 0]}{n} \times 100$ <p>Where T is the target value for the financial variable and n is the number of simulation iterations. This is an improvement over standard deviation because it reflects the fact that most people are risk averse, i.e., they are more concerned with unfavorable deviations rather than favorable deviations. It is interpreted as the probability that the financial variable falls below a specified target level.</p> |
| Value at Risk (VaR)         | <p>In VaR-type measures, the equation is reversed: the shortfall risk is specified first, and the corresponding value at risk (T) is solved for.</p>                                                                                                                                                                                                                                                                                                                                                                        |
| Downside Standard Deviation | $\sqrt{\frac{\sum_{i=1}^n (\min[0, (x_i - T)])^2}{n}}$ <p>Where T is the target value for the financial variable and n is the number of simulation iterations. This is a further improvement over the other metrics because it focuses not only on the probability of an unfavorable deviation in a financial variable (as with shortfall risk) but also the extent to which it is unfavorable. It is interpreted as the extent to which the financial variable could deviate below a specified target level.</p>           |
| Below Target Risk           | <p>BTR is similar, but the argument is not squared, and there is no square root taken of the sum.</p>                                                                                                                                                                                                                                                                                                                                                                                                                       |



**Risk management tools** are essentially the methodology for measuring the risks as well as analyzing the same as support systems for decisions. The methodologies can be either a management technique or a model and is dependent on the type of risk. Selection of such a tool can follow guidelines as below:

| Type of risk | Narration                                                                                                       | Tools                                     |
|--------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Market       | Risk arising due to change in market factors like asset prices, exchange rates, interest rates, etc             | Value at Risk (VaR), Scenario analysis    |
| Credit       | Risk arising out of the failure to honor obligations for payments                                               | Expected loss, unexpected loss            |
| Business     | Due to change in conditions in revenue recognition and exposure such as fluctuation in demand, competition etc. | Historical earnings volatility, analogues |

**Risk management modeling** process relates to the methodology adopted for measuring risk and performance. The two general classes of stochastic risk models are either statistical analytic models or structural simulation models. Understanding these two models would involve defining the four terms used, namely:

**Analytic methods:** These methods often require a restrictive set of assumptions and certain assumed probability distribution. This method is easy and speedy.

**Simulation methods (Monte Carlo):** These models require a large number of computer generated trials to estimate a solution. While, simulation is robust and flexible and can deal with complex problems data requirement is a challenge. The advantage of simulation over analytic method is the greater degree of precision and alignment to real life situation, which is so much important in corporate world.

**Statistical methods:** These are more based on observations of random variables and the statistical qualities they exhibit. They do not consider cause and effect relationship. The advantage of statistics over structural models is an ease of application using available data.

**Structural methods:** These are based on cause and effect relationship and are derived both by quantification of data as well as quality related data. Because of the cause and effect approach, decision support systems are best available from these methods. Dynamic financial analysis which is a particular form of structural simulation model focuses on hazard and financial risk.

### Corporate risk management strategies

In risk management, the following strategies are generally adopted:

**Risk Avoidance** is a strategy by which the organization does not engage in the activity which involves any risk.

**Risk Reduction** is another strategy where the organization takes two steps. One is preventing the occurrence of risk and the second one is controlling the number of occurrences. One of the possible ways of reducing the risk is going for large number.



**Risk Retention** is the most popular method of dealing with risk. Risk retention may be conscious or unconscious. Conscious risk retention takes place when the risk is perceived and not transferred or reduced. When a risk is not recognized, it is unconsciously retained.

**Risk Transfer** is another method of managing risk. Risk can be transferred to a person willing to take it. Hedging or insurance are best examples for risk transfer

**Risk Sharing** is process by which the potential risk is shared among many, so that the loss is not borne by a single person.

These strategies can be discussed under two specific heads namely

- Enterprise risk management and
- Project risk management

### 1. ENTERPRISE RISK MANAGEMENT

“Enterprise risk management is the discipline by which an organization in any industry assesses controls, exploits finances and monitors risks from all sources for the purpose of increasing the organization’s short and long term value to its stakeholders”. This definition has been adopted by the Casualty Actuarial Society ([www.casact.org/research/erm](http://www.casact.org/research/erm)).

There are seven components to the enterprise risk management and they are:

- Corporate risk governance
- Line management
- Portfolio management
- Risk transfer
- Risk analytics
- Data and technology resources
- Stakeholders management

#### Corporate risk governance

Responsibility of a corporate body encompasses

- Identifying the organization’s appetite for risk in the areas of capital leverage, credit rating, etc
- The capability of the organization to manage risk and support its business strategy
- Establishing the structural relationship between the roles and responsibilities for risk management
- Pooling of risk and develop such integrated risk measures encompassing the various spheres of activity like finance, marketing, human resources and operations
- Establishing proper tools for risk assessment, measurement and analysis
- Developing a proper culture and awareness in the organization through leadership
- Educating the various layers of organization about risks absorption and management through case studies

Corporate governance has become a buzzword in Indian corporate world and SEBI has laid down guidelines in this regard. Every annual report contains a section on corporate governance along with management’s discussion on performance and future outlook.



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## **2. Line management**

Line management develops the strategy on a cross functional basis using various models identifying strengths, weakness, opportunities and threats. This analysis identifies the risks that are involved in the formulation and implementation of the strategy. Enterprise risk management specifically lays down the criteria for risk acceptance and also evolves the corporate risk policy that needs to be aligned with the strategy.

## **3. Portfolio management**

Pooling of risks should not just happen, but must be aggregated properly so that appropriate diversification of risk can be attempted. This will lead to optimal portfolio where natural hedges can be fully implemented so that risk and return are well balanced.

Portfolio theory essentially guides an investor to reach an optimal portfolio position. This theory as originally postulated by Harry M. Markowitz assumes that the utility of the investor is a function of mean return and variance of return [or standard deviation (Square root of variance)]. The expected return on a portfolio is simply the weighted arithmetic average of the expected returns on the assets constituting the portfolio. The riskiness of the portfolio is measured by the standard deviation of the portfolio rate of return which is a function of

The proportions invested in the components

The riskiness of the components

The correlation of returns on component securities

The principle of portfolio theory can be likened to pooling of risks and diversifying them.

### **Capital Asset Pricing Model (CAPM)**

This model addresses itself to the problem of developing an appropriate measure of risk for an efficient portfolio and also the relationship between the risk and return of the efficient portfolio, both in the aggregate as well as individual securities. The CAPM is based on following assumptions:

Individuals normally exhibit risk averse behavior

Over a single time horizon individuals attempt to maximize the expected utility of their portfolios

All individuals have congruent expectations in regard to means, variances and co-variances among returns

Monies are available for borrowing and lending freely at risk less rate of interest

There is a perfect competition with no taxes, no transaction costs and securities are totally divisible

The quantum of risky securities in the market is available

### **Arbitrage pricing theory (APT)**

As the CAPM assumes idealistic assumptions, it has its own limitations. Arbitrage pricing theory was developed to overcome the shortcomings of CAPM. The APT assumes that asset prices can be influenced by factors beyond means and variances. APT allows the equation to include any number of risk factors in the equation as long as they have an influence on the return.





#### 4. Risk transfer

Risk transfer objectives aim at lowering the cost of hedging of risks which are already balanced in a portfolio. Honeywell and Mead have developed alternative risk transfer (ART) products which combine both insurance protection and financial risk protection leading to about 30% savings.

#### 5. Risk analytics

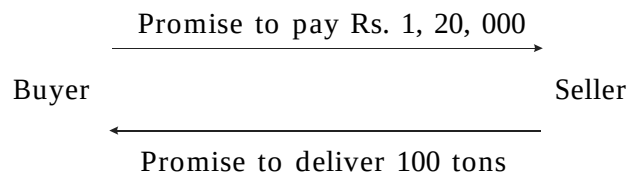
The tools and techniques are used to evaluate risk transfer products such as derivatives, insurance and hybrid products. For example, the cost of risk transfer can be made lower than the cost of risk capital. Apart from risk management advanced risk analytics can also be used to energize decision tools based on net present value and economic value added systems. In this type of analysis VaR that has been discussed earlier comes in handy.

#### Derivatives

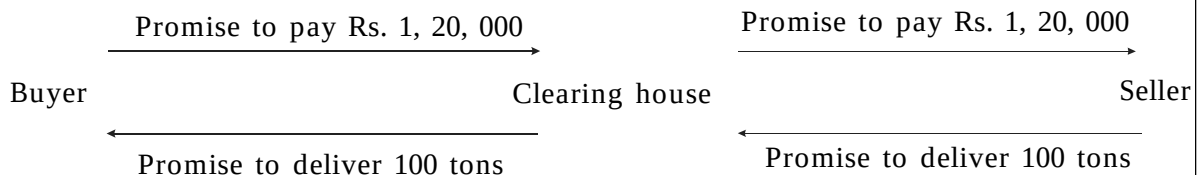
Derivatives can be broadly categorized into futures and options. **Futures** are used as a hedging mechanism against risk. For example, a farmer may have sown wheat in his field and incurs certain costs today. The harvest may take place after a few months. Then the price of wheat is uncertain. This uncertainty can turn into risk and as such the farmer would like to safeguard his risk by hedging against it. He can contract futures at a particular price which will cover his cost and also give a margin. This price may not be the best, but assures him of a return and also covers his risk. Commodities exchanges all over the world have introduced futures and they safeguard the financial risk of the producers. The futures contract is standardized in terms of delivery as well as the type of asset that is permissible for delivery.

#### Creating a Futures contract

a) Buyer and seller agree on a Rs. 1200 per ton August wheat futures contract:



b) The Clearing house becomes an intermediary to the Futures Contract:





**Option** is another derivative, which is a type of contract between two people wherein an individual offers the other person the right to buy a specific asset at a specific price within a specific time period. The advantages of Options are as follows:

Delay or defer making an investment (Delay)

Adjust or alter production schedules to match price changes (Flexibility)

Expand into new markets based on observation of favorable results at the beginning stages itself (Expansion)

Cessation of production or abandon investments, if the results are likely to be unfavorable at the early stages (Abandonment)

As futures and options involve expected future cash flows, the standard discounted cash flow procedure involves two steps.

- Estimation of expected future cash flows and
- Discounting cash flows using an appropriate cost of capital

It is difficult to quantify expected cash flows and it is even more difficult to determine the opportunity cost of capital as the variables involved are many. Towards this Black and Scholes model developed a single period binomial model. The basic idea of the model is to set up a portfolio, which imitates the call option in its pay off. In other words, the cost of such a portfolio must represent the value of call option. Use of this formula as an exercise to reduce risk in computing call option has been fairly successful. Black and Scholes model assumed as many variables in the computation on the basis of their relative impact on the valuation of call option.

## **6. Data and technology resources**

Collection and collation of data have been the most difficult part of analytics. The population on the one hand and the veracity on the other hand plagued the analysts for developing a proper platform where solutions can be obtained. A system to collect data and aggregate it has to be built carefully, which should enjoin sifting data for quality. This should be a continuous exercise and proper monitoring is required to see that the data are captured both spatially and temporally as originally planned. The power of internet cannot be more emphasized in this regard and should form part of the design of enterprise risk technology platform.

## **7. Stakeholders management**

Stakeholders are all interested in their acumen of the enterprise management in regard to the risks that face the organization. SEBI in India has clearly included transparency and communication as the two important facets of an annual report of a company. Management's discussion note normally presents the steps taken by the top management in tackling the various risks and also presents a proper perspective of their future outlook. In the course of business, the bargaining power with the creditors (Vendors) and the bargaining power with the debtors (Customers) always come under stress and strain. Risks involved in solvency transactions as well as ageing debts have to be taken care of on a day to day basis in the business. Towards that many tools (instruments) have been devised and continue to be around. Major tools are discussed below:



| <b>Instrument</b>                      | <b>Purpose</b>                                                                                                                                                                                                                                                                   | <b>Remarks</b>                                                                                                                                                                                                                                      |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Guarantee                              | <p>Guarantees can be financial guarantees or performance guarantees.</p> <p>Financial guarantees protect against the financial loss on failure to meet financial obligations</p> <p>Performance guarantees are protection against non-performance of contractual obligations</p> | Financial institutions provide guarantees as a risk cover against a collateral by the buyer for a consideration                                                                                                                                     |
| Letter of credit or documentary credit | Guarantee against non payment of purchase consideration by the buyer                                                                                                                                                                                                             | Financial institutions issue this instrument for a consideration. It can be revocable or irrevocable. Can also be revolving                                                                                                                         |
| Underwriting                           | Underwriting is a protection mechanism available in the capital market to cover the risk of non-subscription to a public issue                                                                                                                                                   | Financial institutions offer this risk cover for a consideration after due evaluation of risk                                                                                                                                                       |
| Collateralized debt obligations        | Taken against short term and long term loans for working capital as well as fixed assets                                                                                                                                                                                         | Financial institutions offer this risk cover for a consideration after due evaluation of risk and cover themselves completely either through hypothecation or pledge or equitable markets                                                           |
| Asset Securitization                   | Companies offering financial services of hire purchasing, leasing, etc try to raise finance through this method                                                                                                                                                                  | This is a special purpose vehicle (SPV) to manage default risk. Financial institutions as well as public subscribe to this method for a consideration in the form of interest and securitization is available from the assets that are being traded |
| Factoring                              | Companies resort to this instrument both as a risk cover and insure cash flow                                                                                                                                                                                                    | Specific financial institutions called factoring companies offer this service for a commission with recourse or without the recourse                                                                                                                |



In conclusion, enterprise risk management is emerging as the best practice model, which is often benchmarked among the competitors. The enterprise risk management becomes all the more important, for, the absence of it would lead to crisis management.

## **2. Project risk management**

Projects are one time processes unique in nature. Each project is different from the other and has a gestation period before it starts operation and yielding results. A project has to be conceived, feasibility is established both technically and commercially, funded for implementation and operation. By its own nature a project is based on many assumptions to be realized at a future point as also regarding environment and statutory policies. With a gestation period running into a few years any change or revision in assumptions can transform itself into a big risk. Management of such risks can be difficult and would require special tools and models. Normally, projects are considered as dynamic, iterative and often chaotic systems. They are also path dependent systems composed of networks displaying different dynamics.

### **The nature of risks in projects**

Normally, risk is defined as “a possibility that the resulting impacts of events and the dynamic interactions may turn out to be different from the expectation”. Each project is different in terms of the impact of the market related, completion, institutional risks and turbulence. But all of them exist in each project.

#### **Market related risk**

Demand forecasts are often made with reliable data choosing a proper forecasting model. However, the element of risk compounds itself due to correlation coefficients being different among the variables. For example, many road projects have a specific set of customers, but these customers have alternatives. So, forecasting behaviors of these customers becomes extremely difficult and failures to achieve the required traffic volumes turn into a major risk threatening the project itself.

#### **Completion risks**

Projects face both administrative and technical risks during implementation, which require a high degree of innovation to solve them. These risks may arise out of the designs employed, from the contractors building the project, conflicts during execution, etc affecting the completion of the project.

#### **Institutional risks**

Institutional risks relate to unexpected changes in the conditions and norms laid down by the institutions that have either funded the projects or statutorily approved the project. Social acceptability risks arise due to certain sponsoring institutions opposing the implementation of the projects. Again, the governmental agencies which have approved the project in a particular form may call for renegotiation resulting in institutional risks.

#### **Turbulence**

All the three earlier can create certain consequences of events compounded by unforeseen circumstances. This leads to turbulence when multiple issues arises initiating moves and



counter moves and often ending in deadlock and the entire project may collapse. Opportunity failures on oversights can also create the risk of aggravation or overrun in costs resulting in financial risks.

### **Types of project risks, measurement and models**

The project risks can be classified under three different head:

Standalone risks: This is quantification of risk of a project when it is viewed in isolation.

Corporate risks: When the project is taken as part of a corporate entity its contribution towards the total risk of the company

Systematic risks: This represents the market risk of the project

These risks can be measured statistically by applying:

Range

Mean absolute deviation

Standard deviation

Coefficient of variance

Semi-variance

Out of the above, standard deviation is the most popularly used measure of risk and the reasons therefor are:

If there is a normal distribution of the variable, its mean and standard deviation will contain all data relating to its probability distribution

The concept of expected utility is again a function of mean and standard deviation

Standard deviation can be easily determined

While risk analysis is attempted, what-if analysis becomes very important to determine the interdependencies of the variables. Towards this, sensitivity analysis is a tool. Sensitivity analysis can be done by following steps:

Identify the relationship between the basic factors like the quantity sold/produced, unit selling price, life of the project, etc. and the net present value

Compute the range of variation and the acceptable value of each of the basic underlying factors

Interpret the effect on net present value of variations in the basic variables

The models normally used in project risk management are (Discussed in earlier chapters):

Scenario analysis

Monte Carlo simulation

Decision tree analysis

For value imputation of the results from the above models the following methods are used for deciding whether the project shall be accepted or rejected:



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Risk profile method

Risk adjusted discount rate method

Certainty equivalent method

### **Risk profile method**

The probability distribution of net present value, which is an absolute measure, is transformed into probability distribution of profitability index which is a relative measure. Normally, profitability index is linearly correlated to net present value and as such both the probability distributions are more or less identical. The dispersion of the profitability index of the project is compared with the maximum risk profile, which the management is ready to bear. If the risk of the project is less than the maximum risk acceptable to the management for the assumed level of profitability index, then the management will proceed with the project.

### **Risk adjusted discount rate method**

Normally, the discounting rate used for arriving at the present value is the average cost of capital for a company. If the net present value of the future cash flows is positive, then the project is accepted. However, if the risk of the project under construction is greater than the present risk profile faced by the company, then the company would like to have a higher return on the project and as such would consider a “risk premium” for undertaking the project. This risk premium is normally converted into additional quantum of return that is to be required. The existing discounting rate is increased to incorporate the risk premium and that is known as the risk adjusted discount rate. The risk adjusted discount rate is commonly employed differently for different projects like routine replacement investments, expansion investments, risky new investments and highly risky research and development investments. This is a popular method, but entails certain limitations:

Determination of risk premium and corresponding addition return frequently is ad hoc and arbitrary

The assumption that risk increases with time at a constant rate may not be always valid

### **Certainty equivalent method**

The concept of certainty equivalent coefficient represents the computation of a certain amount equivalent to a probable income or loss. Rather this method introduces the concept of expecting the unexpected and trying to quantify the unexpected profit income or loss with this probability into an equivalent. The process of developing certainty equivalent quotient entails the following steps:

- Identify the outcomes with the probabilities
- Develop the expected total value on the basis of weighted values summation
- Develop the minimum required outcome which is acceptable to the management for a project
- Develop a ratio of 3 over 2 to obtain certainty equivalent coefficient
- If this coefficient is acceptable to the management the project goes through

**PROJECT RISK ASSESSMENT IN PRACTICE**

In reality, the risk assessment is done through considering the various components of the financial estimates and developing certain judgmental approaches:

**Estimation of revenues:** Revenues projected for a project need to be justified on the basis of real data available and then the projections are made conservatively. This avoids optimistic projections of income

**Cost estimates:** Always include a margin of safety to take care of impact of inflation over the time horizon for which the projections are being made. Here again the margin of safety is computed on the basis of trend analysis of inflation over the recent past and the lead indicators that are available from fundamental analysis

**Acceptable return on investment:** This is the prime measure and as such it should be arrived at on the basis of certain consensus. It will depend on the payback period to be assumed, the industry experience and the company's norm for return on any new project on the basis of the current experience

**Overall certainty index:** The critical risks of the project are identified and the certainty index of each of these risks is quantified. Then the overall certainty index is developed as an average of the critical indices already computed. For instance, raw material availability, power availability, intensity of competition is a few of the risks, which are quantified in terms of certainty indices. The cumulative average is the overall certainty index

**Judgmental perceptions:** Three different estimates of return on the investment are developed – pessimistic, most likely and optimistic on the basis of the stage at which the particular industry is in its life cycle. On the basis of the three estimates and comparing them with the earlier methods available on certainty equivalent coefficient, a judgmental decision can be taken

**Approaches to project risk management**

The approaches are six fold as follows:

- Decisioneering to assess and mitigate risk
- Build robust strategic systems
- Instilling govern ability
- Shaping institutions
- Hedging and diversifying risks through portfolios
- Embracing risks

| Approaches                                                                                                                                                                                                           | Risk avoidance                                                                                                                                                                                                                    | Risk reduction                                                             | Risk retention                                                                                                                                                                                                                                                                                                                                                                                | Risk transfer                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| <b>Assess mitigate</b><br>E.g., quantitative sensitivity analysis, scenario analysis, decision trees and influence diagrams                                                                                          | Endogenous risks specific to the project                                                                                                                                                                                          | If risk cannot be mitigated, reduction techniques will have to resorted to | Known risks will be retained and self insured                                                                                                                                                                                                                                                                                                                                                 | General risks applying to similar projects transferred to a competent agency |
| <b>Build robust systems</b><br>Using five different devices: information search, network building and cooptation, structures of incentives and contracts, project / design configuration, influence and bold actions | Risks arising out of partnerships with suppliers or contractors, methods of contractor selection, selection of geographic location / site, preemptive action and education of regulator rating agencies, statutory agencies, etc. |                                                                            | Institute adequate controls through multidisciplinary strategy teams, early involvement of financiers, operators and others, incentives / penalties in increments, signal probity, set up controls for monitoring                                                                                                                                                                             |                                                                              |
| <b>Instill govern ability</b><br>Instill cohesion, reserves, flexibility and creativity                                                                                                                              |                                                                                                                                                                                                                                   |                                                                            | <ul style="list-style-type: none"> <li>• Build strong relationships between project participants</li> <li>• Fall back strategies expecting contingencies</li> <li>• Develop alternatives for decision making by proper delegation of authority</li> <li>• Develop creative thinking and innovative approaches for solving crisis through brainstorming sessions among participants</li> </ul> |                                                                              |
| <b>Shape institutions and systems</b><br>Anchor projects, ensure repayment of investments, provide social utility                                                                                                    | Stabilization of long term future to enable investments, enhance the legitimacy of the project by developing practices like inviting the representatives of both                                                                  |                                                                            |                                                                                                                                                                                                                                                                                                                                                                                               |                                                                              |





| Approaches                                                            | Risk avoidance | Risk reduction                                                                                                                                             | Risk retention                                                                                                                                                                                                                                                                                 | Risk transfer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                       |                | the institutions and the public. Develop a strong framework for structuring decision making                                                                |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Hedge and diversify</b><br>E.g., portfolios, insurance and hedging |                | Build a diversified portfolio to balance risks and cash flows, hedging against currency fluctuations or commodity exposures applying financial derivatives |                                                                                                                                                                                                                                                                                                | Insuring risks as well as diversifying investments in different countries to reduce political risk                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Embrace</b><br>Comprehend the residual risk                        |                |                                                                                                                                                            | <ul style="list-style-type: none"> <li>• Develop a proper information system regarding the residual risks, commercial aspects</li> <li>• Develop a clear sense in bearing various risks, then understanding of particular risk domains to develop ability to bear commercial risks.</li> </ul> | <ul style="list-style-type: none"> <li>• Develop information system regarding financial institution capital markets and special vehicle applications</li> <li>• Identify local industrialists who are ready to partner for sharing risks through a portfolio of investment</li> <li>• Identify international partners for sharing investments through a portfolio of investment</li> <li>• Identify financial institutions locally like commercial banks</li> <li>• Identify international financial institutions</li> </ul> |





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### **Concept of critical chain and theory of constraints**

The inherent risks in a project formulation and implementation can arise due to misalignment of objectives. The physical objectives and financial objectives need to be properly aligned as otherwise the misalignment itself can develop into a major risk. It is accepted that to achieve good cost performance in a project is through good performance at every stage. However, achieving good throughput or a holistic performance need not be through good performance at every stage. This follows the principle that optimization of paths need not lead to optimization of the whole.

This misalignment can be taken care of by the application of theory of constraints. According to this theory, the management focuses on whatever impedes the progress towards the goal of maximizing the flow of total value added funds or sales less discounts and variable costs. This involves the following steps:

- Identify the system bottle neck
- Exploit bottle neck
- Subordinate all the decisions to step 2
- Elevate the bottle neck or de bottleneck
- Do not let inertia set in

In conclusion, project risk management presents a milieu of many imponderables, which are external to the company. To that extent, strategic inputs are necessary which have been reflected in the measurement and mitigation of risks. As projects by themselves are unique comparisons do not lend themselves equal. Specific approaches are needed to be developed in each case.



## **ANNEXURE 1**

### **JUMBLED OBJECTIVE QUESTIONS AND ANSWERS**

- Q.1 Which one of the following is not part of expansion?
- (a) Mergers
  - (b) Aquisition
  - (c) Tender offers
  - (d) Joint ventures
  - (e) Exchange offers
- Q.2 Which one of the following is not part of Sell-Offs?
- (a) Spin offs
  - (b) Split offs
  - (c) Divestitures
  - (d) Equity carve outs
  - (e) Proxy contests
- Q.3 Which one of the following is not part of corporate control?
- (a) Premium buy backs
  - (b) Expansion
  - (c) Stand still agreements
  - (d) Anti take over amendments
  - (e) Proxy contests
- Q.4 Which one of the following is not part of changes in ownership structure?
- (a) Joint ventures
  - (b) Exchange offers
  - (c) Share repurchases
  - (d) Going private
  - (e) Leveraged buyouts
- Q.5 Which of the following is not part of rationale for existence of a corporate?
- (a) Transaction cost efficiency
  - (b) Bounded rationality
  - (c) Individual proprietorship
  - (d) Computational capacity
  - (e) Opportunism
- Q.6 Which of the following does not relate to BPR?
- (a) Ambition
  - (b) Process focus
  - (c) Gap analysis
  - (d) It is an enabler
  - (e) Reverse engineering
- Q.7 Which of the following does not form part of Benchmarking process?
- (a) Redesign
  - (b) Planning



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- (c) Analysis  
(d) Integration  
(e) Action
- Q.8 Which one of the following is not a measure related to Balanced Score Card?  
(a) Financial  
(b) Customer satisfaction  
(c) Internal processes  
(d) Gap analysis  
(e) Innovation
- Q.9 Which of the following does not relate to EVA?  
(a) Customer satisfaction  
(b) Operating profit  
(c) Tax  
(d) Cost of capital  
(e) Sales value
- Q.10 Which of the following does not relate to turn around Process?  
(a) Decline  
(b) Response initiation  
(c) Budgetary control  
(d) Transition  
(e) Outcome
- Q.11 Which one of the following does not relate to strategic alliance?  
(a) Split up  
(b) Boot strap  
(c) Disguised sale  
(d) Evolution to a sale  
(e) Alliances of the weak
- Q.12 Value drivers identified in cost leadership model do not include  
(a) Sales growth rate  
(b) Operating profit margin  
(c) Differentiation  
(d) Working capital investment  
(e) Cost of capital
- Q.13. Value drivers identified in Differentiation Strategy do not include  
(a) Sales growth rate  
(b) Waste reduction  
(c) Operating profit margin  
(d) Fixed capital investment  
(e) Cost of capital
- Q.14 Numerator-Focused management focuses on  
(a) Reducing headcount  
(b) Tightening belts



- (c) Selling assets
  - (d) Improving productivity
  - (e) Restructuring
- Q.15 Denominator-Driven Programme Focuses on
- (a) Improving productivity
  - (b) Value engineering
  - (c) Synergy
  - (d) Profit maximizing
  - (e) Reducing headcount
- Q.16 Benchmarking Focuses on
- (a) Production
  - (b) Best practices
  - (c) Best performance
  - (d) Supply chain management
  - (e) Profit
- Q.17 Improving quality is not due to
- (a) Pressure from customers
  - (b) Good training programmes
  - (c) Motivated supervision
  - (d) Inadequate documentation
  - (e) Modern machinery
- Q.18 Strategic Control does not include
- (a) Strategic surveillance
  - (b) Premise control
  - (c) Implementation control
  - (d) Budgetary control
  - (e) Special alert control
- Q.19 Steps for crisis management do not include
- (a) Identification of areas of risk
  - (b) Stock options
  - (c) Avoid chances of risks becoming crisis
  - (d) Train crisis management team
  - (e) Clear communication strategy which is transparent
- Q.20 Defensive measures to counter Takeover attacks do not include
- (a) Golden parachutes
  - (b) Poison pill
  - (c) Anti takeover amendments
  - (d) Authorization of preferred stock
  - (e) Bear hug
- Q.21 Which is not included in efficiency theories?
- (a) Differential efficiency
  - (b) Operating synergy



- (c) Operating efficiency
  - (d) Pure diversification
  - (e) Under valuation
- Q.22 Question for competitiveness does not include
- (a) Restructuring port folio
  - (b) Downsizing
  - (c) Reengineering
  - (d) Regeneration
  - (e) Capacity utilization
- Q.23 The new strategy paradigm does not include
- (a) Competitive challenge
  - (b) Analyzing the past
  - (c) Finding the future
  - (d) Mobilizing for the future
  - (e) Getting to the future first
- Q.24 Decomposing the economic engine does not include
- (a) Concept of served market
  - (b) Revenue and margin structure
  - (c) Configuration of skills and assets
  - (d) Flexibility and adaptiveness
  - (e) Exchange of shares
- Q.25 Inability to escape the past does not include
- (a) Contentment with current performance
  - (b) Vulnerability to new rules
  - (c) Resources substitute for creativity
  - (d) No gap between expectations and performance
  - (e) Accumulation of abundant resources'
- Q.26 Inability to invent the future does not include?
- (a) Optimized business system
  - (b) Deeply etched recipes
  - (c) Failure to reinvent leadership
  - (d) Unparalleled track record of success
  - (e) Success confirms strategy
- Q.27 SEBI stands for
- (a) Securities and exchange body of India
  - (b) Securities and exchange board of India
  - (c) Shares equities board of India
  - (d) Stock exchange board of India
  - (e) Stock exchange board of investors
- Q.28 Psychological influences on demand do not include
- (a) Motivation
  - (b) Attitude



- (c) Segmentation
  - (d) Learning
  - (e) Loyalty
- Q.29 Standard classes of organization structure do not include
- (a) Simple structure
  - (b) Machine bureaucracy
  - (c) Professional bureaucracy
  - (d) Capital structure
  - (e) Adhocracy
- Q.30 GAP Analysis is the Analysis of
- (a) Difference between the planned targets with the existing performance
  - (b) Difference between past performance and present performance
  - (c) Difference between two forecasts
  - (d) Difference between past targets and past performances
  - (e) Difference between master budget and flexible budget
- Q.31 Which one of the following is not the form of restructuring?
- (a) Expansion
  - (b) Reengineering
  - (c) Sell offs
  - (d) Corporate control
  - (e) Change in ownership structure
- Q.32 Business Process Re-engineering is:
- (a) Redesigning operational process
  - (b) Eliminating loss making processes
  - (c) Introducing qualified engineers
  - (d) Changing the product line
  - (e) Changing the business line
- Q.33 A core competence
- (a) Refers to a company's best executed functional strategy
  - (b) Is usually associated with one or more of a company's operating strategies
  - (c) Is something a firm does especially well in comparison to rival companies?
  - (a) All of the above except (b).
  - (b) None of the above
- Q.34 McKinsey's 7-s framework is used to analyze strategic attributes of an organization. Of the 7-s factors, which of the following can not be seen as a soft factor?
- (a) Staff
  - (b) Systems
  - (c) Skills
  - (d) Shared values
  - (e) None of the above



- Q.35 Kaplan and Norton's generic strategic map does not include:
- (a) Internal perspective
  - (b) Customer perspective
  - (c) Financial perspective
  - (d) Competitor perspective
  - (e) Learning and Growth perspective
- Q.36 Following relationship between firms allows them to create more value than they could create individually, while maintaining their independence.
- (a) Horizontal merger
  - (b) Vertical merger
  - (c) Integration
  - (d) Corporate Restructuring
  - (e) Strategic Alliance
- Q.37 An international or global competitive strategy is inherently more complex to formulate and manage because of:
- (a) Differences in markets from country to country
  - (b) Differences in competitors and competition from country to country
  - (c) Differences in labors costs, energy costs, transportation costs, tariffs and import restrictions, foreign exchange rate fluctuations, and the roles of governments from country to country.
  - (d) All of these
  - (e) None of these because global strategies are no more or no less complex than other strategies.
- Q.38 The motivation for participating in international markets includes:-
- (a) A desire to seek new markets
  - (b) A desire to access natural resource deposits in other countries
  - (c) A desire to lower costs
  - (d) The need to compete on a more equal footing with foreign competitors endeavoring to build a globally dominant market position.
  - (e) All of these.
- Q.39 The Government encourages industry, investment and FDI by creating SEZ's. The term SEZ stands for:-
- (a) Special Equity Zones
  - (b) Software Export Zones
  - (c) Special Economic Zones
  - (d) Special Entitlement Zones
  - (e) Special Effort Zones
- Q.40 Reducing headcount and selling assets / belt-tightening to face business downturn is called by Prahalad and Hamel as:
- (a) Numerator Management
  - (b) Denominator Management
  - (c) Turnaround Management
  - (d) Crisis Management
  - (e) Transition Management





- Q.41 The best test of a successful strategy implementation is:-
- (a) Whether structure is well matched to strategy
  - (b) Whether strategies and procedures are observed in a strategy supportive fashion
  - (c) Whether actual organizational performance matches or exceeds the targets spelled out in the strategic plan
  - (d) Whether it is made after the strategy is formulated so that it is supportive of the strategy
  - (e) The extent to which managers and employees fully support the company's strategy and long term direction
- Q.42 Business Process Re-engineering differs from TQM in bringing about
- (a) Incremental improvements
  - (b) Slow and steady changes
  - (c) Radical and drastic changes
  - (d) Long term improvements
  - (e) Process improvements
- Q.43 The managerial task of implementing strategy primarily falls upon the shoulders of:-
- (a) The chief executive officer
  - (b) First-line supervisors who have day-to-day responsibility for seeing that key activities are done properly.
  - (c) Vice presidents and major department heads.
  - (d) All managers, each attending to what needs to be done in their respective areas of authority and responsibility.
  - (e) The CEO and other senior officers
- Q.44 In assessing whether an organization is instilled with a spirit of high performance, the key test is:-
- (a) Whether employees are happy and satisfied.
  - (b) The level of employee morale
  - (c) Whether employees get along well together
  - (d) The extent to which the organization is focused on achievement and excellence
  - (e) Whether minimal levels of employee turnover rates and absenteeism
- Q.45 An anti takeover defense that creates securities that provide their holders with special rights in the event of a takeover is called:-
- (a) Poison Put
  - (b) Poison Pill
  - (c) Flip Pill
  - (d) Proxy rights
  - (e) Bear Hug
- Q.46 Joint Ventures may fail due to any/all of the following reasons, except:-
- (a) Lack of commitment and time in implementing the project
  - (b) Refusal by managers of one company to share knowledge with their counterparts in the Joint Venture
  - (c) Gaining of tax advantages
  - (d) Lack of commitment and time in project implementation
  - (e) Inability to develop the desired technology



- Q.47 According to C K Prahalad, competing for the future will be for:
- (a) Competency Leadership
  - (b) Operational Efficiency
  - (c) Cost Leadership
  - (d) Product Leadership
  - (e) Market Leadership
- Q.48 Major reason for the lower success in cross border merger is:-
- (a) Different cultures involved
  - (b) Shortage of finance
  - (c) Distance
  - (d) Government policies
  - (e) Technology transfer
- Q.49 Motorola learning lessons from Domino's Pizza and Federal express, to improve the speed of delivery for its cellular phones, comes under:
- (a) Strategic Benchmarking
  - (b) Functional Benchmarking
  - (c) Process Benchmarking
  - (d) Performance Benchmarking
  - (e) Internal Benchmarking
- Q.50 The Balanced Scoreboard is about:-
- (a) Creating the Vision, Communicating and Linking, Business Planning and Target Setting, Feedback and Learning
  - (b) Translating the Vision, Communicating and Linking, Business Planning and Target Setting, Feedback and Learning
  - (c) Translating the Vision, Coordinating, Business Planning and Target Setting, Feedback and Learning
  - (d) Creating the Vision, Coordinating, Business Planning and Target Setting, Feedback and Learning
  - (e) Creating the Vision, Communicating and Linking, Business Planning and Target Setting, Feedback and Learning
- Q.51 Following is not the characteristics of a MNC:-
- (a) The Managing Director should be from the Home Country
  - (b) It should have operations in a no. of countries around the globe
  - (c) Employees, stockholders and managers should be from different countries
  - (d) A high proportion of the company's assets, revenues or profits should be accounted for by the overseas operations.
  - (e) It should have affiliates or subsidiaries in foreign countries.
- Q.52 Sharing investment is one of the basic motives of:
- (a) Strategic alliances
  - (b) Joint Ventures
  - (c) MOU
  - (d) Conglomerate acquisition
  - (e) Vertical merger



- Q.53 Coke acquiring many bottling companies to augment its marketing and supplying capabilities is an example of:
- (a) Vertical merger
  - (b) Conglomerate merger
  - (c) Horizontal merger
  - (d) Merger of equals
  - (e) Merger Through Amalgamation
- Q.54 In a hostile takeover, the acquirer trying to put pressure on the management of the target firm by threatening to make an open offer is known to be:
- (a) Tender offer
  - (b) Street Sweep
  - (c) Bear Hug
  - (d) Strategic Alliance
  - (e) Brand Power
- Q.55 Shamsud Chowdhury identified and named the macro and external factors responsible for a firms decline as:
- (a) K-Factor
  - (b) R-Factor
  - (c) Q-Factor
  - (d) Z-Factor
  - (e) E-Factor
- Q.56 Technology can modify industry structure through:
- (a) change in economy of scale
  - (b) creation of new products and / or services
  - (c) change in the bargaining relationship between the industry and its buyers or its suppliers
  - (d) combination of (a) and (b) above
  - (e) all of the above
- Q.57 Marketing Research studies are undertaken:
- (a) to measure brand loyalty of a class of consumers
  - (b) to predict market potential of a product on a future date
  - (c) to understand product-price relationships
  - (d) to make out a case for revision of an existing strategy
  - (e) all of the above
- Q.58 Successful differentiation strategy allows the company to:
- (a) gain buyer loyalty to its brands
  - (b) charge high price premium
  - (c) depend only on intrinsic product attributes
  - (d) have product quality that exceeds buyers' needs
  - (e) segment a market into distinct group of buyers
- Q.59 The corporate governance frame work should ensure
- (a) rights of stakeholders as established by law
  - (b) equitable treatment to all shareholders



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- (c) timely and accurate disclosure of all material matters including finance, performance and ownership of the company
  - (d) all of the above and social responsibility
  - (e) none of the above
- Q.60 Organization culture is:
- (a) appreciation for the arts in the organization
  - (b) ability of the organization to act in a responsible manner to its employees
  - (c) combination of (a) and (b) above
  - (d) deeper level of basic assumptions and beliefs that are shared by the members of the firm
  - (e) none of the above
- Q.61 Switching costs refer to the:
- (a) cost of changing a firm's strategic group
  - (b) cost of installing a new electric switches in a factory when technology changes
  - (c) one time costs incurred by the customers when they buy from a different supplier
  - (d) all of the above
  - (e) none of the above
- Q.62 Backward integration occurs when:
- (a) a company produces its own inputs
  - (b) an integrated company disintegrates into units
  - (c) a company is concentrated in a single industry
  - (d) there are no linkages among the business units
- Q.63 Innovation strategy is:
- (a) defensive strategy
  - (b) offensive strategy
  - (c) responding to or anticipating customer and market demands
  - (d) guerrilla strategy
  - (e) harvesting strategy
- Q.64 Porter's 5 forces model have not touched upon:
- (a) Threats of potential new entrants
  - (b) Competitive strategy of different players
  - (c) Technological development within similar industry
  - (d) Bargaining power of buyers / sellers
  - (e) Price Strategy of substitutes
- Q.65 Technology adaptation is:
- (a) the complete assimilation of technical know-how acquired from collaborator
  - (b) the acquisition of technical know-how from the source external to the firm
  - (c) the acquisition of design from a collaborator and carrying onto necessary modifications thereto
  - (d) the improvement of the level or quality
  - (e) none of the above



- Q.66 The strategy of the Tata Group in India could be viewed as a good example of
- (a) Conglomerate diversification
  - (b) Market development
  - (c) Price transfers
  - (d) Concentric diversification
  - (e) Cost leadership
- Q.67 For an entrepreneur
- (a) Vision is before the mission
  - (b) Mission is before the vision
  - (c) Both are developed simultaneously
  - (d) Vision or mission are un-important issue
  - (e) Profitability is most critical
- Q.68 Which of the following market structures would be commonly identified with FMCG products?
- (a) Monopoly
  - (b) Monopolistic competition
  - (c) Oligopoly
  - (d) Perfect competition
  - (e) None of the above
- Q.69 The Product Market matrix comprising of strategies of Penetration, Market Development, Product Development and diversification was first formulated by
- (a) Ansoff
  - (b) Drucker
  - (c) Porter
  - (d) Andrews
  - (e) Prahlad
- Q.70 If an airline company purchases a hotel, this would be an example of
- (a) Strategic alliance
  - (b) Backward integration
  - (c) Forward integration
  - (d) Market Expansion
  - (e) None of the above
- Q.71 The acquisition of IPCL, Vadodra by Reliance Petrochemicals would be a good example of
- (a) Horizontal integration
  - (b) Vertical Integration
  - (c) Concentric Diversification
  - (d) Forward Integration
  - (e) Diversification
- Q.72 HLL's decision to buy out Lakme, when both are in the cosmetics business, would be an example of
- (a) Horizontal Integration



- (b) Corporate advantage
  - (c) Learn-Organization
  - (d) Vertical Integration
  - (e) Strategic tie-up
- Q.73 Indian Airlines decreasing the airfare on the Delhi-Mumbai sector following the introduction of the No-frills airlines would be an example of
- (a) Cost Leadership
  - (b) Price Leadership
  - (c) Product Differentiation
  - (d) Focus
  - (e) Market Retention
- Q.74 The essential ingredients of Business Process Re-engineering are:
- (a) Continuous improvements of products, processes and technologies.
  - (b) Advanced planning the areas of technologies, processes and strategic partnerships, etc.
  - (c) Fundamental rethinking and radical redesign of business process to achieve dramatic results.
  - (d) Generation, comparison and evolution of many ideas to find out one worthy of development.
  - (e) Identification and selection of layouts most suited for products and processes.
- Q.75 BSNL's plan behind introduction of "Internet Plan 99", ISDN, Virtual Private Net work, etc., would be an example of:
- (a) Utilization of newer technologies
  - (b) Portfolio generation
  - (c) Diversification of business
  - (d) Product Development
  - (e) Encash new opportunities
- Q.76 Mckinsey's 7-s framework consists of:
- (a) Structure, strategy, software, skills, styles, staff and supervision
  - (b) Structure, strategy, software, skills, styles, syndication and shared values
  - (c) Structure, strategy, software, skills, steering power, styles and shared values
  - (d) Structure, strategy, staff, skill, systems, shard values, style
  - (e) None of the above.
- Q.77 Offensive strategy is a strategy:
- (a) For small companies that consider offensive attacks in the market
  - (b) For those companies that search for new inventory opportunities to create competitive advantage
  - (c) For the market leader who should attack the competitor by introducing new products that make existing ones obsolete
  - (d) For those companies who are strong in the market but not leaders and might capture a market share from the leader
  - (e) None of the above



- Q.78 The maturity stage of the PLCC is most often associated with:
- (a) rapid growth
  - (b) uncertainty in market
  - (c) improvements in manufacturing process
  - (d) high exit barriers
  - (e) realignment of competitive structure
- Q.79 Benchmarking is:
- (a) The analytical tool to identify high cost activities based on the 'Pareto Analysis'.
  - (b) The search for industries best practices that lead to superior performance;
  - (c) The simulation of cost reduction schemes that help to build commitment and improvement of actions;
  - (d) The process of marketing and redesigning the way a typical company works;
  - (e) The framework that earmarks a linkage with suppliers and customers;
- Q.80 When two firms together produce, warehouse, transport and market products, it is said to be a case of:
- (a) Consolidation
  - (b) Amalgamation
  - (c) Joint Venture
  - (d) Strategic Alliance
  - (e) All of the above
- Q.81 When strategy of preplanned series of re-launches is:
- (a) harvesting strategy
  - (b) offensive strategy
  - (c) defensive strategy
  - (d) pruning strategy
  - (e) repositioning strategy
- Q.82 Identifying and evaluating key social, economic, technological and competitive trends/ events comprise of:
- (a) Developing a mission statement
  - (b) An implementing strategy
  - (c) Performing an external audit
  - (d) Identifying market trends
  - (e) Conducting an internal audit
- Q.83 SAIL's famous advertising campaign of "there is a bit of steel in everyone's life" was meant to:
- (a) Gain buyers awareness about its versatile product range
  - (b) Create an image of superior performance
  - (c) Inform new buyers about its special products
  - (d) Enhance product quality perception
  - (e) Achieve its mission
- Q.84 Which of the following best describes an investment centre?
- (a) A centre for which managers are accountable only for costs



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- (b) A centre for which managers are accountable only for financial outputs in the form of generating sales revenue.
  - (c) A centre for which managers are accountable for profit.
  - (d) A centre for which managers are accountable for profit and current and non-current assets
- Q.85 A flexible budget is
- (a) A budget which by recognizing different cost behavior patterns is designed to change as volume of activity changes.
  - (b) A budget for a twelve month period which includes planned revenues, expenses, assets and liabilities.
  - (c) A budget which is prepared for a rolling period which is reviewed monthly, and updated accordingly.
  - (d) A budget for semi-variable overhead costs only.
- Q.86 Risk management techniques do not include
- (a) Risk avoidance
  - (b) Risk premium
  - (c) Risk retention
  - (d) Risk reduction
  - (e) Risk transfer
- Q.87 Types of risks do not include
- (a) Business risks
  - (b) Market risks
  - (c) Interest rate risks
  - (d) Default risks
  - (e) Uncertainty
- Q.88 Types of insurance do not include
- (a) Life
  - (b) Property
  - (c) Break down of machinery
  - (d) Consequential losses
  - (e) Intellectual capability
- Q.89 Insurance premium is computed by
- (a) The product of annual rate and sum insured
  - (b) The product of annual rate and value of property
  - (c) The product of monthly rate and sum insured
  - (d) The product of monthly rate and value of property
  - (e) Sum of annual rate and sum insured
- Q.90 Portfolio management reduces
- (a) Systematic risk
  - (b) Unsystematic risk
  - (c) Interest rate risk
  - (d) Default risk
  - (e) Inflation risk





## ANNEXURE 1

- Q.91 Unsystematic risk relates to
- (a) Market risk
  - (b) Beta
  - (c) Inherent risk
  - (d) Interest rate risk
  - (e) Inflation risk
- Q.92 Financial risks do not include
- (a) Trade cycles
  - (b) Interest rate risk
  - (c) Inflation risk
  - (d) Default risk
  - (e) Exchange risk
- Q.93 Project risk does not include
- (a) Institutional risk
  - (b) Turbulence
  - (c) Completion risk
  - (d) Market related risk
  - (e) Uncertainty
- Q.94 Instruments that hedge against risk do not include
- (a) Letter of credit
  - (b) Guarantee
  - (c) Underwriting
  - (d) Factoring
  - (e) Rights issue
- Q.95 RORAC means
- (a) Risk oriented return against capital
  - (b) Return on real asset computation
  - (c) Return on risk-adjusted capital
  - (d) Return on risky assets and capital
  - (e) Return on risk associated capital
- Q.96 RAROC means
- (a) Risk-adjusted return on capital
  - (b) Return adjusted risk oriented capital
  - (c) Risk and return on capital
  - (d) Risk affected return on capital
  - (e) Return associated risk on capital
- Q.97 VaR means
- (a) Variation associated risk
  - (b) Valuation and risk
  - (c) Value at risk
  - (d) Value and return
  - (e) Variance at risk



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- Q.98 Standard deviation measures
- (a) Risk
  - (b) Uncertainty
  - (c) Certainty
  - (d) Variance
  - (e) Forecast errors
- Q.99 Commercial insurance do not include
- (a) Jewelers block policy
  - (b) Bankers indemnity policy
  - (c) Shop keepers policy
  - (d) Marine cargo policy
  - (e) Endowment policy
- Q.101 Life insurance do not include
- (a) Whole life
  - (b) Pension
  - (c) Accident
  - (d) Endowment
  - (e) Motor Vehicle
- Q.102 General insurance do not include
- (a) Fire policy
  - (b) Burglary policy
  - (c) Machine break down policy
  - (d) Contractors all risk policy
  - (e) Life policy
- Q.103 Insurance is not a
- (a) A contract Uberrimae Fide
  - (b) A contract based on insurable interest
  - (c) A contract of indemnity
  - (d) A contract of guarantee
  - (e) A cover for risk
- Q.104 Risk is defined as
- (a) A variation from the actual
  - (b) A variation from the expected
  - (c) A possible event
  - (d) A possible uncertainty
  - (e) Certainty of failure
- Q.105 NRAA has been created in November 2006 to support up gradation and management of dry land and rain fed agriculture. NRAA stands for
- (a) National Rain fed Area Authority
  - (b) National Rural farming Areas Authority
  - (c) National Reconstruction Asset Allocation
  - (d) National Reallocation of Available Assets
  - (e) None of the above



- Q.106 (NAIS) according to Indian Government stands for
- (a) National Assets Insurance Scheme
  - (b) National Agricultural Insurance Scheme
  - (c) National Aerospace Information System
  - (d) National Agricultural Investment Scheme
  - (e) None of the above
- Q.107 (NREGS) ) according to Indian Government stands for
- (a) National Rural Energy Guarantee Scheme
  - (b) National Rural Employment Guarantee Scheme
  - (c) National Rural Executive Grievance Scheme
  - (d) National Reconstruction Gains Scheme
  - (e) None of the above
- Q.108 Contribution of management accountant in validation of Mission is
- (a) Be part of feedback sessions for validation to identify the impact of external forces
  - (b) Be part of feedback sessions for validation to identify the impact of financial aspect
  - (c) Be part of feedback sessions for validation to identify the impact of technological forces
  - (d) Be part of feedback sessions for validation to identify the impact of competitive forces
  - (e) None of the above
- Q.109 Contribution of management accountant in environmental scan and SWOT analysis is
- (a) Research information on competitive activity
  - (b) Collate information on key environmental factors and statutory regulations
  - (c) Research, collect and collate information on statutory regulations
  - (d) Research, collect and collate information on key environmental factors including statutory regulations and competitive activity
  - (e) None of the above
- Q.110 Contribution of management accountant in strategic change portfolio exercise is
- (a) To lay down strategic initiatives in a chronological order over the time horizon of the strategy
  - (b) Be part of cross functional team to lay down tactical initiatives
  - (c) Be part of cross functional team to lay down strategic initiatives in a chronological order over the time horizon of the strategy
  - (d) Be part of cross functional team to perform financial audit
  - (e) None of these
- Q.111 Contribution of management accountant to sustain kaizen strategy is
- (a) Be part of cross functional teams to identify assumptions and critical success factors which need revision
  - (b) Be part of the cross functional team to identify critical business process which need specific attention for modification and improvement



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- (c) To lead production team for modification and improvement of production processes
- (d) Both (a) and (b)
- (e) None of the above
- Q.112 Value chain includes
- (a) Customer service, Distribution, Marketing
- (b) Production, Product and service and process design
- (c) Research and development
- (d) All of the above
- (e) None of the above
- Q.113 Target price is
- (a) Market driven
- (b) Product driven
- (c) Cost driven
- (d) Investment driven
- (e) None of the above
- Q.114 Value analysis aims at
- (a) increasing sales by economizing expenditure and increasing productivity
- (b) reducing cost by economizing expenditure and increasing productivity
- (c) reducing profits by increasing expenditure and increasing productivity
- (d) reducing cost by economizing expenditure and increasing man power
- (e) None of the above
- Q.115 Value engineering job plan consists of the following phases
- (a) General phase, Information phase, Function Phase
- (b) Creation Phase, Evaluation Phase, Investigation Phase
- (c) Recommendation Phase
- (d) All the above
- (e) Non of the above
- Q.116 ABC involves
- (a) Innovative approach to reduction of costs
- (b) Process analysis, cost drivers and innovative approach to reduction of costs
- (c) Process analysis and innovative approach to reduction of costs
- (d) Process analysis and cost drivers to reduction of costs
- (e) None of the above
- Q.117 The attribution of costs other than the purchase price, (e.g. distribution, warehousing, retailing) to each product line. Thus the net profit as opposed to gross profit can be identified for each product. This concept is known as:
- (a) Direct product profitability
- (b) Indirect product profitability
- (c) Direct product costs
- (d) Indirect product cost
- (e) None of these



- Q.118 Product development policy and strategy involves four phases namely,
- (a) Concept development, product marketing, product/ process engineering, product launch
  - (b) Concept development, product planning, product/ process engineering, pilot production/ ramp up
  - (c) Product planning, product/ process engineering, pilot production/ ramp up, marketing
  - (d) Concept development, product planning, pilot production/ ramp up, sales
  - (e) None of the above
- Q.119 MTO stands for
- (a) Mark to order
  - (b) Move to order
  - (c) Move to open area
  - (d) Make to order
  - (e) None of the above
- Q.120 MTS stands for
- (a) Make to sell
  - (b) Make to stock
  - (c) Move to sell
  - (d) Move to store
  - (e) Mail to store
- Q.121 MTA stands for
- (a) Mark to area
  - (b) Move to assembly
  - (c) Make to assembly
  - (d) Monitor in area
  - (e) Move to accelerate
- Q.122 The variables involved in the location of a warehouse are:
- (a) Processing cost of volume shipment, Transportation cost of volume shipment
  - (b) Warehousing cost of average shipment, Local delivery of average shipment
  - (c) Number of average shipments per volume shipment, Processing cost of average shipment, Direct freight cost of average shipment
  - (d) All of the above
  - (e) None of the above
- Q.123 The world class approach to cost management would require understanding
- (a) The total production management
  - (b) Total quality management
  - (c) Align the total cost management on the lines of the above two strategies
  - (d) Competition
  - (e) None of the above
- Q.124 Pre-loss objectives in risk management are
- (a) Understanding environment, Fulfillment of external obligations – statutory requirements



- 
- (b) Reduction in anxiety through preventive measures
  - (c) Social obligations to make people aware of the risks
  - (d) Both (a) and (b)
  - (e) All the above
- Q.125 Post-loss objectives in risk management are
- (a) Survival of the organization, Continuance of the organization's operations
  - (b) Initiate and improve the income / earnings
  - (c) Obligation to society
  - (d) Both (a) and (b)
  - (e) All the above
- Q.126 Risk management strategies are
- (a) Avoid Risk, Reduce Risk, Retain Risk
  - (b) Combine Risks, Transfer Risk, Share Risk
  - (c) Hedge Risk.
  - (d) Both (a) and (c)
  - (e) All of the above
- Q.127 Physical Risk includes
- (a) Natural calamities: fire, tsunami, floods, earthquake, etc.
  - (b) Factory accidents due to fire, mishandling of equipment, breakdown and explosions
  - (c) Occupational hazards
  - (d) Both b and c
  - (e) All the above
- Q.128 Business Risk which is inherent to a business due to
- (a) Its nature and susceptibility to environment, e.g., change of fashion, business cycles
  - (b) Its nature and susceptibility to environment, e.g., conflicts like war, insurgency
  - (c) Its nature and susceptibility to environment, e.g., cross border terrorism, technological obsolescence, etc.
  - (d) All of the above
  - (e) None of the above
- Q.129 Financial Risk arises out of
- (a) The nature of financial transactions
  - (b) Conduct of business and investment
  - (c) Both (a) and (b)
  - (d) Increased competition
  - (e) None of the above
- Q.130 Physical risk arising out of Social, Political, Economic and Legal Environments are often identified
- (a) Through the performance of lead indicators
  - (b) Through the performance of lagging indicators
  - (c) Through the performance of lead and lag indicators



- (d) Through the performance of the government
  - (e) None of the above
- Q.131 While applying statistical analysis, two concepts are applied for assessment of risk:
- (a) Measures of Central Tendency
  - (b) Measures of Variation
  - (c) Measures of end result
  - (d) Both (a) and (b)
  - (e) All the above
- Q.132 Often analysts focus on characteristics of loss distributions, such as
- (a) Expected Loss
  - (b) Standard Deviation of loss
  - (c) Maximum probable loss
  - (d) Both (b) and (c)
  - (e) All the above
- Q.133 The concept of \_\_\_\_\_ is the process of identification of separate risks and put them all together in a single basket, so that the monitoring, combining, integrating or diversifying risk can be implemented.
- (a) Physical risk
  - (b) Financial risk
  - (c) Pooling risk
  - (d) Business risk
  - (e) Sharing risk
- Q.134 Variability in return on investments in the market is referred to as
- (a) Market risk
  - (b) Physical risk
  - (c) Financial risk
  - (d) Pooling risk
  - (e) Business risk
- Q.135 \_\_\_\_\_ refers to the uncertainty of market volumes in the future and the quantum of future income caused by the variations in the interest rates.
- (a) Market risk
  - (b) Physical risk
  - (c) Interest rate risk
  - (d) Pooling risk
  - (e) Exchange risk
- Q.136 \_\_\_\_\_ is the uncertainty of the purchasing power of the monies to be received, in the future.
- (a) Purchasing power risk
  - (b) Market risk
  - (c) Physical risk
  - (d) Interest rate risk
  - (e) Exchange risk



- Q.137 “Building block” approach related to asset liability model refers to successive levels in an organization. The levels are:
- (a) Standalone risks within a single risk factor are accumulated (Ex, credit risk)
  - (b) Accumulation of risks arising out of different risk factors with in a single business area (Ex, combining the assets, liability and operating risks in companies operations)
  - (c) At this level risks across all the business lines in a corporate are aggregated together
  - (d) All the above
  - (e) None of the above
- Q.138 \_\_\_\_\_ is a technique to compute matching of assets and liabilities by which a prudent management of an investment portfolio can be properly taken care of.
- (a) Liability management
  - (b) Asset liability management
  - (c) Risk management
  - (d) Creditor management
  - (e) None of the above
- Q.139 The most commonly used techniques for measurement of liquidity risks is \_\_\_\_\_
- (a) The gap analysis of maturing assets to the maturing liabilities
  - (b) The financial analysis
  - (c) The audit of maturing assets
  - (d) The gap analysis of current assets to the maturing liabilities
  - (e) None of the above
- Q.140 ECOR in risk management means
- (a) Expected cost of ruin
  - (b) Expected cost of opportunity loss
  - (c) Economic cost of ruin
  - (d) Economic cost of opportunity loss
  - (e) None of the above
- Q.141 EPD in risk management means
- (a) Economic policy holder deficit
  - (b) Expected probability of holder deficit
  - (c) Expected policy holder deficit
  - (d) Expected policy holder default
  - (e) None of the above
- Q.142 Solvency related risk measures do not include
- (a) Probability of ruin
  - (b) Short fall risk
  - (c) Value at risk
  - (d) Return on equity
  - (e) Tail value at risk
- Q.143 Performance related risk measures do not include
- (a) Operating earnings





- (b) EBITDA
  - (c) WACC
  - (d) EVA
  - (e) Shortfall risk
- Q.144 Value migration suggests the need to be monitor on a continuous basis to detect and measure the changes happening in value flows:
- (a) Between the industries
  - (b) Between companies
  - (c) Between divisions of a company
  - (d) Both (a) and (b)
  - (e) All the above
- Q.145 The a-priori segmentation method does not include
- (a) Standard industrial classification groups (SIC)
  - (b) Patterns of product purchase and usage
  - (c) Usage groups (Volume users, lean users, and non-users)
  - (d) VALS (Values and lifestyles classification system) and
  - (e) PRISM (Geo demographic classification system)
- Q.146 Post-hoc segmentation method does not include
- (a) Preferences to product attributes and values
  - (b) Basic demographic groups (Age, sex and household composition)
  - (c) Brand preferences and brand loyalty
  - (d) Price sensitivity
  - (e) Usage groups (Volume users, lean users, and non-users)
- Q.147 Judy Strauss and Raymond Frost's e-marketing model defines e-business as
- (a)  $EB = EC + SCM + ERP$
  - (b)  $EB = EC + BI + CRM + SCM + ERP$
  - (c)  $EB = EC + BI + CRM$
  - (d)  $EB = CRM + SCM + ERP$
  - (e)  $EB = SCM + ERP$
- Q.148 The differential effect on a customer whose response to a product or service is through the knowledge of the brand comparison with other brands is known as
- (a) Customer equity
  - (b) Market share
  - (c) Brand equity
  - (d) Brand loyalty
  - (e) Product life cycle
- Q.149 SCO means
- (a) Successful competitor outcome
  - (b) Successful commercial organization
  - (c) Successful customer outcomes
  - (d) Successful competitor outlet
  - (e) None of the above



| Answers          |         |                  |         |                  |         |
|------------------|---------|------------------|---------|------------------|---------|
| Question numbers | Answers | Question numbers | Answers | Question numbers | Answers |
| 1                | e       | 36               | e       | 71               | a       |
| 2                | e       | 37               | d       | 72               | a       |
| 3                | b       | 38               | e       | 73               | e       |
| 4                | a       | 39               | c       | 74               | c       |
| 5                | c       | 40               | b       | 75               | a       |
| 6                | e       | 41               | c       | 76               | d       |
| 7                | a       | 42               | c       | 77               | d       |
| 8                | d       | 43               | d       | 78               | d       |
| 9                | a       | 44               | d       | 79               | b       |
| 10               | c       | 45               | b       | 80               | c       |
| 11               | a       | 46               | c       | 81               | e       |
| 12               | c       | 47               | a       | 82               | c       |
| 13               | b       | 48               | a       | 83               | e       |
| 14               | d       | 49               | a       | 84               | d       |
| 15               | e       | 50               | b       | 85               | a       |
| 16               | b       | 51               | d       | 86               | b       |
| 17               | d       | 52               | b       | 87               | e       |
| 18               | d       | 53               | a       | 88               | e       |
| 19               | b       | 54               | a       | 89               | a       |
| 20               | e       | 55               | a       | 90               | a       |
| 21               | c       | 56               | d       | 91               | c       |
| 22               | e       | 57               | e       | 92               | a       |
| 23               | b       | 58               | b       | 93               | e       |
| 24               | e       | 59               | d       | 94               | e       |
| 25               | b       | 60               | d       | 95               | c       |
| 26               | d       | 61               | c       | 96               | a       |
| 27               | b       | 62               | a       | 97               | c       |
| 28               | c       | 63               | c       | 98               | a       |
| 29               | d       | 64               | b       | 99               | e       |
| 30               | a       | 65               | c       | 100              | e       |
| 31               | a       | 66               | a       | 101              | e       |
| 32               | a       | 67               | a       | 102              | d       |
| 33               | d       | 68               | c       | 103              | b       |
| 34               | e       | 69               | a       | 104              | a       |
| 35               | d       | 70               | c       | 105              | b       |

**ANNEXURE 1**

| Question numbers | Answers | Question numbers | Answers | Question numbers | Answers |
|------------------|---------|------------------|---------|------------------|---------|
| 106              | b       | 121              | b       | 136              | a       |
| 107              | a       | 122              | d       | 137              | d       |
| 108              | b       | 123              | c       | 138              | b       |
| 109              | d       | 124              | e       | 139              | a       |
| 110              | c       | 125              | e       | 140              | c       |
| 111              | d       | 126              | e       | 141              | c       |
| 112              | d       | 127              | e       | 142              | d       |
| 113              | a       | 128              | d       | 143              | e       |
| 114              | b       | 129              | c       | 144              | e       |
| 115              | d       | 130              | a       | 145              | b       |
| 116              | b       | 131              | c       | 146              | b       |
| 117              | a       | 132              | e       | 147              | b       |
| 118              | b       | 133              | c       | 148              | c       |
| 119              | d       | 134              | a       | 149              | c       |
| 120              | b       | 135              | c       |                  |         |



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## **ANNEXURE 2**

### **SUGGESTED QUESTIONS AND ANSWERS**

#### **Study Note 1**

#### **STRATEGY FORMULATION**

**Question 1: Identify various steps for strategy formulation.**

**Answer:**

The formal strategic management process has the following steps:

- Develop Corporate Vision
- Develop Corporate Mission
- Develop Corporate Goals / Strategic Objectives
- Commission SWOT Analysis – External Analysis of Opportunities and Threats and Internal Analysis of Strength and Weaknesses
- Develop there from Functional Level Strategy, Business Level Strategy, Global Strategy and Corporate Level Strategy.
- Initiate Planning Process – Corporate Planning, Long Range Planning, Business Policy Planning.

**Question 2: Identify various steps for strategy implementation**

**Answer:**

- Lay Down Principles For Corporate Performance, Governance and Ethics
- Operationalising Strategy
- Execute the Strategy using various tools
- Introduce Controls
- Detect Variance, Measure Variance, Match against Control & Initiate Feed Back for Revision if Necessary

**Question 3: Identify the various steps for developing mission statements synthesizing various concepts evolved over a time horizon.**

**Answer:**

In short a perfect Mission statement should include:

- Definition of the business in which the company would like to grow
- It sets apart the company from its competitors
- It is inclusive in that all the stake holders are covered
- The behavioral characteristics of the organization flowing out of values and beliefs
- The purpose for which the organization exists
- Clarify the same and
- The mission statement should be inspiring.



#### Question 4: Why do competing objectives arise and how are they resolved?

##### Answer:

Existence of a corporate body in an environment bounded by social, political, economic and technological developments is bound to have competing objectives arising out of the following:

- Balancing between profit maximization and social responsibilities
- Incongruence between goals of different stake holders
- Mismatch of Internal Goals.

These problems are usually resolved by adopting the following techniques:

**Ranking:** Managements can rank the various priorities and try to achieve a balance through setting particular levels of achievement, e.g., a target level for ROCE, as against a target for pollution control expenditure to meet their social responsibilities to the society.

**Weightage:** The above ranking can be made more meaningful by according different weights to the priorities, and the weighted score can be compared.

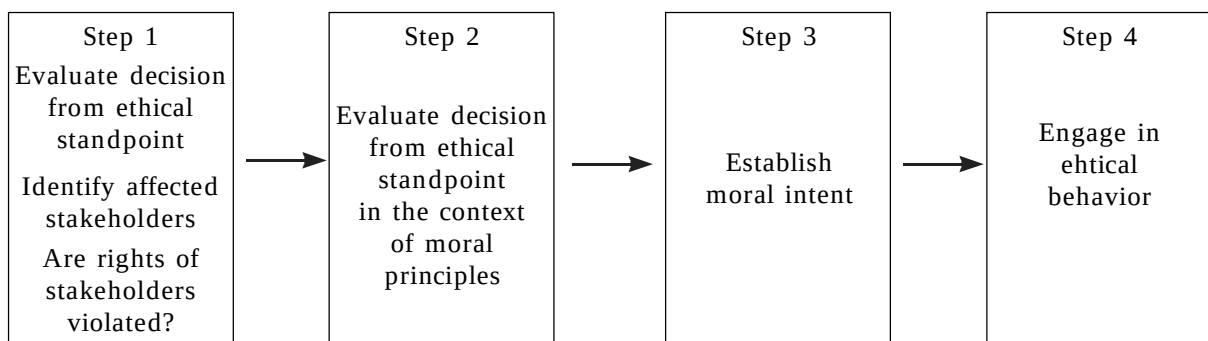
**Composite Measures:** Effective tools like balancing score card can be used to gauge the impact of performance both physically and financially.

#### Question 5: Develop an approach for ethical decision making.

##### Answer:

Formulation of goals should also take into account following responsibilities arising out of: ethical, discretionary, legal and economic areas. The ethical approach dictates what the company should do while the discretionary approach leaves enough elbow room. The legal responsibility lays down what the company has to do. While the economic obligations determine “the must do objectives”.

A Model of Ethical Decision Making



#### Question 6: How environmental consciousness is incorporated into a SWOT analysis?

##### Answer:

Business should be conducted in a way that preserves natural environment. For a good business it is fundamental to respond to the following factors:



1. Consumer Demand for environmentally safe products has become a necessity
2. There is a growing resistance against pollution of the environment from the society
3. This resistance is directed into environmental advocacy troops all over the world
4. Statutory regulations for preserving environment and pollution control are preserving environment and pollution controls are becoming more stringent
5. Funds providers are also particular about the environment liabilities of the company seeking loans
6. Stake holders hesitate to do business with environmentally weak firms
7. Litigations due to violations against statutory environmental requirements are on the increase. So many corporate bodies are becoming environmentally proactive which would mean that they integrate the factors and the limitations of the environment in their strategies for improving efficiency and effectiveness.

**Question 7: What are the major outcomes of SWOT analysis?**

**Answer:**

The three major outcomes from such an analysis are:

- Matching the company strengths to take advantage of the opportunities in the market place E.g. Converting fast food stands to full time restaurants
- Converting threat or weakness into an advantage.
- Eliminate the weaknesses that expose the company to external threats.

**Question 8: What are the three phases of internal analysis?**

**Answer:**

The internal analysis is carried out in three phases.

**First Phase:** Understanding the process by which the company creates value for the customer while earning a profit for the company. For this purpose the company needs to know the role of resources, capabilities and distinctive competencies in this process.

**Second Phase:** Comprehension of the importance of superior efficiency innovation, quality and responsiveness to customers for creating value for the customer and earning good profits for the company.

**Third Phase:** Analysis of the sources of the company's competitive advantage to identify the drivers for the profitability of the company as also the opposition for holistic improvement.

**Distinctive competencies** are company specific strengths to differentiate its products and / or achieve significantly lower cost than its competitors, thus gaining a competitive advantage. These competencies can be manufacturing technique, inventory control systems, optimizing cycle time, evolving innovative marketing techniques or establishing a well oiled net work



of distribution. The distinctive competencies evolve out of two main sources, viz., resources and capabilities.

**Question 9: Define forward integration with an example.**

**Answer:**

Forward Integration: Enhancing ownership and control over downstream products and distribution of the same.

Example: Sugar Industry, Alcohol and portable spirit along with various distribution outlets

**Question 10: Define market development with an example.**

**Answer:**

Market Development: Positioning present products or services into new geographic area.

Example: Introducing existing brands of potable liquor in other countries.

**Question 11: Define the four level strategies.**

**Answer:**

The alternative strategies can be grouped under FOUR heads as follows:

- Functional Level Strategy
- Business Level Strategy
- Global Level Strategy and
- Corporate Level Strategy

**Functional Level Strategy**

Functional Level Strategy aims at harnessing the internal strengths and eliminating the weakness. These strategies are focused on the effectiveness of a Company's operation to

- Achieve superior efficiency
- Quality
- Innovation and
- Customer responsiveness

**Business Level Strategy**

Functional level strategies are instrumental in lowering costs and lend stability to a cost structure of a product or service as required by a business strategy or in other words the results of functional level strategies are inputs to a Business level strategy.

Business level strategies can be different according as how a company endeavors to create value for customers. The main focus of business level strategy is to develop a firm specific business model to enable a company to achieve competitive advantage over its rivals. This strategy entails identification of

- Customer's needs



- Customer Groups and
- Distinctive competencies which are needed for satisfying the customers.

### **Global Level Strategy**

The strategies required to operate in different countries across the globe called for a new type of strategy on the global environment. Thus the global strategies depended on two major issues, viz.

- Decision making in regard to geographical markets, timing of such an entry and their scale of such an entry and
- The ways and means a company should utilize to enable such a foreign investment.

### **Corporate Level Strategy**

Corporate Level Strategy engages itself in the identification of businesses which a company should endeavor. The value creation activities are to be performed in those businesses and suitable methods for expansion or contraction of different businesses. Four major strategies normally pursued are

- Horizontal integration
- Vertical integration
- Strategic outsourcing and
- Diversification.

### **Question 12: Write short notes on**

**Learning curve**

**De-bottlenecking**

**Innovative projects**

**Answer:**

#### **Learning curve**

Learning effects are savings in costs that derive from learning by doing for e.g., a laborer learns through repetition as to how best he could perform a task. Effects of learning can be plotted on a curve known as Learning Curve. Studies have been instituted to understand the aspects of learning effects and to improve training, education of labor, under Indian ethos this approach is known as “SAMAVAYA” which is holistic to include the 5Ws and 1H, viz., WHAT, WHO, WHEN, WHERE, WHY and HOW. Studies have been conducted in manufacturing and services areas. It was noted that learning effects proved very beneficial whenever processes had complex steps like assembly processes, chemical processes, etc. In the area of services studies conducted in the health care industry proved that mortality rate came down significantly with the Learning Curve.

#### **De-bottlenecking**

Increase output through synergy as well as effective utilization of capacity without any





increased fixed cost. This process reduces cost of the production significantly. Application of Theory of Constraints is a pointer in this direction to remove the bottle neck and effectively increase flow of materials through all processes thus increasing output. Superior efficiency could be achieved by improving productivity as well as through application of value engineering in providing alternative raw materials. This should not compromise quality.

### **Innovative projects**

Innovative project should be structured properly to include the following steps:

Project selection should be made after a brain storming session of a group represents a cross section of a company as also include experts in a field drawn from external sources.

The project so identified should be able to produce or innovate a product / service in a foreseeable future, i.e., 2 to 3 years, as the life cycle of a product / service is reducing very rapidly and technological obsolescence sets in very easily.

Cross functional integration is extremely important in that the product identified is driven by customer needs; articulated or unarticulated, manufacturability of the new product is assured on a commercial scale. Development costs are held under check through quality function deployment and different milestones leading to commercialization are fully understood by all the members of the cross functional team.

### **Question 13: Write short notes on**

**Experience curve**

**International strategy**

**Multi domestic strategy**

**Global strategy**

**Transnational strategy**

**Answer:**

### **Experience curve**

Utilizing the local pool of employees through the learning effects and through economies of scale, the employees develop greater comprehension of the processes and are in a position to improve and innovate on these processes due to the experience they have gained over the years of repetitive operations. The advantages of experience curve have been reaped through empowerment by many big multi nationals. The conversion cost especially in the chemical industry and oil refining industry in India is nearly  $1/10^{\text{th}}$  of the cost prevailing in the developed countries. Many pharmaceutical multi nationals had chosen India for contract, production or formulation for catering to the markets in India and the Far East. This strategy has reduced their cost of production as also the logistic cost.

**International Strategy** is based on transfer of distinctive competencies to foreign markets. Advantages include transfer of distinctive competencies. Disadvantages include inadequate local response, unrealized location economics, unavailable advantage due to experience-curve.



**Multi Domestic Strategy** depends on the ability to offer customized products catering to local market's requirements. Advantages include customization of product to suit local market. Disadvantages include unrealized location economics, unrealized advantage due to experience curve, inability to transfer distinctive competencies.

**Global Strategy** is based on the ability to exploit both the economies of scale and experience curve effects while guarding their own technology through wholly owned subsidiaries. Advantages include advantage of Experience Curve, advantage of location economics. Disadvantages include inadequate Local Response.

**Transnational Strategy** combines all the above three strategies to harvest the best of benefits. But this strategy is difficult to implement as complicated organizational structure to integrate both local and international talents will be required. Advantages include advantage of experience curve, advantage of location economics, advantage of customization, benefits of global knowledge. Disadvantages include problems in implementation because of organizational structure and culture.

**Question 14: Write short notes on strategic outsourcing**

**Answer:**

It is rather recent in that companies have been separating into certain non-core activities within a business and allowing them to be performed by an Independent Firm, the purpose being reduction in cost production, e.g., sponsoring of back office operations to a third party. Strategic outsourcing has assumed gargantuan proportions during the last decade. Then a race for cost reduction has become furious due to global competition. This outsourcing activity has been in relation to non core activity are a high technology activity which is not the core competence of the company. The benefits of outsourcing are reduction of cost and secondly differentiation product. Reduction of cost is achieved by outsourcing activities to a third party which has been specializing in a particular activity and able to offer services at a lower cost. It is also possible that a particular activity which is highly skilled or uses a costly technological activity, a company may outsource the specialized operation to a outside agency to avoid capital investment and maintain a special cadre of employees. In the same manner differentiation of a final product of a company is also adopted by adding some new features to the product through outsourcing. The risks of outsourcing are possibilities of holder not being able to meet the deadlines due to third parties mistakes and loss of confidentiality of information.

**Question 15: Bargaining power with the suppliers as well as buyers comes under strain during inflation in the economy. Discuss.**

**Answer:**

As per the economic dictum, inflation is a result of "too much money chasing too few goods". Lot of money in circulation with not much supply of goods will lead to high prices. For increased capacities through either organic or inorganic strategies will take advantage of this situation. However, inflation grips the raw material prices also and as such the operating margins come under strain. Building inventories or following a strategy of make to stock offers better advantage.



If the inflation trend gets intense and a spiral develops a new problem of lower purchasing power of the customer results and suddenly demands starts falling because the customer cannot afford the high price. The immediate future companies that have high capacities may phase recessionary trends that would increase their cost of production through lower capacity utilization. At this point of time, if the recessionary conditions were too prolong corporate restructuring and turnaround strategies will have to be thought of.

As far as the marketing strategies are concerned inflation will have to be understood fully as to the causes for the trend. The causes can be imported, unexploited resources, too much money in circulation, sudden change in supply position due to statutory regulations, etc.

Due to increase in prices of crude oil in FY 2006-07, FY 2007-08, which is largely, imported in India the refined products like petrol, diesel, and kerosene have become costlier. This is purely due to imported inflation and proper adjustment of the end product prices will have to be made to maintain the margins. However, in India due to “inclusive” policy followed by the government, products like Kerosene and LPG are subsidized, but still not to the extent of neutralizing the increase in the cost of production. This has put the oil industry in a difficult situation and the strategies followed by the oil companies are in developing efficient purchasing to keep the cost of crude at manageable proportions.

Fiscal policy of the government and the Reserve Bank of India in containing inflation also have its own share of impact on the strategies of any company. Increase in the interest rates leads to lower availability and utilization of funds and the monies in circulation are also controlled through increase of cash reserve ratio. This affects the purchasing power of the customer and the prices of product tend to fall to attract the customer. The strategy to be followed by a company under these conditions will be cost leadership, as there will be better maneuverability in fixing prices.

“Growth under inflation is always a catch 22 situation” as inflation is a double edged sword. It can help you as well as injure you.

**Question 16: “Planning is doing things today to make us better tomorrow because the future belongs to those who make the hard decisions today is the motto of Eaten Corporation.” Comment**

**Answer:**

Taken the above adages corporate planning can be broken up into four phases:

- Strategic direction
- Externally oriented planning
- Forecast based planning
- Financial planning to impute values to physical targets

|                                                                                           |                                                                                                                                                            |                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Identifying Strategic direction based on Vision, Mission, Objectives / Goals of a company | Externally oriented planning provides information regarding situation analysis, lead indicators, business cycles, macro level indices movement for economy | Forecast based planning – based on a time horizon five, ten or fifteen years select forecast model on the basis of data available if any, data pattern, forecast horizon, preparation time and the sophistication required | Financial planning – impute values to the physical targets/ milestones to be achieved at different points of time in the future. Use of annual budgets of the specific type required eg, zero based, performance budgeting, sunrise or sunset/ operating budgets |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|


  
 Long range planning – Time-space continuum



## Study Note - 2

### STRATEGY IMPLEMENTATION

**Question 17: SEBI has introduced corporate governance in a comprehensive manner to protect shareholders interests as well as provide teeth in monitoring companies' performance through independent directors. Discuss.**

**Answer:**

An outline provided by the CII was given concrete shape in the Birla Committee report of SEBI. SEBI implemented the recommendations of the Birla Committee and the Narayana Murthy committee worked on further refining the rules of SEBI. These recommendations were implemented through the enactment of Clause 49 of the Listing Agreements.

The committees which were created for the purpose were

1. Audit committee
2. Shareholders grievance committee
3. Remuneration committee
4. Share transfer committee

#### **Audit committee**

Audit committee has been empowered to discuss the performance of the company both from the point of view of interest of share holders and efficiency. This committee also discussed in detail quarterly performances taking care for proper disclosures and transparency. The annual report included a report on corporate governance, corporate social responsibility and management discussions on future plans.

#### **Shareholders grievance committee**

The interests of the share holders regarding dividend payments change of addresses, any grievances against the company were discussed and disposed of every quarter and the status is indicated in the quarterly report.

#### **Remuneration committee**

Remuneration of whole time and managing directors was recommended after application of mind as well as the relevant sections of companies act for approval in the general meetings of the share holders.

#### **Share transfer committee**

With dematerialization, transfers of shares have become more transparent. However, the committee looks into the aspects of insider trading and any possibilities of malpractices.

**Question 18: "The continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large" Discuss.**

**Answer:**

CSR can be classified under four heads namely:



- Community involvement
- Socially responsible production processes
- Socially responsible employee relations
- Socially responsible to stakeholders

CSR in relation to community can be stated as follows:

- Respect the principle of preventive action.
- Support a precautionary approach to environmental challenges.
- Rectify environmental damage as a priority at source.
- Respect the principle that the polluter bears the environmental costs.
- Promote greater environmental responsibility.
- Encourage the development and diffusion of environmentally friendly technologies.
- Contribute to the preservation of biodiversity.
- Contribute to equal access to health facilities.
- Contribute to access to basic food, housing, sanitation and sufficient safe drinking water.
- Contribute to education and access to information with respect to essential health problems in the community.

CSR in relation to production processes can be stated as follows:

- Reduce energy use
- Limit or alter material use
- Reduce water use
- Limit emissions
- Reduce waste

CSR in relation to employees would involve the following:

- Respect and ensure the freedom of association and right to collective bargaining
- Do not engage or support the use of forced Labour
- Contribute to the abolition of child Labour
- Do not discriminate with respect to employment and occupation
- Ensure security of employment
- Ensure a living wage.
- Ensure occupational health and safety.
- Respect maximum number of working hours.
- Provide training.
- Guarantee handling of complaints.
- Provide timely information on reorganizations and the right to collective discharge and redundancy schemes.
- Do not use the threat to transfer the operations of the company to other countries as a means for
- Influencing the negotiations with trade unions or employees.



- Do not use double standards.
- Employ and train local staff as much as possible.
- Enable worker representatives to negotiate and confer with decision makers.
- Promote respect for other socio-economic rights, like the right to work, social security, and maternity leave, to take part in cultural life.

CSR with respect to remaining stakeholders, consumers and the vendors' specific attention as follows:

1. Consumers
  - a. Ensure access to essential goods and services.
  - b. Ensure the right to safety, with respect to:
    - i. physical safety
    - ii. safety and quality of consumer goods and services
    - iii. food, water and pharmaceuticals
  - c. Ensure the right to information.
  - d. Ensure the right to choice in the market place.
  - e. Ensure the right to be heard.
  - f. Ensure the right to obtain redress.
  - g. Respect the right to consumer education.
  - h. Promote sustainable consumption.
    - i. Respect the right to privacy.
2. Vendors
  - a. Ensure the vendor understands corporate values in regard to social responsibilities programme
  - b. Provide raw materials and components of specifications to promote quality of finished product
  - c. Follow ethical practices in supply of materials to avoid adulteration, pilferage and other malpractices
  - d. Follow trade practices and respect law of the land in regard to payment of duties, taxes, etc.
  - e. Treat vendor as a partner and not as an outsider

**Question 19: Benchmarking exercise is based on “best practices” and not on “best performances” Discuss.**

**Answer:**

Benchmarking exercise is based on “best practices” and not on “best performances”. For “practices” connote continuity in use while performances may be flash in the pan and not continuous. Best practice is a continuous process of learning, feedback, reflection and analysis of what works (or does not work) and why? In tracking the practices of other companies, **benchmarking** of the process of measuring the company against the products, practices, and



services of some of its most efficient global competitors is the ideal way. For example, when Xerox was in the comeback trail in the last lap of 20<sup>th</sup> century, it decided to institute a policy of benchmarking as a means of identifying ways to improve the efficiency of its operations. Xerox benchmarked L.L.Bean for distribution procedures, Deere & Company for central computer operations, Procter & Gamble for marketing and Florida Power & Light for total quality management processes. By the early 1990s, Xerox was benchmarking more than 200 functions against comparable areas in other companies. This process helped Xerox dramatically to improve the efficiency of its operations.

Types of benchmarking are given below:

- i. **Strategic benchmarking:** This aims at enhancing a company's holistic performance by analyzing the long-term approaches and strategies adopted by the "best practice companies" for their success in any sector across the globe.
- ii. **Competitive benchmarking:** This is confined to the area relating to the performance characteristics of the companies key products and services. So competitive benchmarking will involve the best practices of the companies in the same sector.
- iii. **Process benchmarking:** This is attempted to improve specific key activities and operations culminating into processes with the help of best practice organizations that are engaged in similar activities and services.
- iv. **Functional benchmarking:** Optimization of functional processes or activities through benchmarking can be done by comparing with different business sectors but engaged in similar functions or processes.
- v. **Internal benchmarking:** This involves benchmarking against the companies own divisions or branches or strategic business units situated at different locations. The purpose is to develop a database which gives access to information and a cross fertilization of the managerial acumen with in the company.

**Question 20: Balanced scorecard identifies exactly where the company is heading and what the company is trying to achieve. Discuss.**

**Answer:**

Approach to a balanced scorecard has following steps:

- a. How do we look to shareholders? Or to succeed financially how should we appear to our shareholders? – Financial perspective
  - i. Identify goals / strategic objectives
  - ii. Develop measures
  - iii. Set targets
  - iv. Develop key performance indicators
  - v. Take initiatives
- b. What must we excel at? Or to satisfy our shareholders and customers what business processes must we excel at? – Internal business
  - i. Identify goals / strategic objectives





- ii. Develop measures
- iii. Set targets
- iv. Develop Key performance Indicators
- v. Take initiatives
- c. Can we continue to improve and create value? Or to achieve our vision how will we sustain our ability to change and improve? – Innovation and learning perspective
  - i. Identify goals / strategic objectives
  - ii. Develop measures
  - iii. Set targets
  - iv. Develop Key performance Indicators
  - v. Take Initiatives
- d. How do customers see us? Or to achieve our vision how should we appear to our customers? – Customer perspective
  - i. Identify goals / strategic objectives
  - ii. Develop measures
  - iii. Set targets
  - iv. Develop Key performance Indicators
  - v. Take Initiatives

**Question 21: Attempts have been made to integrate corporate social responsibility into balanced scorecard. How far it has been successful?**

**Answer:**

| Balanced Scorecard Perspective | Market Forces (Objectives) | How success or failure is measured using the triple bottom the (A common framework for sustainability reporting) | Target: The level of performance or rate of improvement required. |
|--------------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| Financial                      | “Green” consumers          | Energy consumption footprint (annualized lifetime energy requirements) of major products                         | Annual reduction in energy footprint for new products             |
| Financial                      | Energy crunch              | Direct energy use segmented by source                                                                            | 100% renewable energy                                             |
| Financial                      | Financial                  | Increase / decrease in retained earnings at end of period                                                        | Percentage                                                        |



| Balanced Scorecard Perspective | Market Forces (Objectives)      | How success or failure is measured using the triple bottom the (A common framework for sustainability reporting) | Target: The level of performance or rate of improvement required. |
|--------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| Internal                       | Pollution and health            | Standard injury, lost day and absentee rates and number of work-related fatalities (included subcontractors)     | 0 lost-time & fatalities, or long-term illnesses                  |
| Internal                       | Climate change                  | Total greenhouse gas emissions                                                                                   | Annualised reduction                                              |
| Internal                       | Governments and regulators      | Incidents and fines for non-compliance with all laws and regulations                                             | 0 incidents or fines                                              |
| People and Knowledge           | Civil society / NGOs            | Policies guidelines and procedures to address needs of Indigenous people                                         | Number of Indigenous employees                                    |
| People and Knowledge           | Activist shareholders           | Business units currently operating or planning operations in or around protected or sensitive areas              | Number of employees trained in environmental management practices |
| Customer                       | Erosion of trust / transparency | Policy to exclude all child labor                                                                                | No child labor                                                    |
| Customer                       | Globalization backlash          | Supplier performance related to environmental commitments                                                        | Use of 100% organic cotton or coffee                              |

#### Question 22: Trace the evolution of Strategic business unit (SBU) concept.

##### Answer:

While the financial structure of an organization evolved **cost centers** gave way to **profit centers** to provide motivation to divisional managers. At this juncture ROCE was considered as the best measure of a profit centre. However, the divisional heads chose to improve this ratio more by denominator management, which is by reducing the denominator rather than augmenting the numerator. This lead to an occupational hazardous situation where the Net Fixed Assets were being phased out but the repair cost to maintain the fixed assets were on the increase without replacing the fixed assets. Technological obsolescence was looming large in the horizon and many companies collapsed due to their fixed assets becoming anachronistic and inefficient. So the profit center had to be upgraded into a **strategic business unit** to take care of the business holistically to include strategy both in respect of business functions and technology with a futuristic tilt.



**Question 23: EVA should always be positive. Why? How can it be improved?**

**Answer:**

Any return on investment should be higher than the cost of capital after all external outflows are taken into consideration, e.g., taxes, interest and dividend.

There fore the formula for EVA has been  $EVA = NOPAT - c * x (CAPITAL)$ .

To improve EVA and this can be done in four ways:

- Improving Operating Performance (Functional Level Strategy)
- Improving profitability of investment (Business Level Strategy)
- Divestment of unproductive capital (Global Corporate Level Strategy)
- Reducing the cost of capital (Corporate Level Strategy)

**Question 24**

**CAPITAL: 10,000**

**NOPAT: 2000**

**C\*: 15 PERCENT**

**r: 20PERCENT**

**$EVA = CAPITAL \times (r - c^*) = 10,000(0.20 - 0.15) = 500$**

**Illustrate and quantify the impact of the four strategies on improving EVA using above data.**

**Answer:**

Strategy 1: Improvement in operating performance

- NOPAT increase from 2000 to 2250, due to greater operating efficiencies. This rises to 22.5 percent. As a result EVA raises to 750
- $EVA = CAPITAL \times (r - c^*) = 10,000(0.225 - 0.15) = 750$

Strategy 2: Profitable Investment

- A new project requiring 10,000 is expected to earn a return of 18 percent thereby adding 1800 to NOPAT .This project will increase EVA, even though the consolidated return will decline to 19 percent ( the average of 20 percent and 18 percent)
- $EVA = CAPITAL \times (r - c^*) = 20,000(0.19 - 0.15) = 800$
- Note that maximizing EVA is more important, not maximizing return on capital .Hence the project should be accepted

Strategy 3: Withdrawal of unproductive Capital

- 1000 of working capital can be liquidated with only a marginal decline of NOPAT. NOPAT will fall by just 50. Withdrawing this working capital would increase the rate of return to 21.67 percent (  $2000 - 50$  ) / (  $10000 - 1000$  ) and EVA to 600
- $EVA = 9000 \times (0.2167 - 0.15) = 600$

Strategy 4: Reduction in the cost of capital

- The capital structure of the firm is altered and its change lowers the cost of capital to 13%, without affecting anything else. As a result EVA rises from 500 -700  
 $EVA = Capital \times (r - c^*) = 10,000 (0.20 - 0.13) = 700$



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## Study Note 3

### ALTERNATIVE STRATEGIES REVISITED

**Question 25: Not all joint ventures lead down the garden path. They end up many a time on the way side due to various reasons. Enumerate.**

**Answer:**

Not all joint ventures lead down the garden path. They end up many a time on the way side due to:

- The research and development for a new technology never materialized
- Preparation and planning for a joint venture might have been inadequate
- Conflicts in regard to the basic objectives of the joint venture cropping up after the formation
- Sense of secrecy and reluctance share expertise with the partner ends in a fiasco
- Difficulties faced in sharing managerial control between the partners made into a dead lock

**Question 26: “Growth through concentric diversification into a related industry may be a very appropriate corporate strategy” Comment.**

**Answer:**

While this statement may look relevant on the face of it, this can be applied only when a firm has a strong competitive position but industry attractiveness is low. For example, Murugappa group’s E.I.D. Parry India Ltd., for example, has diversified both internally and externally out of the unpredictable sugar business into a series of related businesses run by the parent company.

The related diversification internally took the form of diversifying sugar division into alcohol and confectionary to add profitability to the unpredictable sugar business. Again the fertilizer activity of EID parry group in the form of production of fertilizer mixtures, ammonium phosphate sulphate and super phosphate was integrated externally with Coromandal fertilizers of which E.I.D. Parry India is a major share holder.

**Question 27: “Complementary mergers may result in each firm filling in the “missing pieces” of their firm with pieces from other firm” Comment.**

**Answer:**

A merger of a firm with strong R & D unit would help to improve new product development while with a firm with a strong distribution network, may benefit better distribution. For example, Dr.Reddy’s went for acquisitions of R&D units to strengthen their exploration for new molecules to shorten the product development time horizon. Coca Cola when entered into India, took over the distribution systems of Parle and this saved them both efforts and time to develop distribution network.



**Question 28: “The condition wherein the whole is greater than the sum of its parts; in a synergistic merger, the post merger value exceeds the sum of the separate companies’ pre merger values” Prove.**

**Answer:**

Under ‘synergy’, the combined value of a firm is much greater than the value of individual firms. The phenomenon of synergy arises due to economies of scale of operation. Besides, the combined mega features such as enhanced managerial capabilities, creativity, innovativeness, R & D and market coverage capacity. Due to the complementary nature of resources and skills a widened horizon of opportunities are also responsible for synergy on a merger situation. For example, Madura bank had very big network compared to ICICI. Bank of Madura had one of the lowest costs of deposit and capital adequacy ratio was very high. ICICI had latest technology to be implemented and subsidiaries overseas but had no significant network in India. So, ICICI and Madura bank came together and there has been a dramatic improvement post merger due to synergy.

**Question 29: “Takeover usually takes the form of ‘hostile’ or ‘forced’ or ‘unwilling’ acquisition and acquisition happens at the instance and the willingness of the company management and the shareholders” Do you agree?**

**Answer:**

Yes, it is for this reason that acquisition is generally referred to as ‘friendly takeover’. An example of acquisition is Aditya Birla group, a leading conglomerate in India with substantial interest in textiles and cement, apart from other things, took over from L & T its cement business on a friendly takeover. Similar such transaction was that ORBI Tech by Polaris Software. On the other hand, the acquisition of Raasi Cement by India Cements earlier was a hostile takeover by the India Cements Group. Further, the term takeover is often used to denote the hostile nature of acquisition, where there is an element of resistance and opposition to the takeover bid.

**Question 30: What are the strategies adopted to combat hostile takeover?**

**Answer:**

A target company which faces the threat of a hostile takeover, would adopt the following strategies:

#### **Poison pill tactics**

This strategy aims at initiating action against the predator by destroying the attractiveness of the firm. The following are few methods:

The acquiring company may issue substantial amount of convertible debentures to its existing shareholders which would make it difficult for the potential acquirer as there is a danger of considerable increase in the voting power of the company.

- The target firm either sells or mortgages or leases or otherwise disposes off some of its precious assets.



- The target firm can defend itself from the onslaught of the potential bidder by disposing of its liquidity by acquiring some asset or other firm.
- The target grants its employees stock options that immediately vest if the company is taken over. This is intended to give employees an incentive to continue working for the target company at least until a merger is completed instead of looking for a new job as soon as takeover discussions begin. However, with the release of the “golden handcuffs”, many discontented employees may quit immediately after they’ve cashed in their stock options. The poison pill may create an exodus of talented employees. In many high-tech businesses, attrition of talented human resources often means an empty shell is left behind for the new owner.
- The target company issues rights to existing shareholders to acquire a large number of new securities, usually common stock or preferred stock. These new rights usually allow holders (other than an acquirer) to convert the right into a large number of common shares if anyone acquires more than a set amount of the target’s stock (typically 10-20%). This immediately dilutes the percentage of the target owned by the acquirer, and makes it more expensive to acquire control of the target.

#### **Green mail tactics**

The target firm can purchase its own stocks at a premium to avert a takeover bid. The incentive is offered by management of the target company to the potential bidder for not pursuing the takeover bid.

#### **White Knight tactics**

The target company’s management may seek out a friendlier potential acquiring company who could offer a higher offer price which would eventually drive away the original bidder. The purpose of ‘white knight strategy’ is to seek to find a bidder. The objective is to make the takeover exercise as much unviable and unprofitable as possible for the original bidder. Such a strategy will help get the target firm a better deal. There are cases where a white knight has later been aggressive with the target company and consummated the deal at better terms.

#### **Golden Parachutes tactics**

Adopted by the target company by offering hefty compensations to its managers if they manage to get ousted due to takeover; this is pursued to reduce their resistance to takeover. This was also mentioned among one of the strategies of poison pill. This is mainly initiated because soft target firms who are managed by professional managers may fear shifting of loyalty by professional managers and to avoid any such attempts set up golden parachutes so that predators may not have incentive to deal with the agents for consummating the deal.

**Divestiture tactics:** Whereby target the company arranges to divest or spin off some of its businesses in the form of an independent, subsidiary company thus reducing the attractiveness of the existing business to the predator. This clearly changes the valuation of the company and many a times the multiples of valuation for multi divisional businesses would encourage such moves by target companies.



**Crown Jewel tactics:** Whereby the target company arranges to sell its crown jewel namely highly profitable part of the business or ones which market values better in order to dissuade the predator. However, such strategic initiative requires clear understanding of predators target businesses and valuation guidelines to be effective.

**Legal tactics:** A target firm can forestall the possible takeover bid through legal mode. It takes the form of 'legal strategy' for guarding against hostile takeovers. In this case, it is possible for the target firm to move a court of law for obtaining injunction against the offer. For this purpose, relevant provisions exist in the Securities Contracts (Regulations) Act, 1956 and the Companies Act, 1956. This strategy is resorted to either to block or delay the tender offer in circumstances where the shares are lodged for the transfer by the bidder. SEBI has come with clear guidelines to discourage hostile takeovers in India.

**Question 31: Due diligence is applied more to confirm the initial offer rather than to withdraw. Is it true?**

**Answer:**

Due Diligence is the most important aspect in doing a merger and takeover deal. During the process of takeover, the predator and the target extend a lot of information on an informal mode and predator's deal progress is based on a number of assumptions and data inputs are primarily from public source and competitive intelligence. The process of due diligence gives the predator the authority to validate the "Homework" of the Deal. Hence the management gives a lot of importance for this activity during the transaction.

While doing the due diligence the focus would be to assert whether the deal is worth the bill. When someone triggers such a thought, the following aspects would prop up:

1. Confirmation of the strategy and feasibility of the target's business
2. Verifying operations and assets and liabilities are as represented
3. Develop and evaluate opportunities to best fit the target with the buyer
4. Cultural fit
5. Understanding the seller's financial and legal structure

The buyer must go with the spirit of confirming the value of the deal agreed to at the earlier stage and if corrections required, one must ascertain the same. Then the buyer must probably see how value generating activities could be driven on the post deal stage. If the buyer goes with the intention of finding gaps, probably the whole process may destabilize. There may not be perfect information sharing or mapping at Letter of intent stage.



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## Study Note 4

### INDIAN SCENARIO – ECONOMIC SURVEY

**Question 32: “Agricultural sector is poised for a second green revolution during the eleventh five year plan period” Comment.**

**Answer:**

Agriculture sector has remained a problem area and there has been a deceleration in its growth. To arrest this trend and reverse the deceleration number of policy inputs has been made. A National Rain fed Area Authority (NRAA) has been created in November 2006 to support up gradation and management of dry land and rain fed agriculture. The authority would coordinate all schemes relating to watershed development and other aspects of land use. The accelerated irrigation benefit programme is also being revamped to repair, renovate and restore water bodies in various states. For improved productivity in the agricultural sector an action plan has been formulated product specific. Like the green revolution of 1960's another revolution is on the threshold. The 11<sup>th</sup> plan will give special emphasis to agriculture to reorient and rejuvenate this sector to meet the needs of the farmers. The credit flow to the agricultural sector has exceeded the target for the third consecutive year. However, doubts are being expressed about the efficacy of the delivery systems and the improvement of this system is the urgent need. The National Agricultural Insurance Scheme (NAIS) and the National Rural Employment Guarantee Scheme (NREGS) are two important schemes, which have been implemented recently. These have been extended to more number of villages, so that the under employment in agriculture sector is mitigated and business risk in agricultural farming due to natural calamities are also taken care of.

Dr. M.S. Swaminathan committee has identified insurance as a panacea for the above liabilities and the possible steps can be:

- Recognizing agriculture as an “open roof” industry and bringing in concepts of industrial liability insurances
- Pre-harvest hedging
- Cross dimensional liability coverage for inability
- Linking of life assurances of farming community with their property and casualty insurances

**Question 33: Growth of infrastructure has lagged behind and may assume serious proportions during the eleventh five year plan. How does the government of India plan to meet this challenge?**

**Answer:**

The growth of infrastructure has lagged behind and may assume serious proportions. So, the government has been actively pursuing public private partnership (PPP) to bridge the deficit





in the infrastructure. Under the overall guidance of the committee of infrastructure headed by the Prime Minister, the PPP programme formulation and implementation are being closely monitored by the relevant ministry / departments. An appraisal mechanism has been laid down and PPP appraisal committee has been given a mandate and guidelines for drawing up time frame for according approvals to proposals in a speedy manner. PPP projects normally involve long term contracts between the government and private parties detailing the rights and obligations of both the contracting parties. Government has decided to develop standardized frameworks based on due diligence and agreements will follow international practices. They will also create a framework with a right matrix of risk allocation, obligations and returns. Planning commission has also issued model concession agreement (MCA) for ports, state highways and operation maintenance agreements for highways. To promote PPP programme all state governments and central ministries are setting up PPP cell with a senior level office as a nodal officer. Technical assistance has been obtained from Asian Development Bank (ADB) including hiring of consultants and training of personnel.



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## Study Note 5

### FORECASTING, MODEL BUILDING AND MODELS

**Question 34: What are the types of forecasting? Identify the models.**

**Answer:**

Forecasting models are of four types:

1. Qualitative models
  - a. Delphi model – Collects and analyzes panel of experts opinions
  - b. Historic data – Develop analogies to the past through judgment
  - c. Nominal group technique – Participative group process with forced voting
2. Naive (time series) quantitative models
  - a. Simple average – Averages past data to project the future based on that average
  - b. Exponential smoothing – Weights differently earlier forecasts and the recent to project into the future
3. Causal quantitative model
  - a. Regression analysis – Defines functional relationships among variables as to whether it is linear or non-linear
  - b. Economic modeling – Offers an overall forecast for a variable like Gross National Product (GNP)
4. Combination of monetary and physical projections
  - a. Marketing projections – Monetary by region, product and product group
  - b. Economic projections – Monetary by region, industry and broad product category
  - c. Historical demand projections – In units, monetary by product and product group
  - d. Demand forecast – In units by product and product group for operations management and monetary for sales and financial planning. (This is a combination of a, b and c)

**Question 35: What are the various decision analysis models? Explain influence diagrams.**

**Answer:**

There are three types of decision analysis models:

- Analytical hierarchical process
- Decision trees
- Influence diagrams

#### **Influence diagrams**

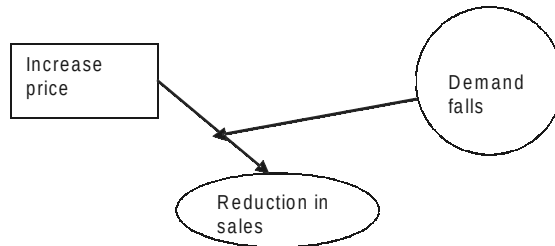
Another important decision analysis tools are known as an influence diagram. It offers a graphical presentation of decision situation expressing the exact nature of relationships between the variables. Bodily (1985) developed certain conventions for influence diagrams. They are:

1. A rectangle is a decision variable
2. A circle is an uncontrollable or intermediate variable



3. An oval is a result or outcome variable  
These three types of variable are connected with arrows that indicate the direction of influence. Arrows can be one way or two ways.

Influence diagram simplified



**Question 36: What are the types of simulation models? What are the advantages and disadvantages of simulation models?**

**Answer:**

There are several types of simulation as given below:

1. **Probabilistic simulation** where one or more independent variables is conceptualized as a probability distribution of values
2. **Discrete simulation** where it becomes important to know when an event exactly occurs
3. **Visual simulation** is a graphical representation of computerized results. Software for this method is one of the recent developments in computer - human interaction and problem solving

Decision support systems have been increasingly using simulation models for the following reasons:

1. Simulation theory is relatively easy to comprehend
2. Simulation can offer solutions to “what-if” type questions
3. Decision support system analysts work closely with managers who seek solution
4. The simulation model is built for one particular problem
5. Simulation models allow inclusion of real life complexities and no simplifications are necessary

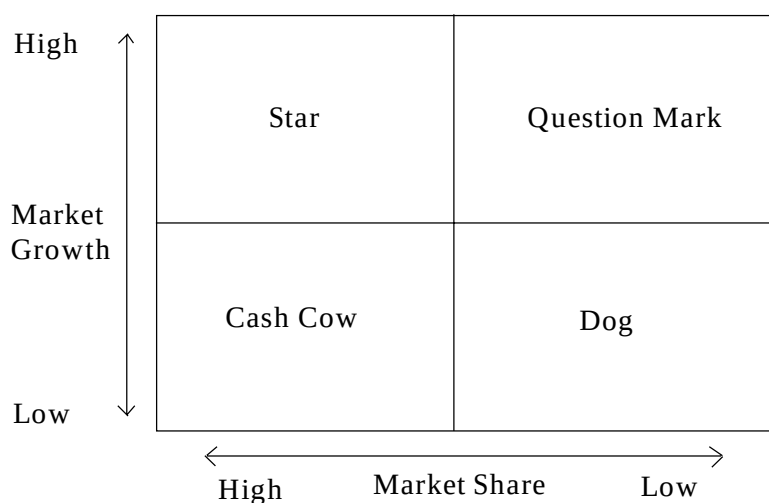
Disadvantages:

1. An optimal or the best solution is not always guaranteed
2. Building simulation model is a slow and costly process
3. Solutions and inferences from a specific simulation model cannot be transferred for other problems

### Question 37: Compare and contrast BCG and GE matrices.

#### Answer:

The Boston Consulting Group (BCG) have developed a matrix, based on empirical research, which analyses products and businesses by market share and market growth. This growth / share matrix for the classification of products into cash cows, rising stars and questions marks is known as the Boston classification.



- Stars** are products with a high share of a high growth, market. In the short term, these require capital expenditure, possibly in excess of the cash they generate, in order to maintain their market position, but promise high returns in the future.
- In due course, however, stars will become **cash cows**, with a high share of a low-growth market. Cash cows need very little capital expenditure and generate high levels of cash income. The important strategic feature cash cows are that they are generating high cash returns, which can be used to finance the stars.
- A **question mark** (sometimes called **problem child**) is a product in a high growth market, but has a low market share. A decision needs to be taken about whether the product justifies considerable expenditure in the hope of increasing its market share, or whether it should be allowed to die quietly as it is squeezed out of the expanding market by rival products. Because, considerable expenditure would be needed to turn a question mark into a star by building up market share, question marks will usually be poor cash generators and show a negative cash flow.
- Dogs** are products with a low share of a low growth market. They may be ex-cash cows that have now fallen on hard times. Dogs should be allowed to die or should be killed off. Although they will show only a modest net cash flow or even a modest cash inflow, they are cash traps which tie up funds and provide a poor return on investment, and not enough to achieve the organization's target rate of return.



- e. There are also **infants** (i.e. products in an early stage of development) and **warhorse** (i.e. products that have been cash cows in the past, and still are making acceptable sales and profits even now) and **dodos** (low share, negative growth, and negative cash flow).

Directional Policy Matrix

|                         |              | Business Strength |                   |                                                 |
|-------------------------|--------------|-------------------|-------------------|-------------------------------------------------|
|                         |              | Weak              | Average           | Strong                                          |
| Industry Attractiveness | Unattractive | Divest            | Phased Withdrawal | Invest selectively to maximise cash generation  |
|                         | Average      |                   |                   | Invest for market share or withdrawal           |
|                         | Attractive   |                   |                   | Invest to retain market share as industry grows |
|                         |              |                   |                   | Priority products and services                  |

General Electric of USA, assisted by McKinsey, developed a nine-cell strategic planning grid which attempted to correct some of the limitations of the BCG matrix approach. This grid is illustrated in the above figure as the Directional Policy Matrix. Each dimension is a composite measure of several component factors. Industry attractiveness is a function of a number of factors. The procedure involves assigning each of the factors a weight depending on its perceived importance, followed by assessing how each business compared on each factor using a 1 to 10 rating scale, and then computing a weighted composite rating. The choice of the factors and the weights assigned to the factors vary from business unit to business unit.

The same approach is used to measure Business Strength where aspects relevant to competitive position are considered. Each of the dimensions is classified into three categories: high (strong); medium; low (weak); thus, creating nine cells.



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## Study Note 6

### MARKETING STRATEGIES

**Question 38: Customer now articulates his own option to create a new product, as he has become “the boss”. How does this reflect change from product orientation to market orientation?**

**Answer:**

Production orientation for a product to be put on to the market is based on the concept that customers prefer products, which are available freely and at low cost. But this orientation has given way with the customer driven strategy coming to the fore. So the market orientation stems out of the concept that the company should be more effective than the competitors in creating delivering and communicating superior customer value to the target markets. This change in the orientation has come about mainly due to the globalization of the market and liberalization of economies all over the world. This has resulted in multiple options being available to the customer and other things being equal the customer now articulates his own option to create a new product, as he has become “the boss”.

**Question 39: Judy Strauss and Raymond Frost’s e-marketing model defines e-business as a continuous optimization of a firms business through digital technology.  $EB = EC + BI + CRM + SCM + ERP$**

**Explain.**

**Answer:**

$$EB = EC + BI + CRM + SCM + ERP$$

EB is electronic business, EC is electronic commerce, BI is business intelligence, CRM is customer relationship management, SCM is supply chain management and ERP is enterprise resource planning.

EC uses digital technologies to enable buying/ selling, BI uses digital technologies for collecting primary / secondary information, CRM is strategy to satisfy customers and build long lasting relationships on the basis of high interaction with customers. This high interaction has been enabled through webinars and web conferences. SCM relates to delivery of products efficiently and effectively both by the vendors to the manufacturers and manufacturers to the distributors/ customers. The high interaction with vendors and customers has been possible through EDI (electronic data interface), paper less transactions. ERP has helped optimization of business processes and lowering costs. Order entry and purchasing, invoicing and inventory control have been speeded up and also optimized through MRP, JIT, Kanban, etc using digital technologies.

**Question 40: Define brand equity and identify its valuation methods.**

**Answer:**

The endowed added value provided to all products and services is brought under the concept of brand equity. There fore brand equity is the added value share of every brand in comparison



with other brands. It can also be said that it depicts the differentiations in terms of value additions existing or proposed as perceived by customer. Brand equity can be equated with recognition of the brand through the number of customers, who are satisfied with the brand, customers who value the brand and see it as a friend and those customers who are devoted to the brand. Brand equity is essentially an asset and can be defined as the differential effect on a customer whose response to a product or service is through the knowledge of the brand. In essence brand equity makes a customer show a preference for one product over another when they are congruent.

Brand valuation is estimation of the total financial value of the brand. The estimate for valuation is based on the price premium the brand commands multiplied by the extra volume it is able to market over an average brand.

Brand valuation can be done in five ways:

1. Add up all costs of research and development and marketing expenditure of the brand over a specific time horizon. This method has certain limitations in that it is difficult to identify all expenses that relate to the brand and only quantifies the cost and not the value
2. Based on the present value of the price premium that a brand commands over the unbranded product. This is the first approach, which brings in the additional value earned by a brand. However,
  - a. It is difficult to identify a proper unbranded good for comparison
  - b. It does not recognize the stability attribute brought in to the earnings by the brand
  - c. The possibility of a brand being a barrier to the entry and this aspect of in terms of value is not included
3. If the brand were to be auctioned the value that may be fetched by such auction. Conceptually, this method is very sound but it may not be practicable for brand market is very narrow and accurate valuation is not possible
4. Computation of value based on intangible measures such as esteem, recognition and awareness. While the approach sounds interesting, translating these intangibles into commercial value is extremely difficult and the methods of quantification through use of statistics can be flawed
5. Discounting future potential earnings for brand valuation. This method virtually includes all the information from the earlier four methods and in addition has to develop a reliable forecast of future earnings and growth. Here it is difficult to gauge the life of the brand and the time horizon to be set apart from quantifying the earnings.



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## Study Note 7

### APPLICATION OF MANAGEMENT ACCOUNTING IN STRATEGIC MANAGEMENT

**Question 41: From a cost plus pricing model, a market driven model for pricing has lead to “target price”. How has it lead to target costing method for cost reduction?**

**Answer:**

Until towards the last decade of the 20<sup>th</sup> century, product pricing was essentially a part of push strategy. Manufacturing to stock on the basis of an assured demand with adequate protection to tariff walls from the government, especially, Indian entrepreneurs produce goods at their own cost and provided their margin and fix their selling price on the “cost plus pricing” basis. However, this approach came in for a rude shock when the information technology revolution or the “third wave” as it is called engulfed the entire world. While on the one hand, developed countries found their market shrinking due to stagnation in their population, but had surplus capacity to produce world class goods, they had to look for new markets. The third wave came in as a boon and the entire world shrunk. Logistics no longer was a problem and the delay in reaching the customer was totally removed. Liberalized economies meant breaking down tariff walls and the markets became open. Now the customer has many options for buying a product as numerous producers were queuing up with quality products. Pricing of product was no longer the prerogative of the manufacturer, but of the customer. Pricing thus became market driven and a product of pull strategy.

From the point of view of the management accountant the market driven price is the target price at which the manufacturer has to market his products and source his earnings. At the same time the management accountant has also understood that if a business has to be carried on, it has to earn a return on capital employed (ROCE) at a higher level than the average cost of capital. Having quantified this return per unit of sale this element is deducted from the target price to yield the target cost. This area is the battle ground where the higher existing costs needed to be brought down to a level of the target cost for which a financial strategy has to be developed.

This financial strategy would involve cost reduction at all levels and thus would involve analysis of marketing costs and profitability on the one hand, product development policy and strategy on the other hand. Towards this, the main thrust of cost reduction is a three pronged exercise:

- Value engineering during design and development
- Kaizen costing during production
- Activity based management and costing during all stages of product life

**Question 42: What are the phases of a value engineering job plan?**

**Answer:**

There are seven phases, corresponding in part to the chain saw’s course of development. The specific phases of the job plan are:





1. General phase
2. Information phase
3. Function Phase
4. Creation Phase
5. Evaluation Phase
6. Investigation Phase
7. Recommendation Phase

- **General Phase:** This phase gives an overview of the entire job plan. Job Plan is broken up into: (A) A description of the process and the techniques of each stage of production or a cost centre. (B) Identification of any bottle necks by products and waste products which are to be overcome and the structure of human resources and any stresses and strains are recognizable affecting good human relations and inspired team work.
- **Information Phase:** Information relating to bottle necks, by products and waste products, raw materials, conversion costs will have to be obtained in an exhaustive manner. The specifications and requirements and the current costs incurred in these areas will have to be quantified accurately.
- **Function Phase :** Two techniques of this phase are a major part of Functional Approach:
  - Define the Function - Every function must be defined in two words, one verb and one noun
  - Evaluate Function Relationships -This is accomplished by taking the functions as defined in the above technique and the information and data secured in the information phase and establishing a relationship between them.
- **Creation Phase:** Creativity or Brain Storming. Two techniques simply point up the vital areas:
  - Establish Positive Thinking – Mind comprises 2 parts – Judicial & Creative. Necessary to turnoff the judicial part during the Creative Phase
  - Develop creative ideas – Cultivate uninhibited thinking and developing a multitude of ideas and approaches for accomplishing the defined functions. Large Quantity of Ideas desired
- **Evaluation Phase:** Techniques of this phase must be undertaken with care and diligence. Judicial part of the mind is brought into active use.
  - Refine and Combine Ideas.
  - Establish Cost on All Ideas.
  - Develop Functional Alternatives.
  - Evaluate by Comparison.

The combined creative ideas that have been refined to basically workable solutions and have the greatest potential return on further invested time are subjected to the techniques of the Investigation Phase.



- **Investigation Phase:** This technique provides selected ideas into workable and salable solutions providing lower cost methods of performing the required and desired functions through the application of additional, vast resources of knowledge.
  - Use Company and Industrial Standards.
  - Consult Vendors and Specialists
  - Use Specialty Products, Process and Procedures

These are to be evaluated and used when they provide a lower total cost than standard products, processes, and procedures would.

- **Recommendation Phase:** This phase and its techniques are the culmination and wrap-up of all previous efforts exerted throughout the Job Plan:
  - Present Facts
  - Present costs
  - Motivate Positive Action

The Presentation of these facts and costs and the motivation of positive action are accomplished in one of three ways – verbal form, written form or in combination of both.

Final combined form is recognized as best and contains sufficient data for the decision makers to determine the course of action to be taken. Changing things is central to Leadership, and changing them ahead of anyone else is Creativeness.

**Question 43: Nine Price-Quality strategies offer a relationship between price and quality under different perceptions. Discuss.**

**Answer:**

The price fixation for the first time takes place when:

- A company develops or acquires a new product
- Introducing existing product into a new geographic area or a new distribution channel
- A service company bids for a new contract work

For fixation of price the decision of the company regarding positioning of the product becomes important according as the nature of the product. Product quality has a bearing on the price.

Nine price-quality strategies

|              | Quality High   | Quality Medium  | Quality Low   |
|--------------|----------------|-----------------|---------------|
| High price   | • Premium      | • Mega value    | • Ultra value |
| Medium price | • Overcharging | • Average value | • Fair value  |
| Low price    | • Rip off      | • Deceptive     | • Economy     |



Essentially, the strategies High-High (a), Medium-Medium (e) and Low-Low (i) can exist in a market at the same time as there is logic in pricing. The strategies (b), (c) and (f) are a consumer high surplus. The strategies (d), (g) and (h) lead to over pricing to take advantage of a temporary shortage market.

**Question 44: The world class approach to cost management would require understanding the total production management, total quality management and align the total cost management on the lines of the other two strategies. How is it accomplished?**

**Answer:**

The world class approach to cost management would require understanding the total production management, total quality management and align the total cost management on the lines of the other two strategies. This will ensure that all the aspects of the corporate strategies are translated in terms of values and control in the total cost management strategy. The following table shows the relationship among the three strategies:

| Process                           | Product /service definition                                                              | Product / service development | Material sourcing and inbound logistics                                                                           | Production or servicing                       | Support functions (HR/IT and Finance) | Marketing                                                                     | Sales and outbound logistics                                                                           | Service                |
|-----------------------------------|------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------|
| TQM strategy                      | Quality function deployment and value engineering                                        |                               | Statistical and managerial tools for TQM accident and loss prevention                                             |                                               |                                       | Customer relationship management, complaints and redressal                    | Adherence to schedules                                                                                 | Ensure service quality |
| Total Production management (IPM) | Ensure manufacturability, identification of required plant and machinery, proper vendors |                               | Reduce cost of quality, improve plant availability through preventive and productive maintenance, waste reduction |                                               |                                       | Respond to marketing inputs relating to customers and develop pull technology | Work in coordination with the marketing function in regard to logistics as well as after sales service |                        |
| Total cost management (TCM)       | Reduce design related defects and associated costs                                       | Reduce time to market         | Eliminate costs related to defective inputs                                                                       | Eliminate costs related to rejects and rework | Ensure internal customer satisfaction | Ensure external customer satisfaction                                         | Optimize logistics expenditure                                                                         | Reduce service cost    |



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**Question 45: How has the classification of costs changed from the traditional method in strategic total cost management?**

**Answer:**

Classification of costs has always been into variable, semi-variable, fixed categories. When cost as a strategy is to be implemented it presupposes that there is a time horizon which is longer than a few accounting periods. In such a time span even the so called fixed costs tend to vary e.g., rent, taxes, salaries, etc. So, the total cost management strategy has evolved a new classification namely, **bed rock fixed costs** e.g., depreciation, patent, amortization; **managed costs** rent, taxes, salaries and wages, maintenance, travel, advertising, etc. and **truly variable costs** include materials, royalties, freight, overtime costs, etc. This classification helps arriving at break even points which are more credible and take into consideration the changes in the costs over a period. A single break even is not possible and not acceptable in the total cost management. Another very important feature of total cost management is that almost all costs are manageable through cost strategy as even period costs tend to vary over time. For instance, rents which are considered period costs as fixed under normal parlance are treated as managed costs in total cost management strategy. This is particularly so, because the quantum of rent variation can be managed through leasing, rent or own strategies, tax planning, etc.



## Study Note 8

### RISK MEASUREMENT AND MANAGEMENT

#### Question 46: What are the types of risks?

##### Answer:

Mark Dorfman has defined “risk management as the logical development and execution of a plan to deal with potential losses”. The risk can include both upside and downside. Potential risk management often refers to reducing downside potential and enhances the returns on topside.

Risks are of many types as follows:

1. **Physical Risk** like natural calamities: fire, tsunami, floods, earthquake, etc.
2. **Business Risk** which is inherent to a business due to its nature and susceptibility to environment, e.g., change of fashion, business cycles, conflicts like war, insurgency, cross border terrorism, technological obsolescence, etc.
3. **Financial Risk** arising out of the nature of financial transactions and conduct of business and investment.

#### Question 47: How do you measure physical risk?

##### Answer:

Physical risks are measured by the application of technological tools. Earthquakes are measured in the Richter scale. Floods are measured through level monitoring and marking danger levels. Risk of fire is often monitored through measurement of flash point, fire point, ignition temperatures and propulsion temperatures. Spontaneous ignition temperatures are yet another measurement to identify fire risk, e.g., coal dumps, oil installations, explosive godowns, etc.

Physical risk arising out of Social, Political, Economic and Legal Environments are often identified through the performance of lead indicators. In the Social arena lead indicators can be pestilence, expediciencies, social upheavals, etc., measurement of these social risk are done on the basis of the impact on the Society, i.e., increase in crimes, violence and accidents, etc.

Political risk is often identified with the change in Government policy capitalistic, democratic or totalitarian and can be measured by the impact of such government policy on the economic activity, e.g., Government Industrial Policy and Labor Policy.

Economic risk may arise out of commercial transactions, foreign exchange currency variation, capital market fluctuations, trade cycles, etc. The lead indicators risks are like variation in GDF, IIP, Balance of Payments, Stock Market Indices, etc.

Legal Risk arises out of the implication of various statutes affecting business, Anti Trust Bills, Factory Acts, Industrial Disputes Act, and Foreign Exchange Management Act (FEMA).

#### Question 48: Explain the concept of risk pooling and diversification.

##### Answer:

Whether it is the individual, an insurance company or insurer or a corporate, which necessarily has to insure all its risks, the proper way to look at the exigencies is to pool the risk. The



concept of pooling risk is the process of identification of separate risks and put them all together in a single basket, so that the monitoring, combining, integrating or diversifying risk can be implemented.

Monitoring becomes easier when the specific agency put in charge knows that all the risks have been identified and they are being monitored according to the system drawn up to quantify the total risk through pooling and with a control figure. I.e., plan the way to monitor, actually monitor, and then check whether there are variations from the monitoring exercise and then act to correct the deviation. This correction act can be combining risks or integrating risks or diversifying risks.

For example, whenever a project is put up insurance (Marine insurance) is taken for shipping the various plant and machinery from the manufacturers to the port near the project site. The logistics from the port to the project site is taken care of by the carrier and he insures (transit insurance) the risk for that segment. The material is received at site and stored until erection (storage insurance). During erection of different plant and machinery, mechanical, electrical, etc, risk is covered (erection insurance). The erected plant and machinery is then tested and trial runs are taken for guarantee purposes on continuous run as per the contract. The risk during this period is covered as risks for commercial run. All these risks put together is pooling and is each separate policy has a risk value and premium and conditions attached there to by the insurer and insured has to carry out those obligations. This is the process of monitoring. To reduce risk after pooling it can be combining through a comprehensive policy from the plant and machinery Freight on Board (FOB) to the completion of final commercial guarantee run. Integrating risks will be to take care of all the foreign shipments together, inland transit risks together so that these risks which are similar are taken together.

### **Diversification of risk**

This involves identifying that fraction, which is systematic and the remaining unsystematic. Systematic risk is that inherent and peculiar to the type of business or the organization and can be reduced or diversified by acting within the organization, which is through functional level strategy. The unsystematic risk, which is the market risk is external to an organization and is also termed as market risk. The identification of characteristics of market risk through statistical correlation "Beta", which is a measure of market risk, lends itself for manipulation through portfolio management.



## Study Note 9

### RISK INSURANCE

**Question 49: What are the characteristics of insurance contract?**

**Answer:**

Following are the unique characteristics which are distinct from other forms of contract.

1. **Aleatory contract (Dependent on chance):** The values exchanged by the contracting parties in an insurance contract are unequal as they are dependent on chance or in other words in an insurance contract result depends entirely as risk. If the loss arises, compensation is paid by the Insurer on the occurrence of peril. If it doesn't occur insurer does not pay any compensation while the premium gets paid to the insurer
2. **Conditional Contract:** Insurance contracts lay down conditions like providing proof of insurable interest, immediate communication of loss, proof of loss, and payment of premium by the insured
3. **Contract of Adhesion:** Legally obligatory on the part of the insurer to explain the terms of contract fully to all the parties. This is particularly important as under contract of adhesion, any ambiguity in the wording of the agreement will be interpreted against the insurer as he had laid down the terms
4. **Unilateral Contract:** Insurer is the only party to the contract who makes promises that can be legally enforced.

Generally, Non life insurance contracts are usually annual contracts and have to be renewed each year. Each time the policy is renewed a new contract is issued by the Insurer.

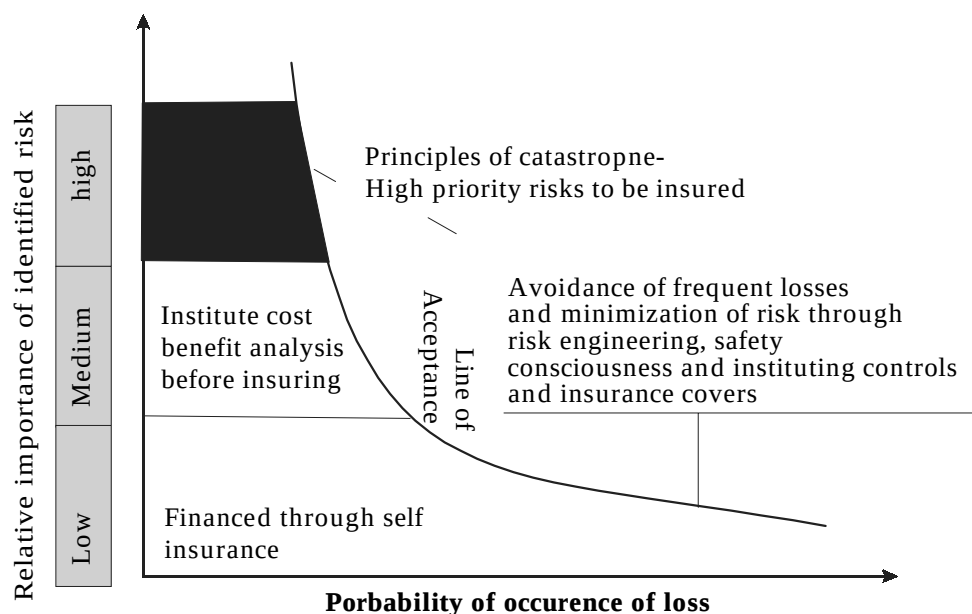
**Question 50: What are the characteristics of insurance exposures? Discuss the relationship between relative importance of identified risk and probability of occurrence of loss.**

**Answer:**

The characteristics for an exposure to be covered by Insurance are as follows:

5. **Pure Risk:** These are classified into *personal risk, property risk, liability risk and loss of income risk*.
  - a. *Personal Risk* – Can happen due to premature death, old age, sickness or disability and unemployment.
  - b. *Property Risk* – Can be classified as loss of property, loss of use of property, additional expenses arising out of loss of property.
  - c. *Liability Risk* – Can arise as injury to people or damage to property or negligence or carelessness.
  - d. *Loss of Income Risk* – Consequential loss of income arising out of personal or property losses.

6. **Similar Exposures:** Prediction of losses through application of statistical computations with the help of theory of probability require a sizeable population of similar exposures. This is particularly important in that estimation of probabilities for the happening of an event needs an adequate large sample, as accuracy increases with bigger sample.
7. **Accidental Losses:** Insurance contracts allow payments only for a accidental losses which beyond the insured's control. Losses taking place unintentionally alone are covered by Insurance. Suppression of information of a known risk will not entitle for compensation.
8. **Definite Loss:** A definite loss has three facets. It should be recognizable and should be susceptible to verification. The loss should be measurable. This is particularly important in that premium are computed mainly on the estimated quantification of losses.
9. **Large Loss:** As there is always a consideration in the form of a premium for receiving a compensation for a loss, care should be taken that the premium to loss ratio is sufficiently favorable. Insurance tariffs normally form a very small percentage sometime even less than a per cent.
10. **Catastrophic Losses:** Catastrophic losses from natural disasters have two main characteristics :
  - a. They are limited to geographic area where the impact has taken place.
  - b. Prediction of the event is very difficult. For example storms and floods or earthquakes etc. can create catastrophic losses as such an Insurer will have to take special precautions of calculating the premiums. Even then the loss may be so huge that the consumers normally resort to sharing the risks through reinsurance as also ensures dispersion of risks over a larger geographical area. To estimate the frequency and severity of the catastrophic losses probability analysis is resorted to:







**Question 51: How is insurance premium is computer for a particular product and what is the role of management accountant in this exercise?**

**Answer:**

The process of determining or fixing the rates of premium for a particular product is known as pricing. Traditionally, premiums have been calculated based on tariffs set by the Insurance Regulatory Authority. The rates are derived based on various factors like past loss ratio, location of the asset, type of asset, as well as exposure to the risks. Rate is the pricing factor upon which the premium is based. For example, car insurance policies are priced based on factors such as make and model of the car, the age of the driver, purpose for which the car is used, location where the vehicle is kept, etc.

Premium is calculated using the formula

$$\text{Premium} = \text{Annual Rate} * \text{SI}$$

The annual rate is usually given per thousand SI.

Where SI is Sum insured.

Traditionally, for motor insurance, the parameters that are used to price a policy have been model of the car, age of the driver, location of the car and purpose for which the car is driven, etc.

The industry will eventually move from price rating to risk rating. The pricing for each individual will be based on their track record. For example, for 'own damage' in a car insurance policy, the pricing parameters will be the model of the car, driver's age and engine capacity.

This is of particular importance to a management accountant as it is in the nature of pricing a product. The insurance premium can be broken up into four parts:

- Cost of payment for losses
- Cost of operation and maintenance of insurance pool
- Reserve for contingencies
- Return on Investment.

In the life insurance, calculation of insurance premium is very complicated exercise as the variables involve are many, e.g., factors aggravating mortality rates, like smoking, drinking, drugs and other habits, age of the insured, occupational hazard, etc. This computation is normally through actuarial computations involving mortality rates. Premium rate is often referred as rate per unit of exposure. If the total face value of life insurance is hundred thousand (Rs.100, 000) and the Unit of exposure is Rs.1000 the premium will be Rs.500/-. As already indicated the gross insurance premium is made up of a pure premium cover to expected loss and a loading to cover the cost of doing the business.



**Question 52: Define liability exposures. Write a short note on:**

**Contractual liability**

**Agro and Bio liabilities**

**Answer:**

Liability exposures can be defined as those losses, which are caused due to the failure to accomplish legally imposed obligations rather than enjoy the rights. The limit of liability of the Insurers under a policy is the sum insured.

**1. Contractual liability** is caused when promises are made to deliver particular goods or services at a price already determined and at certain time. The liabilities can be two fold:

- a. Post completion contractual liability: A liability arises when an agreement is made by a contractor for a performance of an agreed service, e.g., building contractor
- b. Professional services liability: A professional applies his special knowledge and skill in practice like a lawyer. Therefore a client or a patient can sue a professional for negligence or wrong doings

**2. Agro and Bio liabilities:** The basic liability issues arise as follows:

- a. Farmers credit liability
- b. Consequential losses liability
- c. Genetically modified crop seed liabilities
- d. Consulting expenses and royalty liabilities
- e. Casualty liabilities on farmers assets
- f. Latent deficiencies liabilities (public and professional liabilities)
- g. Inflation liabilities (dynamic risks in risk management) affecting the farming community

Dr. M.S. Swaminathan committee has identified insurance as a panacea for the above liabilities and the possible steps can be:

- Recognizing agriculture as an “open roof” industry and bringing in concepts of industrial liability insurances
- Pre-harvest hedging
- Cross dimensional liability coverage for inability
- Linking of life assurances of farming community with their property and casualty insurances

**Question 53: Define management accountant’s role in insurance risk management.**

**Answer:**

The management accountant wears two hats, a management accountant in an insurance company and a management accountant in an insured company. Both of them have the



responsibility for managing the risk from their own company's angle. A management accountant in an insurance company has to fully comprehend the computation of premium rates for different insurance products as also fully define the character of losses to be covered as a cross functional process along with the Actuarial professionals. Value imputation of the risks to be covered by the insurer's company has two aspects:

1. Quantifying the total risk to be covered for calculating a premium as a definite fraction of the risk value covered by the policy
2. If the quantification of risk is so high and the corresponding premium is likely to be also high enough for an insured to back out, then develop a framework where the insurer's company can re-insure itself for the policy risk with another insurance company. This will help in reducing the premium for the insured

A management accountant in an insured's company has his task cut out very clearly in two directions. At the time of covering the risk he has to work very closely with the cross functional team to identify the direct values of the risks involved and the indirect consequential values of the risks involved. For example, firstly, the replacement cost of a plant being insured is a direct cost and has to be quantified by proper methodology and secondly, the consequent loss of profits due to the stoppage of plant due to breakdown of the plant being replaced. In a service company it may be a cessation of a service being offered due to a peril such as fire or earthquake, etc and the consequential loss of profits there of.

Management accountants where ever they are need to be conversant with the use of mathematical models quantifying risk, financial cannons like Time value of money, dynamic programming, cost slopes and crashing, etc.



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## Study Note - 10

### CORPORATE RISK MANAGEMENT

**Question 54: Describe asset liability model and its utility for managing liquidity risk and exchange rate risk.**

**Answer:**

Asset liability management is a technique to compute matching of assets and liabilities by which a prudent management of an investment portfolio can be properly taken care of. Asset liability management is defined as “maximizing the risk adjusted returns to shareholders over the long run”. It is also defined as management of total balance sheet in terms of size and quality (composition of assets and liabilities).

#### **Liquidity risk management through asset liability management**

It is difficult to measure liquidity risk as it entails expecting likely inflow of deposits, loan dispersals, changes in competitive environment, etc. The most commonly used techniques for measurement of liquidity risks is the gap analysis. The assets and liabilities are arranged according to their maturity pattern in time brackets. The gap is the difference between the maturing assets to the maturing liabilities. A positive gap indicates that maturities of assets are higher than those of liabilities. A negative gap indicates that some rearrangement of funds will have to be done during that time bracket. It can be from sale of assets or issue of new liabilities or rolling over existing liabilities.

#### **Exchange rate risk management through asset liability management**

At a particular exchange rate assets and liabilities of a financial institution match exactly. As the exchange rate fluctuates this balance gets disturbed. A simple solution to correct this risk is to match assets and liabilities of the same currency. Many financial institutions do not have foreign exchange exposure as all their assets and liabilities are in rupee currency. The risk of foreign exchange borrowings of these institutions are passed on to the lenders through dollar denominator loans. The uncovered loans are hedged at the time of contracting them through forward covers for the entire amount.

**Question 55: What are solvency related measures for risk management?**

**Answer:**

*Solvency-related* measures (these measures concentrate on the adverse “tail” of the probability distribution – and are relevant for determining economic capital requirements)

Probability of ruin – the percentile of the probability distribution corresponding to the point at which the capital is exhausted.

Shortfall risk – the probability that a random variable falls below some specified threshold level. (Probability of ruin is a special case of shortfall risk in which the threshold level is the point at which capital is exhausted.)

Value at risk (VAR) – the maximum loss an organization can suffer, under normal market conditions, over a given period of time at a given probability level. VaR is a common measure



of risk in the banking sector, where it typically calculated daily and used to monitor trading activity.

Expected policy holder deficit (EPD) or economic cost of ruin (ECOR) – an enhancement to the probability of ruin concept (and thus shortfall risk and VaR) in which the severity of ruin is also reflected. Technically, it is the expected value of the shortfall.

Tail Value at Risk (Tail VaR) or Tail Conditional Expectation (TCE) – an ECOR-like measure in the sense that both the probability and the cost of “tail events” are considered.

Tail events – unlikely but extreme events, usually from a skewed distribution. Rare outcomes, usually representing large monetary losses.

### Question 56: What are performance related measures for risk management?

#### Answer:

Performance-related measures (these measures concentrate on the mid-region of the probability distribution –see “risk profile” above – i.e., the region near the mean, and are relevant for determination of the volatility around expected results):

- Return on equity (ROE) – net income divided by net worth
- Operating earnings – net income from continuing operations, excluding realized investment gains
- Earnings before interest, dividends, taxes, depreciation and amortization (EBITDA) – a form of cash flow measure, useful for evaluating the operating performance of companies with high levels of debt (when the debt service costs may overwhelm other measures such as net income).
- Cash flow return on investments (CFROI) – EBITDA divided by tangible assets.
- Weighted average cost of capital (WACC) – the sum of the required market returns of each component of corporate capitalization, weighted by that component’s share of the total capitalization.
- Economic value added (EVA) – a corporate performance measure that stresses the ability to achieve returns above the firm’s cost of capital. It is often stated as net operated profits after tax less the product of required capital times the firm’s weighted average cost of capital.

### Question 57: What are the strategies adopted for Corporate risk management?

#### Answer:

In risk management, the following four strategies are generally adopted:

- **Risk Avoidance** is a strategy by which the organization does not engage in the activity which involves any risk.
- **Risk Reduction** is another strategy where the organization takes two steps. One is preventing the occurrence of risk and the second one is controlling the number of occurrences. One of the possible ways of reducing the risk is going for large number.



- **Risk Retention** is the most popular method of dealing with risk. Risk retention may be conscious or unconscious. Conscious risk retention takes place when the risk is perceived and not transferred or reduced. When a risk is not recognized, it is unconsciously retained.
- **Risk Transfer** is another method of managing risk. Risk can be transferred to a person willing to take it. Hedging or insurance are best examples for risk transfer
- **Risk Sharing** is process by which the potential risk is shared among many, so that the loss is not borne by a single person.

**Question 58: Define Enterprise risk management. Write a short notes on:**

**Corporate risk governance**

**Portfolio management**

**Answer:**

“Enterprise risk management is the discipline by which an organization in any industry assesses controls, exploits finances and monitors risks from all sources for the purpose of increasing the organization’s short and long term value to its stakeholders”.

**Corporate risk governance**

Responsibility of a corporate body encompasses

1. Identifying the organization’s appetite for risk in the areas of capital leverage, credit rating, etc
2. The capability of the organization to manage risk and support it’s business strategy
3. Establishing the structural relationship between the roles and responsibilities for risk management
4. Pooling of risk and develop such integrated risk measures encompassing the various spheres of activity like finance, marketing, human resources and operations
5. Establishing proper tools for risk assessment, measurement and analysis
6. Developing a proper culture and awareness in the organization through leadership
7. Educating the various layers of organization about risks absorption and management through case studies

Corporate governance has become a buzzword in Indian corporate world and SEBI has laid down guidelines in this regard. Every annual report contains a section on corporate governance along with management’s discussion on performance and future outlook.

**Portfolio management**

Pooling of risks should not just happen, but must be aggregated properly so that appropriate diversification of risk can be attempted. This will lead to optimal portfolio where natural hedges can be fully implemented so that risk and return are well balanced.

Portfolio theory essentially guides an investor to reach an optimal portfolio position. This theory has originally postulated by Harry M. Markowitz assumes that the utility of the investor is a function of mean return and variance of return [or standard deviation (Square root of variance)].



The expected return on a portfolio is simply the weighted arithmetic average of the expected returns on the assets constituting the portfolio. The riskiness of the portfolio is measured by the standard deviation of the portfolio rate of return which is a function of

The proportions invested in the components

The riskiness of the components

The correlation of returns on component securities

The principle of portfolio theory can be likened to pooling of risks and diversifying them.

**Question 59: Enterprise risks involved in solvency transactions as well as ageing debts have to be taken care of on a day to day basis in the business. What are the tools (instruments) used for this purpose and application there of?**

Major tools for managing enterprise risk are as below:

| Instrument                             | Purpose                                                                                                                                                                                                                                                                                                                 | Remarks                                                                                                                                                                                                                                             |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Guarantee                              | Guarantees can be financial guarantees or performance guarantees. <ul style="list-style-type: none"> <li>Financial guarantees protects against the financial loss on failure to meet financial obligations</li> <li>Performance guarantees are protection against non-performance of contractual obligations</li> </ul> | Financial institutions provide guarantees as a risk cover against a collateral by the buyer for a consideration                                                                                                                                     |
| Letter of credit or documentary credit | Guarantee against non payment of purchase consideration by the buyer in the nature of off-balance sheet financing                                                                                                                                                                                                       | Financial institutions issue this instrument for a consideration. It can be revocable or irrevocable. Can also be revolving                                                                                                                         |
| Underwriting                           | Underwriting is a protection mechanism available in the capital market to cover the risk of non-subscription to a public issue                                                                                                                                                                                          | Financial institutions offer this risk cover for a consideration after due evaluation of risk                                                                                                                                                       |
| Collateralized debt obligations        | Taken against short term and long term loans for working capital as well as fixed assets                                                                                                                                                                                                                                | Financial institutions offer this risk cover for a consideration after due evaluation of risk and cover themselves completely either through hypothecation or pledge or equitable markets                                                           |
| Asset Securitization                   | Companies offering financial services of hire purchasing, leasing, etc try to raise finance through this method                                                                                                                                                                                                         | This is a special purpose vehicle (SPV) to manage default risk. Financial institutions as well as public subscribe to this method for a consideration in the form of interest and securitization is available from the assets that are being traded |
| Factoring                              | Companies resort to this instrument both as a risk cover and insure cash flow                                                                                                                                                                                                                                           | Specific financial institutions called factoring companies offer this service for a commission with recourse or without the recourse                                                                                                                |



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**Question 60: How is project risk management done in practice?**

**Answer:**

In reality, the risk assessment is done through considering the various components of the financial estimates and developing certain judgmental approaches:

- Estimation of revenues: Revenues projected for a project need to be justified on the basis of real data available and then the projections are made conservatively. This avoids optimistic projections of income
- Cost estimates: Always include a margin of safety to take care of impact of inflation over the time horizon for which the projections are being made. Here again the margin of safety is computed on the basis of trend analysis of inflation over the recent past and the lead indicators that are available from fundamental analysis
- Acceptable return on investment: This is the prime measure and as such it should be arrived at on the basis of certain consensus. It will depend on the payback period to be assumed, the industry experience and the company's norm for return on any new project on the basis of the current experience
- Overall certainty index: The critical risks of the project are identified and the certainty index of each of these risks is quantified. Then the overall certainty index is developed as an average of the critical indices already computed. For instance, raw material availability, power availability, intensity of competition is a few of the risks, which are quantified in terms of certainty indices. The cumulative average is the overall certainty index
- Judgmental perceptions: Three different estimates of return on the investment are developed – pessimistic, most likely and optimistic on the basis of the stage at which the particular industry is in its life cycle. On the basis of the three estimates and comparing them with the earlier methods available on certainty equivalent coefficient, a judgmental decision can be taken

**Question 61: How do you shape institutions for project risk management and what are the strategies to be adopted?**

**Answer:**

Institutions can be shaped by anchoring projects, ensuring repayment of investments, providing social utility. This risk could be avoided by stabilization of long term future to enable investments, enhance the legitimacy of the project by developing practices like inviting the representatives of both the institutions and the public. Develop a strong framework for structuring decision making.

**Question 62: How do you hedge and diversify project risk management and what are the strategies to be adopted?**

**Answer:**

Hedging and diversification of project risk management use the following tools: portfolios, insurance and hedging. Project risk could be reduced through building a diversified portfolio





to balance risks and cash flows, hedging against currency fluctuations or commodity exposures, applying financial derivatives. Risk can be transferred by insuring risks as well as diversifying investments in different countries to reduce political risk.

**Question 63: How do you embrace project risk management and what are the strategies to be adopted?**

**Answer:**

Project risk can be embraced through comprehension of residual risk. This risk could be retained by developing a proper information system regarding the residual risks, commercial aspects and developing a clear sense in bearing various risks, then understanding of particular risk domains to develop ability to bear commercial risks. This risk could be transferred through Develop information system regarding financial institutions, capital markets and special vehicle applications identification local industrialists who are ready to partner for sharing risks through a portfolio of investment, identification of international partners for sharing investments through a portfolio of investment, identification of financial institutions locally like commercial banks, identification of international financial institutions.



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## ANNEXURE 3

### CASE STUDIES WITH SUGGESTED SOLUTIONS

#### Englishfone reentry into India

(A case on acquisition)

**“Englishfone’s Chief Executive Values Hongkongfone at \$18.8 billion”.**

In January 1999, UK based Englishfone made its maiden entry into India when it merged with US based USAfone. At that time, USAfone had a 49 per cent stake in Madhya Pradesh SI Cellcom and 20 percent in SI Cellular in Chennai. However by 2003, Englishfone exited India. After all, with just 1 per cent mobile penetration, the country was not yet a hot telecom destination.

Two years later, when the subscriber base started shooting up, Englishfone returned. In October, 2005, it picked up a 10 percent stake in leading mobile operator Indiafone Tele-Ventures for \$1.5 billion (Rs.6700 Crores). In its third avatar, the \$54.8 Billion Englishfone has bagged Hongkongfone, India’s fourth largest mobile operator, by paying \$11.08 billion (Rs.49.860 Crores) for a 67% stake. In the process, it has edged out Hongkongfone’s 33% partner, the Group.

Englishfone offered to pick up’s 33% stake at the same evaluation. Now, Englishfone will have a presence in 16 of India’s 23 Circles, plus licenses for another six. Ironically, the only circle missing in Englishfone’s India bouquet is Madhya Pradesh where it had made its India debut.

The real gainer, no doubt, is Hong Kong based, Hongkongfone Telecommunications International, which has netted a neat \$8.48 billion by exiting the Indian Operations. Sources close to HTIL say it exited since it got enough value for the \$2.6 billion odd investment it had pumped into the Indian venture.

The Indian acquisition fits into Englishfone’s focus on the EMAPA (Eastern, Europe, Middle East, Africa, Asia Pacific and Affiliates) markets. India is a critical cog in that plan. That’s because mobile revenues already account for 57% of the \$ 22.5 billion (Rs.1,01,250 crore) Indian telecom market. By 2010, it is expected to account for 76% of an estimated \$43.6 billion (Rs.1,96,200 crore) market.

#### **Bankrolling the buy-out**

Englishfone’s successful bid for Hongkongfone’s 67% stake in Hongkongfone may have been driven by its compulsions to enter the High-growth Indian Market, but what clinched the deal for the UK based company was the enormous booty of cash at its disposal.

Englishfone was probably the least leveraged of all the bidders and this helped them bid aggressively. It already had \$5 billion from the sale of its Japanese Unit for \$15 billion in 2006 (the remaining \$10 billion is expected to go back to shareholders). It also got \$1.62 billion cash from its 5.6% stake sale in Indiafone. This \$6.62 billion may go towards funding the \$11.1 billion price tag for the 67% stake.



In addition, Englishfone had free cash reserves (for the first six months of 2006) in excess of \$3 billion. It had also sold its 25% stake in Swiss Mobile and exited Belgium. Therefore, the debt component in the deal was lower.

Investment Bankers in India too, have underlined Englishfone's advantage, thanks to its access to cash and its capability to strike the least leveraged deal.

### **Immediate challenges**

It is going to be a tough battle ahead as the World's largest mobile operator (by revenue) tries to woo the price-conscious Indian Consumer. The CEO says "We are the fourth largest operator in India. We intend to be No.1 in India. So would Indiafone, Let's see". Englishfone is targeting 100 million Indian Subscribers in three years (Hongkongfone has 24.41 million at present). That's half its subscriber base in 27 countries. But getting there means adding between 1.5 million and 2 million subscribers every month.

While Hongkongfone has been adding around 1 million subscribers a month, market leader Indiafone has been adding 1.75 million. Englishfone needs to exceed Indiafone's net subscriber additions to be the leader in three years. Second, it needs to tap rural India in a big way. Englishfone has earmarked an investment of \$2 billion over the next couple of years to strengthen its presence here.

### **Discussion Questions**

#### **1. Why Englishfone chose Hongkongfone?**

Fourth largest mobile operator in India with 24.41 million subscribers.

16.41% share of the Indian mobile market.

Present in 16 of 23 circles. Has license for six others barring Madhya Pradesh.

Average Revenue Per User (ARPU) at Rs.374 as against the national average of Rs.335.46.

Hongkongfone Mumbai ARPU at Rs.609.36, the highest in India, but yet to be integrated.

Accounted for 41% of Hongkongfone Telecommunication International's Revenues.

Revenues of \$908 million in H1 2006 as against \$1.29 billion in 2005.

Operating profits of Rs.1,017 crore, EBITDA margins at 32.7% in H1 2006.

Fits into Englishfone's focus on increasing presence in emerging markets.

#### **2. Now the question arises is: Has Englishfone paid too much?**

**The answer is not really.**

The Englishfone scrip rose 1.34% on the London Stock Exchange between 9 February and 12 February. The total valuation of Rs.\$18.8 billion is below the \$20 billion level that was considered a major issue with Englishfone investors. Englishfone paid \$11.08 billion for the 67% stake. After one factors in the \$ 1.62 billion it will receive over the next 18 months by selling its 5.6% stake in Indiafone, the net outgo is \$9.46 billion. Add to that debt of \$.1.96 billion.

While that has to be paid, what could bring a lot of succor to Englishfone is the Memorandum of understanding that it has with Indiafone on infrastructure sharing.



The immediate impact will be that it will be in a position to start services quickly in uncovered areas.

Englishfone seems to have pegged its valuation based on India's mobile growth story. After all, there is no other country that is adding over 6 million subscribers every month. The increasing subscriber base has also meant that while average revenues per user are falling, revenues are on the rise. The Cellular Operators' Association of India data clearly shows that though ARPU fell by 10.6% in the July-September 2006 quarter over the same period last year, revenues went up by 57.85%. That's the clear indication of the potential of the Indian Market.

Also, mobile penetration at 13% is well below China's 41% and Brazil's 54%. It is expected to touch 40% mark by 2011-2012. By then Englishfone expects to control 20-25% of the market as against 16% now. Obviously, revenues will be higher.

The enterprise value per subscriber that Englishfone paid at \$770.2 is much lower than \$1,066 it valued each Indiafone Subscriber in 2005.

Englishfone will have to bid for 3G spectrum. However, Englishfone seems to be focusing more on expanding the 2.5 subscriber base for now. But the experience that it has in deploying 3G in Europe will be a great advantage when it gets down to rolling out services in India.

### **3. What can one expect from Englishfone?**

Englishfone said it in as many words. So, look out for a major ramp up of the existing Hongkongfone network. That means more business for global telecom vendors.

First, it changed the pink Hongkongfone logo with its own red logo. It is something which company does globally. CEO (EMAPA), Englishfone says "We believe in the Englishfone brand, and the migration will be done in a seamless way. That's because we have experience of Re-branding in over 20 markets. And yes, will be consulted in the Re-branding exercise".

Next, you can expect low cost handsets with the Englishfone logo. That's quite on the lines of what an Indian mega telecom company has already done in the CDMA space. Englishfone has recently struck a deal with China's ZTE to source handsets. Expect such deals for vendors who are already manufacturing in India.

This could lead to lower tariffs, though it remains to be seen how much lower it can go from Re 1 a minute. But be prepared for services like Englishfone simply for the low end user, Englishfone Live for multimedia and Englishfone Passport for cheaper global roaming calls. Being on the Englishfone network means that roaming will be a lot cheaper.

### **4. Was the acquisition a success or a failure?**

#### **It was a success**

Just six months ago, the London based group sold their 5.11% stake in Hongkongfone to Hongkongfone Telecommunications for \$450 million. That worked out to \$502 per



subscriber. The \$18.8 billion valuation by Englishfone means that it has offered \$770.2 per subscriber, a 53.4% increase. In contrast, way back in 1999, Indiafone acquired JT Mobile at \$117 per subscriber. The soaring valuations are a clear indicator of where the Indian Telecom market is headed.

The advantage that Englishfone has is that Hongkongfone has the highest average revenue per user (ARPU) in India at Rs.374. This is a despite a 19.3% fall in its ARPU since September 2005. But the key advantage is that during 2006, Hongkongfone added 10.67 million subscribers. That's an average of almost a million new subscribers every month. Given that the industry is adding over 6 million subscribers every month, this figure should only rise.

The sharply rising subscriber base ensures that revenues will keep increasing. While during 2005, Hongkongfone had revenues of Rs.5,800 crores, it notched Rs.4086 crore in the first half of 2006. The deal with Indiafone will also keep capex costs in check for Englishfone. Considering that chief executive of Englishfone is not too keen on 3G services in India immediately, the focus will be on getting a national coverage. Now it is time for Englishfone to justify the valuation to Englishfone's shareholders.

Global population is 6.6 billion and India's population is 1.2 billion. A mobile phone user globally is 2.3 billion and in India it is 205 million users. So therefore one can see the potentiality of the Indian market.

The Cellular Operator Association of India (COAI) data clearly shows that ARPU went up by 57.85% in 2007 2<sup>nd</sup> quarter as compared to the 2<sup>nd</sup> quarter in the last year. India's mobile industry to touch 40% mark by 2011-2012 and Englishfone expects to capture 20-25% of the market share.



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## **IB group rediscovers itself**

(A case study on Strategy formulation and implementation)

Indian breweries vision is to become the No.1 Company in all our Core Businesses through Customer Focus and Teamwork. To realize this dream the Company has developed its mission statement as follows:

We constitute a large, global group based in India. We associate with world leaders in order to adopt technologies and processes that will enable a leadership position in a large spectrum of activities.

- We are focused on assuming leadership in all our target markets.
- We seek to be the most preferred employer wherever we operate.
- We recognize that our organization is built around people who are our most valuable asset.
- We will always be the partner of choice for customers, suppliers and other creators of innovative concepts.
- We will continually increase the long-term value of our Group for the benefit of our shareholders.
- We will operate as a decentralized organization and allow each business to develop within our stated values.
- We will be a major contributor to our National Economy and take full advantage of our strong resource base.
- We commit ourselves to the ongoing mission of achieving Scientific Excellence.

### **Quality statement**

We constitute a large, global group based in India. We associate with world leaders in order to adopt technologies and processes that will enable a leadership position in a large spectrum of activities.

We are focused on assuming leadership in all our target markets.

We seek to be the most preferred employer wherever we operate.

We recognized that our organization is built around people who are our most valuable asset.

We will always be the partner of choice for customers, suppliers and other creators of innovative concepts.

We will continually increase the long-term value of our Group for the benefit of our shareholders.

We will operate as a decentralized organization and allow each business to develop within our stated values.



We will be a major contributor to our National Economy and take full advantage of our strong resource base.

We commit ourselves to the ongoing mission of achieving Scientific Excellence.

The Chairman of IB said, “The success of IB Company is measurable by the steady increase in the market capitalization, which has grown dramatically. We have marked the occasion with a bonus issue in the ratio of 1:1 and a cash dividend after an extended period of time. The primary role of Indian breweries [Holdings] Limited is to promote and incubate companies to which we bring both financial and management resources, so as to grow these investments as quickly as possible, to profitable leadership in their respective lines of business.

Not so long ago IB was a multi divisional conglomerate with interests in many different lines of business. Over the last several years, there has been a distinctive shift away from this approach in favor of greater focus. We have chosen to remain and invest resources in business where we have not only clear market leadership domestically, but also a global relevance. We pride ourselves on being a consumer goods company, with expertise in building lasting brands. With this philosophy, we have sharpened our vision and focused our resources in three major sectors, viz., Brewing, Spirits and most recently, Aviation.

### **Beer**

Indian breweries have gone from strength to strength during a year, which commenced with Scottish & Newcastle cementing the joint venture and consequent induction of Rs.464 Crores into the company. In a market that grew at an average rate of 15% for Larger and 11% for strong beer our company has significantly outperformed, gaining 50% market share in the process. Hummingbird Lager has crossed the 20 million case mark and Hummingbird Strong has become India’s leading Strong Beer during the year. Aggressive growth and close watch on costs has resulted in Indian breweries increasing profit margins by 245%. The gradual beginning of deregulation has resulted in explosive growth during the early part of the current financial year. Improving economic conditions and the demographic imperatives will ensure sustainable growth for many years to come. To take advantage of this energizing growth, our company plans to make significant growth in capacity over the next few years.

### **Spirits**

It has been a watershed year for our Spirits Division post the spate of acquisitions including SW, and the remnant shares of T and H. The management integration of the business has gone extremely well, thanks to close attention to detail and professional management of the process. I am pleased to report to you that respective High Courts have granted permission to complete the legal consolidation of all the spirits companies of the group into John’s to create Indian spirits Ltd. The market cap of Indian spirits has crossed the US \$ 1 billion mark on a normative basis.

The business is growing strongly and the company has drawn up a three year strategic plan which envisages continuous improvement of profitability, growing “premiumness” of our product offerings and the opening of new lines of activity such as exports and wines.



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## **Airlines**

Hummingbird Airlines is our newest venture and all of you who have experienced the service would recognize that this company is re-writing the book on service levels in the aviation industry, not just in India but with plenty of international recognition and accolades as well.

We have brought to bear on this business, our deep insights into consumer behavior and needs, helping us to create a product, which truly sets new standards. With 17 aircraft performing 104 flights a day in 15 months since commencement of operations, I believe that Hummingbird has got off to an aggressive start which is well placed to take us forward to market leadership in coming years.

Hummingbird Airlines is expected to break even by FY 07-08. However, the airline is well respected and consequently able to lineup funding required to meet all its requirements till that time.

## **FERTILIZERS**

Chennai Chemicals Ltd. has had another productive and successful year having produced 4 lakh tonnes of urea and 1.94 lakh tonnes of Di Ammonium Phosphate (DAP). From a situation of heavy losses and extensive debts at the time that the IB Group acquired it, this company has now been making profits for the last several years and is now debt free. We at IB are proud of this turn around and the active contribution that CC makes to farm production in Karnataka. CC also rewarded its shareholders with the declaration of a dividend for the first time in 18 years.

## **IB city**

IB CITY is rising fast in the heart of Delhi, reshaping forever the skyline of the city. Located, as it is, on one of the most valuable pieces of real estate in Delhi, the one million plus sq.ft multi use development comprising a luxury hotel, high tech commercial space and super premium shopping mall will create a landmark in the city. Occupation will commence by the end of the current FY and the entire project will be completed by autumn 2007. Renting of our share of the developed premises will generate a recurring and healthy cash flow.

From the foregoing, you will see that our company is on the verge of cashing in on the growth that will accrue from our high quality products, brands and exceptional service levels, addressing needs of a resurgent India, where the youthful population will contribute not only to rapid economic growth, but also to a significant expansion in consumption. The IB Group's family of products and services anticipate and cater to these needs and I truly believe, my friends, THE GOOD TIMES WILL CONTINUE TO ROLL!

This leaves me with a very pleasant duty of recording my appreciation and the appreciation of my colleagues on the Board, to all for having contributed to this happy state of affairs, including staff, managers, suppliers, customers, financial partners and above all, you, my dear shareholders."

## **Discussion questions**

What is the relationship between vision and mission of Indian breweries





Indian breweries vision is to become the No.1 Company in all our Core Businesses through Customer Focus and Teamwork

To become a number one company IB has formulated a strategy at the functional level to identify its core competence, improve quality, build up on the customer focus and develop structure in organization in such a way that cross functional relationship has been strengthened. Over the last several years, there has been a distinctive shift away from this approach in favor of greater focus. IB has chosen to remain and invest resources in business where IB have not only clear market leadership domestically, but also a global relevance.

The mission statement very clearly reflects the importance attached to development of the core competences for which quality, customer focus, team work, etc. have been given great importance

From a conglomerate IB group moved towards specialization. Discuss.

IB group as a conglomerate had with in its control breweries, fertilizers, aviation and real estate development. At this point of time though the company was moving ahead the rate at which it was growing was not satisfactory especially as the core competencies in different areas have not been give their fillip they required. As a managerial acumen crystallized restructuring the group has been very successful. Breweries and spirits had been brought under John's so that the brands could be built and nurtured globally with specific focus. In the same manner, Chennai chemicals and fertilizers which had already the necessary professional expertise have to be supported through financial measures. The aviation company Hummingbird is also been developed separately on professional lines looking for new opportunities and acquisitions.

The top management of the company very clearly knew that developing IB group in the various spheres of activity would require heavy dose of investment. Towards this cash flow and cash accretion became important and forays into real estate development have provided the necessary cash flow in a regular manner.

From this case study what are the level strategies formulated and implemented by IB group?

Regrouping the company's activities according as the distinctive core competencies, customers focus and quality excellence, the strategy conceived has been at the functional level.

Identifying the requirements of resources for each activity through as SWOT analysis the company developed a business level strategy by identifying the target markets domestically and investments required there for. Chennai chemicals and Hummingbird aviation fitted well for this strategy.

Redefining markets, development of brands multi-nationally for the brewery products and spirits required steps based on global level strategy. This global level strategy now has come in as a catalyst for Hummingbird aviation becoming an international airline.



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## **Seashore at Risk**

(A case on risk management)

The BL 250 Hotels and Resorts Index, a constituent of the Broad – based BL 250 index, is rundown during the early years of 2001- 2003. The stock of Hotels in India did not fare well even when they were operating on a chain. The sentiments were no different with companies operating single hotels. Primarily, two factors contributed to the dumping of hotel stocks – a substantial fall in earnings and bleak prospects of revival in the near future.

### **Earnings**

The earnings growth for hotel companies is a function of occupancy levels and the average room rates (ARR). While a hotel does generate stand-alone revenue from its restaurants, bars and conference hall, a substantial portion stems from guest check-ins and related revenues, such a food and beverages (F & B). Typically F&B-to-room-income ratio ranges from 0.80 to 1 in cities such as Chennai and Kovalam; and 1:1 in Goa and Bangalore. That is, every one rupee earned in room revenue generates F & B income of 80 paisa in Chennai, and one rupee in Chennai. Hence, occupancy levels play an important role in determining the pre-tax profits of hotel companies.

As over 50 per cent of the total guestrooms are located in Chennai and Goa, it would be just as well to study the occupancy levels in these two cities to determine the overall trends. Luxury Hotels in these cities have two characteristics. First, they derive more than 60 percent of their income from foreign guest check-ins and, second, these hotels depend primarily on business travelers for revenues.

### **Hotel Seashore**

The Chennai based Hotel Seashore owns and operates a chain of premium hotels under the 5 Star deluxe categories. Its 4 properties are located in Chennai, Bangalore, Goa and Kovalam with the Chennai and Bangalore properties accounting for majority of the revenues. It is presently in an expansion mode, which will more than double its room inventory to over 2520 rooms in the next 2 – 3 years from the present levels of 1086 rooms. It is also developing an IT Park in Pune, which is expected to generate an annuity income of Rs.24crs. The wide gap in the demand and supply of rooms in the areas where Seashore presently operates and is expanding augurs well for its future growth leading to increased ARRs and Occupancy Rates (OR). The increase in ARRs and ORs in most of these locations will more than offset the decrease in ARRs in Bangalore. Taking into account the buoyant industry conditions, expansion of rooms in high growth markets, the brand pull of Seashore and its tie-up with Temposki we expect the company to better its performance going forward. The stock is presently quoting at 17.5x its FY08E EPS of Rs.3.20.

### **Discussion questions**

- Identify the type of risk faced by hotel Seashore?

They derive more than 60 percent of their income from foreign guest check-ins and, second, these hotels depend primarily on business travelers for revenues. These two segments depend on the macro lead indicators for the economy and



as such trade cycles also affect the hotel industry. This results in lower occupancy rate and lower room rent. This is clearly a case of business risk.

- How has Seashore managed the business risk?

The fluctuation in average rates and occupancy rates brought about a fluctuation in cash flows and operations below the break even level. So any measure for managing this risk would be to identify an avenue which is totally unrelated. To compensate for the crests and troughs of the cash flow, a regular stream of cash flow would take care of the standing charges. Towards this hotel seashore is developing an IT Park in Pune, which is expected to generate an annuity income of Rs.24crs.



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## **An acquisition with a difference**

(A case on Mergers and Acquisition)

### **According to the Europeshoes and Americanshoes International acquisition**

- Agreement under which Europeshoes AG would acquire all of the outstanding shares of Americanshoes for US \$59.00 per share in cash.
- The offer price represents a premium of 34.2% over the closing price of Americanshoes's stock on August 2, 2005.
- The transaction value is approximately **₹** 3.1 billion (U.S.\$3.8 billion) including the assumption of net cash of **₹** 69 million (U.S.\$84 million).
- The combination of Europeshoes and Americanshoes accelerates the Europeshoes group's strategic intent in the global athletic footwear, apparel and hardware markets.

Based in Europe, Europeshoes is the second largest sporting goods company in the world with its core brands Europeshoes TaylorMade-Europeshoes GOLF. With 14,217 employees it reached sales of **₹** 5.9 billion in 2004. The Group's net income attributable to shareholders from continuing and discontinued operations reached **₹** 314 million in 2004.

Americanshoes International Ltd. (NYSE: RBK), headquartered in Canton, MA, is a leading worldwide designer, marketer and distributor of sports, fitness and casual footwear. Sales for 2004 totaled approximately **₹** 3.8 billion.

### **What is in the deal?**

Today's announcement represents a major strategic milestone for our Group," said Europeshoes Chairman and CEO.

### **What is in the store?**

Opportunity to combine two of the most respected and well-known companies

Europeshoes and Americanshoes are energetic and growing companies with a shared commitment to innovation, sport performance and sport lifestyle.

Expand our geographic reach, particularly in North America, Create footwear, apparel and hardware offering that addresses a broader spectrum of consumers and demographics.

With Americanshoes, we are advancing our position on the playing field of the sporting goods industry, improving our financial strength to drive increased shareholder value.

### **Strategic perspective**

Extended geographic reach and more balanced sales profile.

World-class and talented employees

Broader portfolio of world-renowned brands

A more complete product offering in key sports categories



Stronger presence across teams, athletes, events and leagues  
Enhanced R & D capabilities and cutting-edge technology.

**Financial perspective**

Accretive to earnings.  
Return in excess of cost of capital  
Strong operating cash flow  
Substantial operational synergies  
Financing and Capital Structure

**Management and headquarters**

Europeshoes will maintain its corporate headquarters in Europe and its north American Europeshoes headquarters in Portland, Oregon.

Old CEO will remain as chief executive officer of Americanshoes international Ltd. And will continue to lead the Americanshoes team.

Americanshoes will continue to operate under its name and will retain its headquarters in canton, Massachusetts.

This transaction is about growing the combined entity, and Europeshoes does not anticipate significant workforce reductions.

**Approvals and Timing**

The transaction is subject to customary closing conditions and regulatory approvals as well as approval by Americanshoes shareholders

Two shareholders collectively own approximately 17% of Americanshoes's outstanding shares and have agreed to vote their shares in favor of the transaction.

The companies believed that the transaction will close in the first half of 2006.

**Discussion Questions**

1. What are the redeeming features Europeshoes – Americanshoes alliance?
  - a. To avoid competition and enhance the range the two companies came together with the following strategic perspectives:
    - Extended geographic reach and more balanced sales profile.
    - World-class and talented employees
    - Broader portfolio of world-renowned brands
    - A more complete product offering in key sports categories
    - Stronger presence across teams, athletes, events and leagues
    - Enhanced R & D capabilities and cutting-edge technology.
  - b. More than these perspectives Europeshoes understood the tremendous brand equity of Americanshoes and allowed to continue its independent existence. Americanshoes



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International also continues its brand Americanshoes. It will continue to operate under its name and will retain its headquarters in canton, Massachusetts. The combination of Europeshoes and Americanshoes accelerates the Europeshoes group's strategic intent in the global athletic footwear, apparel and hardware markets.

2. How did Europeshoes acquire Americanshoes international? What strategy it adopted?
  - a. EuropeshoesAG would acquire all of the outstanding shares of Americanshoes for US \$59.00 per share in cash.
  - b. The transaction value is approximately **1** 3.1 billion (U.S. \$3.8 bn) including the assumption of net cash of **1** million (U.S.\$84 mn).
  - c. Europeshoes adopted the strategy of acquisition through corporate control. A substantial stock holder's ownership is purchased at a premium that is above the market price called Greenmail. In this particular case the offer price represents a premium of 34.2% over the closing price of Americanshoes's stock on August 2, 2005
3. What sort of a strategic alliance can this acquisition be identified with?
  - a. Though Europeshoes acquired Americanshoes essentially it is born out of a strategic alliance approach. This is an alliance of two strong and complementary partners that will continue to remain strong. This strategic alliance is known as "alliance of complementary equals".



## Risk management in Hanman

(A case on risk management, corporate governance and social responsibility)

|              |                                                    |
|--------------|----------------------------------------------------|
| Type         | Public ( <u>BSE</u> : HANMAN, <u>NSE</u> : HANMAN) |
| Founded      | 1981                                               |
| Headquarters | India                                              |
| Industry     | Automotive                                         |
| Products     | Hanman                                             |
| Revenue      | ~\$2.5 billion (2005)                              |
| Employees    | 3,000                                              |

### Vision

“The Leader in The Indian Automobile Industry, Creating Customer Delight and Shareholder’s Wealth; A pride of India”

### Core Values

Customer Obsession  
Fast, Flexible and First Mover  
Innovation and Creativity  
Networking and Partnership  
Openness and Learning

### Mission

“To motorize India...”

### Major objective

The main objective behind formation of Hanman Limited was to meet the growing demand of a personal mode of transport caused by the lack of an efficient public transport system.

### Downstream Business

- Hanman Finance
- Hanman Insurance
- Service
- Hanman True Value

This company which was started as a public – private partnership developed itself as a role model, both as a corporate entity and as an employer. The company was operated on the four corner stones of profitability, solvency, growth and sustainability. Towards this the company identified various risk factors namely, Business Risk, Commodity Price Risk, Exchange Rate Risk and Financial Risk.



Business risk arose because the automotive industry faces trade cycles, mainly because that the purchases of automobiles depended on the purchasing power of the public. Commodity price risk arose due to the Japanese collaboration and consequent import of many components from Japan for the assembly of automobiles. With the Japanese Yen strengthening against Indian Rupee, the exchange rate risk required careful monitoring and control. Financial risk arose due to sale through hire purchase segment and the default risk that could arise. The company has successfully been managing these risks and is evidenced by the following financial results - 2005:

Growth of 21% and PAT increased by 31%

EPS Increased from 51 Rs. to 63 Rs.

ROCE increased by 35%

Profit After Tax of Rs.15,620 million

Highest Sales of 674,924 vehicles

Under the SEBI guidelines a corporate entity has to adhere to the principles of corporate governance to take care of the share holders interests, provide transparency to its activities. Towards this it developed its corporate governance to take care of the following factors:

- a. Rights and equitable treatment of shareholders
- b. Interests of other stakeholders
- c. Role and responsibilities of the board
- d. Integrity and ethical behavior
- e. Disclosure and transparency

Arising out of this approach the social responsibility of the company transformed itself into taking the following steps:

The new institute Driving Training and Research (IDTR)

Along with two suppliers has adopted 4 Industrial Training Institutes.

Hanman Driving School (MDS)

Construction of Fly over.

As a model employer it developed good relations with all its employees and inculcated in them values of ownership, loyalty and productivity. It ensured compliance with standards of business conduct & ethics and also with regulatory requirements and emphasized on honesty, integrity & ethical conduct.

### **Discussion questions**

- How has Hanman delivered Corporate Social Responsibility?

Social responsibility of the company transformed itself into taking the following steps:

The new institute Driving Training and Research (IDTR)





Along with two suppliers has adopted 4 Industrial Training Institutes.

Hanman Driving School (HDS)

Construction of Fly over.

- What are the risks faced by the company? How would have they managed it?

Business risk arose because the automotive industry faces trade cycles, mainly because that the purchases of automobiles depended on the purchasing power of the public. This risk was managed by the company by taking back second hand Hanman cars from the customers on exchange basis. Besides they offered it again after adding value to these second hand vehicles by overhauling and reengineering at affordable prices to public.

Commodity price risk arose due to the Japanese collaboration and consequent import of many components from Japan for the assembly of automobiles. Over a period of years Hanman had indigenized components by developing many Indian suppliers. With the Japanese Yen strengthening against Indian Rupee, the exchange rate risk required careful monitoring and control. This was de risked through hedging.

Financial risk arose due to sale through hire purchase segment. To overcome this risk Hanman floated its own financing company that had securitization as its concept.

- How can corporate governance be part of risk management?

All the stakeholders namely, customers, investors, employees, creditors, suppliers have their stakes in the company, which is in the form of financial risk as also operating risk.

Under the SEBI guidelines a corporate entity has to adhere to the principles of corporate governance to take care of the share holders interests, provide transparency to its activities. Towards this it developed its corporate governance to take care of the following factors:

Rights and equitable treatment of shareholders

Interests of other stakeholders

Role and responsibilities of the board

Integrity and ethical behavior

Disclosure and transparency



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## Supplying oil for India

(A case on strategy formulation)

### Vision

A major, diversified, transnational, integrated energy Company, with national leadership and a strong environment conscience, playing a national role in Oil security & public distribution

### Mission

- To achieve international standards of excellence in all aspects of energy and diversified business with focus on customer delight through value of products and services, and cost reduction
- To maximize creation of wealth, value and satisfaction for the stake holders
- To attain leadership in developing, adopting and assimilating state-of-the-art technology for competitive advantage
- To provide technology and services through sustained Research and Development
- To foster a culture of participation and innovation for employee growth and contribution
- To cultivate high standards of business ethics and Total Quality Management for a strong corporate identity and brand equity
- To help enrich the quality of life of the community and preserve ecological balance and heritage through a strong environment conscience

### Values We Nurture

Country Oil nurtures the core values of Care, Innovation, Passion and Trust across the organization in order to deliver value to its stakeholders.

Objectives and Obligations

### Objectives

- To serve the national interests in oil and related sectors in accordance and consistent with Government policies
- To ensure maintenance of continuous and smooth supplies of petroleum products by way of crude oil refining, transportation and marketing activities and to provide appropriate assistance to consumers to conserve and use petroleum products efficiently.
- To enhance the country's self-sufficiency in crude oil refining and build expertise in laying of crude oil and petroleum products pipelines.
- To further enhance marketing infrastructure and reseller network for providing assured service to customers throughout the country.
- To create a strong research & development base in refinery processes, product



formulations, pipeline transportation and alternative fuels with a view to minimizing / eliminating imports and to have next generation products.

- To optimize utilization of refining capacity and maximize distillate yield and gross refining margin.
- To maximize utilization of the existing facilities for improving efficiency and increasing productivity
- To minimize fuel consumption and hydrocarbon loss in refineries and stock loss in marketing operations to effect energy conservation
- To earn a reasonable rate of return on investment
- To avail of all viable opportunities, both national and global, arising out of the Government of India's policy of liberalization and reforms
- To achieve higher growth through mergers, acquisitions, integration and diversification by harnessing new business opportunities in oil exploration & production, petrochemicals, natural gas and downstream opportunities overseas.
- To inculcate strong 'core values' among the employees and continuously update skill sets for full exploitation of the new business opportunities
- To develop operational synergies with subsidiaries and joint ventures and continuously engage across the hydrocarbon value chain for the benefit of society at large

**Obligations Towards customers and dealers**

To provide prompt, courteous and efficient service and quality products at competitive prices

**Towards suppliers**

To ensure prompt dealings with integrity, impartiality and courtesy and help promote ancillary industries

**Towards employees**

To develop their capabilities and facilitate their advancement through appropriate training and career planning

To have fair dealings with recognized representatives of employees in pursuance of healthy industrial relations practices.

**Towards community**

To develop techno-economically viable and environment-friendly products To maintain the highest standards in respect of safety, environment protection and occupational health at all product units

**Towards Defense Services**

To maintain adequate supplies to Defense and other Para-military services during normal as well as emergency situations



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### Financial objectives

- To ensure adequate return on the capital employed and maintain a reasonable annual dividend on equity capital.
- To ensure maximum economy in expenditure
- To manage and operate all facilities in an efficient manner so as to generate adequate internal resources to meet revenue cost and requirements for project investment, without budgetary support
- To develop long-term corporate plans to provide for adequate growth of the Corporation's business
- To reduce the cost of production of petroleum products by means of systematic cost control measures and thereby sustain market leadership through cost-competitiveness
- To complete all planned projects within the scheduled time and approved cost

### Financial review

Amalgamation of erstwhile East India Petroleum

Consequent upon the merger of East India Petroleum with Country Oil, the financial statements of Country Oil for the year ended 31<sup>st</sup> March, 2007, have been prepared by including the financials of erstwhile EAST INDIA PETROLEUM as a separate Division. Since figures for the previous year 2005-06 do not include the financials of erstwhile EAST INDIA PETROLEUM, the same are to that extent not comparable with the figures for the current year.

### Turnover

The turnover (inclusive of excise duty) of Country Oil for the year ended 31<sup>st</sup> March, 2007 was Rs.2,20,779 crore as compared to Rs.1,83,172 crore in the previous year. The total sales of petroleum products (including natural gas) for 2006-07 was 57.92 MMT as against 49.61 MMT (excluding EAST INDIA PETROLEUM sales) during 2005-06.

### Profit Before Tax

The Corporation's Profit Before Tax was Rs.10,485 crore during 2006-07 as compared to Rs.6,706 crore in 2005-06. The profit for 2006-07 include a profit of Rs.3,225 crore on sale of 20% equity holding in Oil & Natural Gas Corporation Ltd. (ONGC) and provision of Rs.1,319 crore for diminution in investments in erstwhile in EAST INDIA PETROLEUM, which is vested in a Trust formed consequent to the amalgamation, while the profit for 2005-06 included a profit of Rs.438 crore on sale of 50% equity holding in GAIL (India) Ltd.

### Discussion questions

Discuss relationship between Vision and Mission.

#### a. Vision

- i. A major, diversified, transnational, integrated energy Company, with national leadership and a strong environment conscience, playing a national role in Oil security & public distribution



### **b. Mission**

- i. To achieve international standards of excellence in all aspects of energy and diversified business with focus on customer delight through value of products and services, and cost reduction
- ii. To maximize creation of wealth, value and satisfaction for the stake holders
- iii. To attain leadership in developing, adopting and assimilating state-of-the-art technology for competitive advantage
- iv. To provide technology and services through sustained Research and Development
- v. To foster a culture of participation and innovation for employee growth and contribution
- vi. To cultivate high standards of business ethics and Total Quality Management for a strong corporate identity and brand equity
- vii. To help enrich the quality of life of the community and preserve ecological balance and heritage through a strong environment conscience

How has COUNTRY OIL translated their obligations to stakeholders?

#### **a. Towards customers and dealers**

- i. To provide prompt, courteous and efficient service and quality products at competitive prices

#### **b. Towards suppliers**

- i. To ensure prompt dealings with integrity, impartiality and courtesy and help promote ancillary industries

#### **c. Towards employees**

- i. To develop their capabilities and facilitate their advancement through appropriate training and career planning
- ii. To have fair dealings with recognized representatives of employees in pursuance of healthy industrial relations practices.

#### **d. Towards community**

- i. To develop techno-economically viable and environment-friendly products
- ii. To maintain the highest standards in respect of safety, environment protection and occupational health at all product units

#### **e. Towards Defence Services**

- i. To maintain adequate supplies to Defence and other Para-military services during normal as well as emergency situations

#### **f. Towards shareholders**

- i. To ensure adequate return on the capital employed and maintain a reasonable annual dividend on equity capital

Identify the type of strategy adopted by COUNTRY OIL for achieving their vision and mission.

- a. Achieving transnational status through global level strategy
- b. Achieving diversification through business level strategy
- c. National leadership as an integrated energy company through functional level strategy



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## Managing risk in oil supply to India

(A case on risk management)

### Risks and concerns

In contrast with the experience of the 1970s, the significant increase in crude oil and petroleum product prices since 2003 appears to have had only a muted impact on the global economy thus far. The impact of higher oil prices has been limited largely because of a significant increase in consumption, rather than exogenous supply shock. Further, there has been a substantial decline in the oil intensity of the economy since early 1980s. Subsequently during 2007-2008 crude oil prices showed a spurt to USD 100 per barrel and has cast enormous burden on Country Oil industry. Especially, 70% crude oil requirements are being imported.

Under the erstwhile Administered Pricing Mechanism, the Indian economy was shielded against the global oil price spikes and any sharp increase in oil prices was dissipated by spreading it through smaller, incremental hikes over a period of time. This is not the case anymore. With crude oil prices stabilizing above the US\$ 90 per barrel mark being increasingly viewed to be permanent in nature, high oil prices are likely to result in higher subsidy costs. In this context, the Government's policy on subsidies necessarily needs a review.

Country Oil has been suffering losses due to price control on the four principal petroleum products. The subsidies received from the Government discounts from upstream companies, reserves, and the Oil Bonds issued by the Government only partially offset these losses. As a result, the Country Oil continues to be mired by a huge financial burden of net under-realization. This in turn, has adversely affected the financial performance of the Corporation. However, Country Oil continues to pursue its Cap-Ex programme with increased market borrowings. To maintain the flow of funds for investments, the Corporation has been selling the Oil Bonds issued to it at a discount.

With the rising competition in the petroleum retailing business, the density of retail outlets in the country has gone up substantially, which in turn has reduced the per-pump product throughput, thereby raising concerns about the profitability of individual retail outlets and the viability of dealerships. The rising competition in the institutional sales business has prompted the OMCs to resort to heavy discounts, which in turn has trimmed their marketing margins.

Natural gas is becoming the preferred fuel and feedstock for the fertilizer and power sectors, displacing liquid fuels thereby eroding to some extent the growth prospects in petroleum refining and marketing, which is the core business of Country Oil. With the anticipated increase in the availability of natural gas in the immediate future from recent gas finds in the Indian basins, there is little doubt that the new fuel will play a major role in the Indian energy market.

Without having linkage with a major supply source for natural gas, the challenge in the gas business is to establish short, medium and long term supply linkages in a market constrained by non-availability and increasing prices. Within the natural gas business, city gas distribution is seen as a focused area for rapid growth. Country Oil entered the city gas distribution business during this year, with the formation of Green Gas Ltd., a joint venture company



with GAIL, which has become operational in Lucknow and Agra, with plans for expanding to other cities in Uttar Pradesh, Country Oil also signed a Memorandum of Understanding with Great Eastern Energy Corporation Ltd. (GEECL) for establishing city gas distribution networks in West Bengal based on CBM from GEECL's CBM blocks. A separate joint venture company is also being formed with GAIL for city gas distribution in West Bengal and subsequently in other eastern states.

The Indian Bio-fuels programme has become a reality with the progressive initiatives and mandates given to the OMCs to include Bio-fuels in the oil & gas supply chain. Bio-fuels business is poised to create a silent revolution in the energy market and address the concerns for energy security. In keeping with the above mandate, Country Oil has taken the initiative of venturing into the entire value chain of Bio-diesel through a definitive business plan.

As regards business in neighboring countries, recovery of outstanding dues from Nepal Oil Corporation remains an area of concern, although some progress has been made on this front, with the beginning of a process of monthly payments.

The long-pending issue of subsidy payment by the Government of Sri Lanka to the Corporation's subsidiary, Lanka COUNTRY OIL Ltd., has been settled after protracted negotiations. This has led to a renewed thrust on the business priorities of the subsidiary after a fairly long spell of uncertainty.

The manpower recruitment scenario has undergone significant changes over a period of time and it is becoming increasingly difficult to induct desired talent from the premier institutes and other campuses of the country due to higher compensation packages being offered by the private sector players in the growing economy.

### **Discussion questions**

- What are the types of risk faced by COUNTRY OIL?

#### **Business risk**

With the crude oil price zooming alternative sources of energy explored. Natural gas as an alternative has emerged on the scene and oil refining industry is facing a threat that may transform into a risk

Dependence on import of raw materials for 70% of its requirements, threat of reduced or non-availability of crude oil from abroad in times of conflicts has become another threat that may transform into a risk

#### **Financial risk**

Raw material price risk: Increasing crude oil prices are not being offset in finished product prices

Subsidies from the Government not revised

Exchange rate risk due to more than 70% of requirement of crude oil being imported

Default risk: Credits offered to customers are facing slippages and are turning doubtful

- How has COUNTRY OIL mitigated risks being faced?



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COUNTRY OIL is obviating the businesses by integrating their operations with natural gas production and supply. Reducing raw material risk by reducing consumption of crude oil by substitution of bio fuel blending from sources within the country

Exchange rate risk is being mitigated with hedging and recently with rupee getting stronger against dollar has become a compensating factor

Country Oil continues to pursue its Cap-Ex programme with increased market borrowings. To maintain the flow of funds for investments, the Corporation has been selling the Oil Bonds issued to it at a discount.

Outstandings on subsidies from Sri Lanka and Nepal Governments have been settled after protracted negotiations

The subsidy policy of GOI is under review. In the mean time the COUNTRY OIL and other oil companies are increasing prices of those oil products which are not affecting the common man, e.g., Aviation petrol, premium petrol.





## Premium computation for motor vehicle insurance

(A case on insurance)

Automobile insurance is very specialized in that the tariff rating goes by the experience of various insurers regarding settlement of claims. The variables involved are the insured value, age of the vehicle and age of the driver. Premium computation can vary due to the change in the three variables mentioned above. Two specific cases have been discussed in this case study for computation of premium.

If we consider the value of the car to be insured is INR 3 lakhs and if the various rating parameters are the 1) age of the vehicle and 2) the age of the driver.

Rates are typically per thousand of sum insured unless otherwise specified. Sometimes, the rates could also be per hundred of sum insured.

- 1) The rates for the age of the vehicle are as follows:

If age of vehicle <5 years, then rate=.5

If age of vehicle >5 years, then rate=.8

Premium 1 =  $.5/1000 \times 300000 = 150$

- 2) The rates for the age of the driver are as follows:

For driver age 30 years, rate =  $7.5/1000$

For driver age 35 years, rate =  $7.9/1000$

So the premium for a vehicle with age less than 5 years and age of the driver is 35, the premium can be calculated as

Premium 1 =  $.5/1000 \times 300000 = 150$

Premium 2 =  $7.9/1000 \times 300000 = 2370$

Total Premium = Premium 1 + Premium 2 =  $150 + 2370 = 2520$

### Discussion questions

- What are the variables considered for computation of premium?

The variables involved are the insured value, age of the vehicle and age of the driver.

- Tariff rates as indicated by the insurance company vary with the age of vehicle and age of driver. Why?

Tariff rate varies according as the experience of the insurers companies in regard to claims settlement. If there have been too many accidents and the claims have been a large loss, then the premium rates will have to take into consideration the following:

Cost of payment for losses

Cost of operation and maintenance of insurance pool

Reserve for contingencies

Return on Investment.

Increase in age of the car and increase in age of the driver are directly proportional to increase in risk. Again a change in model also brings in obsolescence and this will lower the insured value.



## Funds with Hedging Capability

(A case on risk management)

Fund Managers pick stocks with a view that the stock will appreciate in value adding to the fund growth. Imagine a scenario where the fund manager has taken 95% exposure in equities and the market crashes. This is what normally happens in equity funds, where the fund returns also take a hit when the market corrects sharply.

So why not have a fund that is exposed to the equities markets and also protects from a sharp fall. This is where funds with hedging capabilities come into picture.

Performance of Funds with Hedging Capability

| Scheme Name                           | 3 Months | 6 Months | 1 Year |
|---------------------------------------|----------|----------|--------|
| ABS Hedged Equity Fund-Growth         | 30.50    | 45.45    | 60.08  |
| Balanced Equity fund - Growth         | 20.34    | 35.30    | 50.30  |
| Hello Equity Management Fund - Growth | 11.50    | 15.50    | 25.55  |

Investors looking for capital protection and capital appreciation at the same time should look for funds with hedging capabilities. These funds invest in only those equities on which futures and options trading is also allowed. This enables the fund to hedge the equity exposure with an equally opposite exposure in the derivatives market. Any rise or fall in the cash market will be taken care by the derivatives exposure and reduce the volatility in the fund.

Funds with hedging capability work in both bullish and bearish markets because the fund manager depending on his views on the market takes an equal and opposite position in the derivatives markets to hedge the portfolio.

### Discussion questions

- How is hedging done by mutual funds in their products?

Dictum runs that high returns go with high risks and an investor who is risk adverse doesnot invest in purely equity funds which are prone to high financial risks. The introduction of balanced funds where the low risk bonds are balanced by high risk equity investments with proper weightage taking the relevant beta of individual scrip into consideration.

- How the high risk in equity fund can be hedged otherwise?

Investors looking for capital protection and capital appreciation at the same time should look for funds with hedging capabilities. These funds invest in only those equities on which futures and options trading is also allowed. This enables the fund to hedge the equity exposure with an equally opposite exposure in the derivatives market. Any rise or fall in the cash market will be taken care by the derivatives exposure and reduce the volatility in the fund.



## **A cross border fiasco- An acquisition fiasco**

(A case on acquisition and turnaround)

Acquisition of US based Pictures Entertainment in, 1990 was done through payment of \$27 for \$12 per share of the company and 22 times more than the company's annual cash flow

### **Electro**

Founded on 1948 with an initial capital of - 1,50,000. During the mid 1960's, Electro entered the European Markets, and in 1970 set up manufacturing units in U S and Europe. The great success for Electro was introduction of Walkman. Electro retained rights to its entire film library and 2700 movie titles by acquiring Pictures Entertainment.

### **Pictures Entertainment**

Founded in 1900 is an American film and television production company. It produced short films and low budget movies, concentrated on B pictures segment.

### **Reasons for acquisition**

To merge electronics with entertainment – a good business sense (led Electro to acquire Pictures Entertainment Records)

Losing to Matsushita in VCR

Controlling software in the era of globalization would speed up the acceptance of an innovative (hardware) product.

Acquisition was not accepted by Americans

### **Post acquisition blues**

- Analyst felt wide difference between the Japanese and American management cultures
- Electro said that they have no intention to dominate Hollywood through the studio
- Benefits that both the companies will gain through the synergies of Electro hardware and Picture Entertainment's software
- Electro allowed American managers complete control
- Manage like the American company
- Analyst felt that the decline of Pictures Entertainment's revenue was because Electro played the passive role
- Electro's decision not to interfere in the movie business, which accounted for more than 20% of its total revenues, went for a loss
- Giving an American CEO the movie business, the president of Electro's US operations who hardly knew about the operations.
- He himself said that producers can run the studio much better than professional managers



- Just because CEO and President of a Pro production company were personal friends he was allowed to manage Pictures Entertainment until 1994
- Purchasing Pro production company was a real mistake as Electro had to pay them hefty amount and they didn't had any experience of managing the studio before
- Under Pro production, production cost shot up and movies made by his production were mostly a flop show
- CEO with Pro productions extravagant spending and also renegotiating employment contract of this totally neglecting Electro's interest over here
- New clauses in the contract after his termination said that Pro production will be paid \$2.9 mn for three years after this termination, which proved to be the financial crisis.
- Authorizing millions of dollars to Pro production for buying antique furniture, fabulous parties and other luxuries
- Hardly any management controls at Pictures Entertainment during Pro productions president tenure
- After Pictures Entertainment president left, Pro productions president became the chairman of Pictures Entertainment
- He changed the studio name to 'EPE' but still analyst criticized his lack of management control
- With more flops that hit movie studio was losing money at a rate of \$250 mn per year
- However Electro recovered some losses by consolidating the performance of its movie business with its most profitable music business
- Finally Pictures Entertainment realized new Chairman's inability and relieved him of his duties in EPE

### **The revival efforts**

- In 1994, there comes a new Chairman
- Electro wrote off \$2.7 bn of investment
- Disclosed \$510 mn operating loss
- Combination of unusual items such as Abandoning large no of under –development project and settling numerous law suit and contract claims
- Led to sharp decline of Electro share price
- Severe effect on Electro financial statement write off net loss of \$3.1 bn for next six months
- Senior executives were held responsible being asked to quit
- During that time their was no accountability of its heavy expenditure
- Reduced Vendors from 14000 to 800

**Some other facts about acquisition**

Hardware and Software did not gel as synergy at that point of time

Synergy from a combination of Electronic and Entertainment

Electro was banned from owning a TV Network

Increasing lists of joint ventures made quality and innovation questionable

**Discussion questions**

- Why Electro of Japan did go for an acquisition of Picture Entertainment in USA?  
To merge electronics with entertainment – a good business sense (led Electro to acquire Pictures Entertainment Records)  
Controlling software in the era of globalization would speed up the acceptance of an innovative (hardware) product.
- What are the reasons for the failure of the acquisition of Picture Entertainment (USA) by Electro (Japan)?  
Acquisition was not accepted by Americans  
Analyst felt wide difference between the Japanese and American management cultures  
Electro said that they have no intention to dominate Hollywood through the studio  
Benefits that both the companies will gain through the synergies of Electro hardware and Picture Entertainment's software  
Electro allowed American managers complete control  
Manage like the American company  
Analyst felt that the decline of Pictures Entertainment's revenue was because Electro played the passive role  
Electro's decision not to interfere in the movie business, which accounted for more than 20% of its total revenues, went for a loss  
Giving an American CEO the movie business, the president of Electro's US operations who hardly knew about the operations.
- How was the turn around effected by Electro?  
In 1994, there comes a new Chairman  
Electro wrote off \$2.7 bn of investment  
Disclosed \$510 mn operating loss  
Combination of unusual items such as Abandoning large no of under – development project and settling numerous law suit and contract claims  
Senior executives were held responsible being asked to quit  
Reduced Vendors from 14000 to 800  
Reducing head count, cost reduction as mentioned above reflected denominator management approach.



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## **Dr. India restructures itself**

(A case on restructuring strategy)

Pharmaceutical scrips are treasures rediscovered. The market has virtually rediscovered the unique set of conditions that make investment in this sector perhaps the least risk, and, in the process, driven the valuation, across-the-board, to new highs.

The rediscovery of the pharmaceutical industry is not confined to the fickle equity investors; even the Union Government has placed the industry on a pedestal promised many a sop. And among the pharma stocks, the ones poised to sustain the high levels of valuation are those in formulations, or the finished dosage form, at the higher end of the value chain.

### **Potential for Growth**

The determinants of growth for the pharmaceutical industry are still in the nascent stage, a factor that makes the industry and the investors optimistic about the future. For instance, an oft-repeated example to highlight the future potential is the low coverage of healthcare among the population.

In a population of about one billion, only around one-third is believed to have access to medicines. Given this limited coverage, the industry potential is enormous. While other industries may be similarly placed, the sensitive and critical nature of drugs increases the possibility of this industry's potential being fulfilled.

The nature of the products has largely insulated the industry from the vagaries of business cycles. At the macro-level, the industry grew about 15 per cent over the last few years.

### **Dr. India**

Dr. India is a mid-sized pharmaceutical company in India. The key business segments are domestic formulations, CRAMS (Contract Research and Manufacturing services) and Lab Services. The domestic formulation business of the company contributed around 50% of its revenues and the CRAMS segment contributed around 30% of revenues. The contribution from CRAMS business which was around 8% in FY07 has increased four fold and has emerged as the second largest contributor. The company has recently divested its NCE (New Chemical Entities) research business and plans to list the company in CY08. The company has recently entered into contracts with foreign collaborators, for marketing Diagnostic products, mainly Self-Monitoring Blood Glucose System in India and global drug major for drug discovered and development agreement for the molecules provided by the latter. This deal has potential to generate USD 100 Mn (Rs.400 Cr) in royalties and milestone payments if the drug reaches the market. Given the company's healthy growth in formulations and contract manufacturing and domestic formulations businesses the company would be able to maintain healthy OPM and savings of Rs.60 Crore from the R & D expenses due to demerger will add Rs.3.10 to the EPS and taking it to Rs.15.5.

### **Discussion questions**

How has Dr.India repositioned itself in regard to product portfolio?

Originally Dr.India had a strong range of domestic formulations. And among the pharma stocks, the ones poised to sustain the high levels of valuation are those in formulations, or



the finished dosage form, at the higher end of the value chain. With this in view, the company has chosen introduce diagnostic products also.

With the importance of contract research growing in the recent years, what has Dr.India done as part of its strategy?

Dr.India has restructured itself to de-merge the R&D division and hopes to float it as a wholly owned subsidiary. At a latter date, they will go for an IPO. For this de-merged division for R&D new contracts for research have been obtained representing major overseas partner in the frontier areas of research. This will allow the R&D division to grow faster and independently and as group Dr.India will develop its core competency for the strategic business units separately.



## May the best in breed solutions grow!

(A case study on strategy formulation and implementation)

“Aspiration is the main fuel for progress. Aspirations transform a set of ordinary people into extraordinary achievers.”

“I would urge ITIndia to choose a worthy dream, to go after it confidently, and to play a role that will make all of us proud in the years to come.”

-NRN MURTHY

### **Itindia today:**

Global Headquarters: Mumbai, India

Founded: 1981

India IPO: 1993

ADS Offerings: 1997, 2001 & 2003 (Secondary)

Global Presence: 43 Sales Offices, 45 Development Centers, Operating in 22 countries

Employees: 80,600+

FY 07: Revenue / 5 Year CAGR: \$3.60 billion / 43%

FY 07: Net Income / 5 Year CAGR: \$1,010 million / 42%

### Expand addressable markets

|                           |                       |                       |
|---------------------------|-----------------------|-----------------------|
| Geographical<br>Footprint | Vertical<br>Footprint | Services<br>Footprint |
|---------------------------|-----------------------|-----------------------|

### Build relationships and trust

|                         |                  |                           |
|-------------------------|------------------|---------------------------|
| Client<br>Relationships | Trusted<br>Brand | Operational<br>Excellence |
|-------------------------|------------------|---------------------------|

### Develop competencies and capabilities

|                                           |                         |                               |
|-------------------------------------------|-------------------------|-------------------------------|
| Expanding the<br>Global Delivery<br>Model | Best-in-class<br>People | World-class<br>Infrastructure |
|-------------------------------------------|-------------------------|-------------------------------|



**Itindia' vision:**

“To be a globally respected corporation that provides best-of-breed business solutions, leveraging technology, delivered by best-in-class people”

**Itindia' mission statement**

“To achieve our objectives in an environment of fairness, honesty, and courtesy towards our clients, employees, vendors and society at large”

**The values that drive itindia:**

Customer Delight: A commitment to surpassing our customer expectations

Leadership by Example: A commitment to set standards in our business and transactions and be an exemplar for the industry and our own teams

Integrity and Transparency: A commitment to be ethical, sincere and open in our dealings

Fairness: A commitment to be objective and transaction-oriented, thereby earning trust and respect.

Pursuit of Excellence: A commitment to strive relentlessly, to constantly improve ourselves, our teams, our services and products so as to become the best.

**Ethics bring business:**

Performance leads to recognition

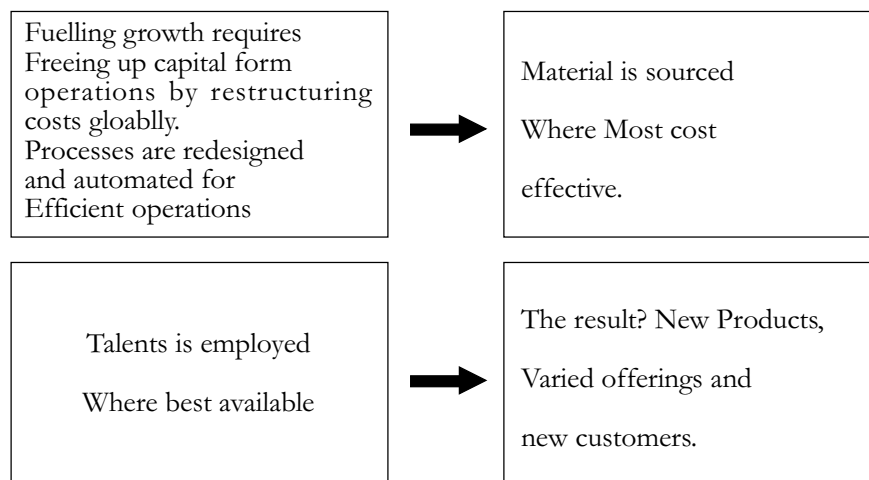
Recognition brings respect

Respect enhances power

Humility and grace in one's moments of power enhances the dignity of an organization

**Itindia & corporate governance**

ITIndia focus on corporate governance not only brought global visibility to the company, but also created pressure on other Indian firms to raise their governance standards.





### Winning customer

ITIndia, recognized globally as a leading technology solutions company, has been a driving force behind this trend.

1. Fuel Growth by becoming a globally efficient co-effective producer.
2. Create customer loyalty through faster innovation.
3. Make money from information
4. Win in the turns

### Competitive strengths

Innovation and leadership

Proven Global Delivery Model

Comprehensive and sophisticated end-to-end solutions

Commitment to superior quality and process execution

Long-standing client relationships

Status as an employer of choice

Ability to scale

### ITIndia strategy

Increase business from existing and new clients

Expand geographically

Continue to invest in infrastructure and employees

Continue to enhance our solution set

Continue to develop deep industry knowledge

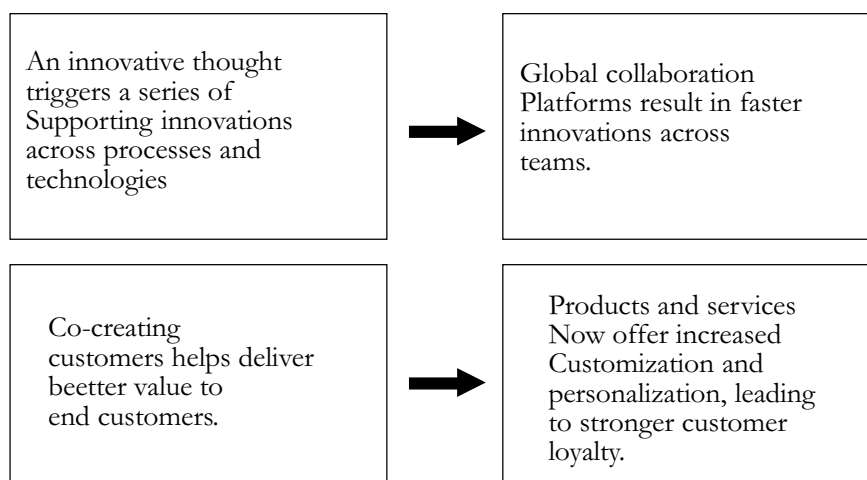
Enhance brand visibility

Pursue alliances and strategic acquisitions

High quality delivery

Significant cost benefits

Abundant skilled resources





### Future Potential

ITIndia has the potential to become a major player in the worldwide outsourcing market with its Global Delivery Model, providing its target market of Global 2000 companies can accept using suppliers with IT delivery centers off-shore

### Discussion questions

What exactly ITIndia mean by “best-of-breed business solutions, leveraging technology, delivered by best-in-class people” in the Vision statement?

Best of breed business solutions imply continued excellence from the employees of the company who have been chosen as the best in class people from the large reservoir of talents and develop solutions which transcend levels and time (Best Breed)

What are the various types of strategies perused by ITIndia for becoming global company?

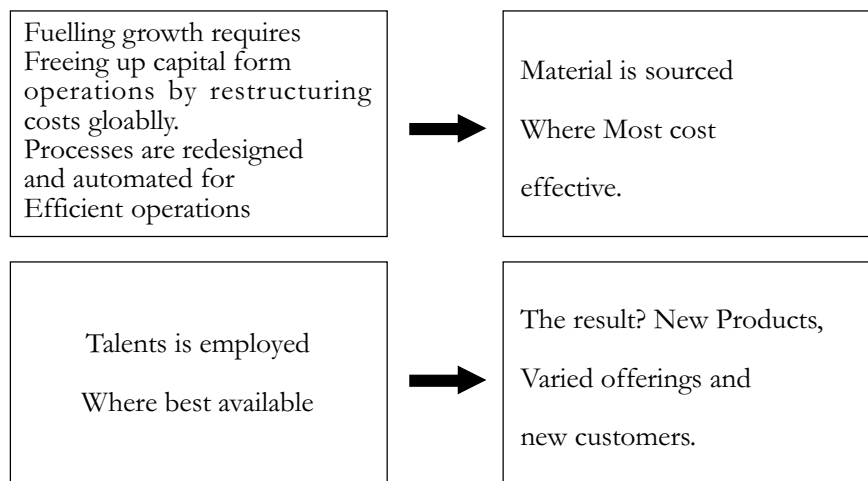
Functional level strategy for producing best of breed solutions by best in class people

Application of global strategy through

Expanding the global delivery model and world class infrastructure

How has ITIndia become a role model for discharging as far as corporate governance and social responsibility?

ITIndia focus on corporate governance not only brought global visibility to the company, but also created pressure on other Indian firms to raise their governance standards.



From the scenario presented what do you feel should be strategy for future of ITIndia?

ITIndia has three competitive advantages:

Global delivery model

Best in class people

World class infrastructure



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However, these three competitive advantages can be replicated by competitors and they may not continue to be sustainable competitive advantages. Again with Rupee becoming stronger, maintaining best in class people may become a problem with other countries offering lower cost services to clients. There fore it's necessary that ITIndia develops more products which they have embarked upon and emphasis should be more in this sphere. It is also necessary that ITIndia turns inwards to develop domestic market which at present represents only a single digit percentage of the total market.



## A Conglomerate way of balancing core competencies

(A case on core competency and integration)

Textile Industries Limited, a flagship company of the Fusion Group ranks among India's largest private sector companies with consolidated net revenues of Rs.141 billion (FY 2007). Its net consolidated turnover at Rs.14,095 crores, up by 38%, with a net profit of Rs.1,968 crores reflecting a sharp growth of 89% starting as a textiles manufacturer in 1948, today Textile's businesses comprise Viscose Staple Fibre (VSF), Cement, Sponge Iron, Chemicals and Textiles – in all of which the company holds a dominant position.

### Industry: Diversified-Mega

Core Business of the Company: Cement and VSF (viscose staple fiber)

Market Capitalization: Rs.25,350.45 Crores

Group has been adjudged as the Best Employer in India in 2007 and amongst the top 20 Best Employers in Asia in the Hewitt-Economic Times and Wall Street Study of 2007.

### Vision

To be a premium global conglomerate with a clear focus on each business

### Mission

To deliver superior value to our customers, shareholders, employees and society at large

### Values

Integrity, Commitment, Passion, Seamlessness and Speed

### Business strategy for growth (VSF)

Aggressive capacity expansion plan

Focusing on value added products and market enlargement

Backward integration in pulp being strengthened

### Strategy for profitable growth (For cement):

Capacity addition of 9.5 Mn. TPA through new projects

4 Mn. TPA in Ultra Tech Tadipatri, A.P. with split grinding unit, by end of FY08

Total Capacity to reach 45 Mn.Tones, by June 2008.

Aggressive Growth planned for Textile from 17 to 44 plants by FY 2008

Capacity will expand three fold to 12.3 Mn.Cu.Mtrs

Enhancing cost competitiveness

Supply chain initiatives

Focus on service differentiation to strengthen brand



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## Corporate governance

The Fusion Group is committed to the adoption of best governance practices and its adherence in the true spirit, at all times. Our governance practices stem from an inherent desire to improve and innovate and reflect the culture of trusteeship that is deeply ingrained in our value system and form part of the strategic thought process. Our governance philosophy rests on five basic tenets, viz., Board accountability to the company and shareholders, strategic guidance and effective monitoring by the Board, protection of minority interests and rights, equitable treatment of all shareholders as well as superior transparency and timely disclosure.

In line with this philosophy, Textile Industries Limited, a flagship of the Fusion Group, continuously strives for excellence through adoption of best governance and disclosure practices. Your company is fully compliant with all the provisions of Clause 49 of the Listing Agreement of the Stock Exchanges.

## Discussion questions

Textile as a conglomerate has been able to develop its core competencies. Discuss.

Textile's businesses comprise Viscose Staple Fibre (VSF), Cement, Sponge Iron, Chemicals and Textiles

These are both unrelated and related diversifications

There has been some backward integration in certain areas

Traditional areas continue with the company

However, this conglomerate mix has been developed on divisional strategy and separating decision centers, core competences have been developed by decentralizing decision centers. Consolidation of core businesses has been evidenced through mergers, e.g., Cement so that competitive stature can be built to world class and economies of scale can be obtained to compete with cross border giants.

What is the redeeming feature of the Vision?

While the Corporate world has been singing in praise of core competencies and divesting investments which belong to unrelated diversification, here is a company which has enshrined its desire to continue as a conglomerate, that too as a premium conglomerate in the world. The beauty of Vision is that the conglomerate will operate on the decentralized mode giving independent focus for each line of activity.



## Blazing trails of hope

(A case on strategic alliances)

India Formulations Laboratories at a glance

Global pharmaceutical company with presence in over 35 countries and operations in over 115 countries worldwide.

First pharma company in Asia-Pacific (outside Japan) to be listed on NYSE.

Research specialization in diabetes, cardiovascular, anti-infectives, inflammation, cancer.

First Indian company to out-license molecules to global majors for clinical trials.

World-class manufacturing facilities conforming to GMP and SHE standards.

### **Vision**

To become a discovery-led global pharmaceutical company

### **Core Purpose**

To help people lead healthier lives

### **Mission**

To be the first Indian Pharmaceutical company that successfully takes its products from discovery to commercial launch globally.

### **Values Quality**

Respect for the Individual

Innovation & Continuous Learning

Collaboration & Team Work

Harmony & Social Responsibility

### **Integrated Pharmaceutical Company**

Founded in 1984

Produces and delivers innovative, safe and high quality:

Finished Dosage Forms

Active Pharmaceutical Ingredients and

Biologics

The company conducts NCE drug discovery research in the areas of Metabolic Disorders, Cardiovascular Indications and Cancer.

### **Global Company**

Wholly owned subsidiaries in US, UK, Russia and Brazil.

Joint Ventures in China and South Africa.

Representative offices in eleven countries worldwide

Markets pharmaceutical products in more than 100 countries.

Partnerships with global pharmaceutical companies:

Novartis

Novo Nordisk



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Par Pharmaceuticals

Leiner Healthcare and

Pliva

NCE drug discovery research centers in Atlanta, US and Hyderabad, India

**Strong Product Portfolio**

Manufacture and market over two hundred and fifty formulations (medicines) targeting a wide range of therapies.

Manufacture and market a wide range of anti-cancer drugs

Over 100 molecules (API) developed.

Six new chemical entities (NCEs) under various stages of clinical development.

**Research Driven & Global Talent**

NCE drug discovery research on Metabolic Disorders, Cardiovascular Indications and Cancer.

Expertise in developing innovative formulations.

Proven skills in synthetic and analytical chemistry to develop innovative cost effective manufacturing processes

Eighty one patents filed with the US PTO of which 41 have been granted. Eight one patents filed with PCT. (as of FY 05)

One hundred and nine one patents filed in India, of which 35 have been granted. (as of FY 05)

About 6120 employees worldwide

A 1750 strong sales team worldwide

About 951 scientists worldwide

Around 323 scientists dedicated to new drug discovery research

**Sustainability Formula**

Economically, generating surpluses that can be re-invested for the sustainable benefit of all our stakeholders – shareholders, employees, government, suppliers, customers and lenders.

Socially, creating a positive impact through business and voluntary initiatives for the benefit of the local and international community.

Environmentally, adopting a proactive approach towards a discovery led global pharmaceutical company

**Our Journey of Excellence**

**1984**

Set up with an initial outlay of US \$50,000.

**1986**

Goes public; commences exports

**1987**

Obtains first USFDA approval; begins formulations operations.

**1988**

Acquires B Labs, expands Bulk Activities Business

**1993**





Establishes India Formulations Research Foundation; commences drug discovery program.

**1994**

Makes GDR issue of US \$48 million.

**1995**

Sets up a JV in Russia

**1997**

Licenses an anti-diabetic molecule, becoming first Indian pharmacy company to out-license an original molecule

**2000**

Sets up research centre in US to conduct target-based drug discovery

**2001**

Becomes first Asia-Pacific Pharma Company (outside Japan) to list on NYSE; launches first generic product in US market.

Becomes first Indian pharma company to obtain 180-day exclusive marketing rights for a generic drug in US market.

Sets up Drug Discovery to augment post-genomic drug discovery effort.

**2002**

Acquires two companies in (UK), the first overseas acquisitions. (March)

**2003**

Launches first generic product under 'India Formulations' Label in US

**2004**

Acquires a company and gains access to drug delivery technology platforms in dermatology.

**2005**

Forms a India's first integrated drug development company. (*September*)

Enters into first-of-its-kind co-development / commercialization deal with an European company. (*September*)

Acquires an API manufacturing unit in Mexico. (*November*)

Launches unique partnership with India Venture for commercialization of ANDAs.

**2006**

Acquires the fourth-largest generics company in Germany (*March*)

**Care for Environment & Society**

All API manufacturing units have facility for zero-liquid discharge and total recycle of industrial effluent

All facilities comply with Current Good Manufacturing Practices (CGMP)

OHSAS 18001 certification for environmental management

Publishes an annual independent Sustainability Report based on the Global Reporting Initiative (GRI) guidelines

We endeavor to give back to society in innovative and impactful ways under the aegis of India Formulations Foundation



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The Foundation has successfully rehabilitated over 21,000 children and has trained 27,000 un-employed youth so far

### **Discussion questions**

How did India Formulations implement its Vision strategically?

Acquired the necessary expertise and knowledge through acquisitions apart from obtaining product range.

Instituted joint ventures specifically to obtain drug delivery technology as also newly patented products.

Set up research centers in various places to simultaneously discover new molecules such as anti-diabetic molecule.

What is the sustainability competitive advantage formula pursued by India Formulations?

India Formulations developed an integrated approach by a judicious combination of financial objective with social responsibility and environmentally proactive approach as below:

Economically, generating surpluses that can be re-invested for the sustainable benefit of all our stakeholders – shareholders, employees, government, suppliers, customers and lenders.

Socially, creating a positive impact through business and voluntary initiatives for the benefit of the local and international community.

Environmentally, adopting a proactive approach towards a discovery led global pharmaceutical company



## Credit Where Credit's due

(A case on successful customer outcome)

\* Reproduced with permission from Mark Mc Gregor, Author of Thrive

Imagine you're running a credit card business. Turnover and profits are growing year after year, your staff are very satisfied (at industry leading levels in fact), and performance metrics are all looking great. Would you be happy? The management team of Capital One's UK business wasn't. They felt that the business wasn't working properly and set about finding out what was wrong.

Their analysis concentrated on how successful they were being in delivering what customers wanted. What they found was simple, striking and in real need of correction. This is the sort of conversation that the management might have listened in to:

Operator: Welcome to Capital One, Mr. Everyman. My name is Jody, how can I help you?

Tom: HI. I'd like to pay off my balance to-day, please. Can you give me a settlement figure?

Operator: I'm sorry; sir, but I can't give you that information over the phone.

Tom: Oh. So how can I get that figure then?

Operator: It will be in your next statement.

Tom: So I have to wait until that arrives to pay you?

Operator: Yes Sir. Would you like to know when your next statement is due?

Tom: I guess so.

Operator: That will be in two weeks time.

Tom: *Two weeks?*

Operator: That's right, sir. Is there anything else I can help you with today?

Tom Well: no.

Operator: Thank you for calling Capital One, Mr. Everyman. Goodbye.

Operational performance measures in the call center included two key components: call handling times and assessment of whether customers were being given the right answers to queries. By these measures this was a successful call: three accurately answered questions in a short space of time. Clearly the wrong things were being measured, and this was masking the shortcomings of the processes that were supposed to be delivering solutions for customers.

The measurement regime was soon changed to concentrate on Successful Customer Outcomes. Management responsibilities for fixing system and process limitations were sorted out and frontline staffs were enabled to deliver what customers really wanted.

### Discussion questions

What is the lesson drawn from the above case study. Explain.



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The lesson is clear – look beyond the numbers to understand what your business is really about.

While the company has been making profits and financial fundamentals were looking great, the top management felt was not working fine. The communication customers and the company service representative clearly showed that the requirements of customers for information were not met which left the customers dissatisfied. Again the early birds who wanted to pay off the dues could not pay on time for lack of information and this could in the long run affect the cash flows of the company. So the company felt that measuring the performance of the company only through financial figures does not suffice, but should include customer relations management for successful customer outcomes.

How will you recommend balanced scorecard as a strategic tool for this company?

The company has not been looking beyond figures and had no inkling as to how to develop customer relations management and measure the responses. The present system of call handling times and an assessment of whether customers were being given the right answers to their queries did not meet the requirement of the company for wrong things were being measured and this was masking the short comings of the process that were supposed to be delivering solutions for customers.

Introduction of a balanced score card as a tool will largely obviate the above disability. The customer response measurement in a balanced score card system is clearly linked to the financials as well as the monitoring of strategic inputs. Thus, measuring the wrong things will not arise in this case. On the other hand, the inputs from customer responses will go a long way for modifying existing strategies and improve their financials.



### **Winning Indian customers** (A case study on marketing strategy)

Positioning itself as a complete digital imaging company Officeworld wanted to increase its market share. It consolidated presence in the Indian IT peripherals market and won the 'Challenger 2003' Award.

#### **Officeworld Inc**

Two entrepreneurs in 1933- Instrument Laboratory in Japan made High grade cameras. Later, with research by a scientist in 1934 first prototype and evolved the product under the brand name Officeworld. 1942 saw Officeworld's evolution into global company. In 1947 it became Officeworld camera Co Inc. It diversified to other imaging products (printers, photocopiers and digital devices serving home offices and industrial markets worldwide). It rediscovered itself at the beginning of the 21<sup>st</sup> century-global multimedia group with 195 group companies, 97800 strong employees in R & D, manufacturing and sales and distributions.

#### **Officeworld Singapore**

It was responsible in 1979 to supervise the operations in Asia-Pacific region. It played a major role for the formulation and control of sales and marketing strategies by managing and coordinating the region sales and distribution service and information networks. In 21<sup>st</sup> Century it is known as a leading IT digital imaging company in the world.

#### **Officeworld in India**

Established in 1997 (subsidiary of Officeworld Singapore), HQ in Delhi Cannon's target market segment was Government, small office home office (SOHO) and SME sectors. In 1998 it introduced cameras, 1999 it introduced fax machines, scanners and printers and began selling through national distributors.

In office automation area Officeworld faced severe competition like Modi XEROX and RPG Ricoh. In camera sector, the Gray Market was a big challenge. It wanted to concentrate in IT Peripherals business but Epson and HP were ruling this segment. Both had reduced entry level models and also better distribution system.

In 2001, the Director and General Manager of Consumer Information and Imaging Division (CIID) conducted market study to understand the overall industry scenario. The results were:

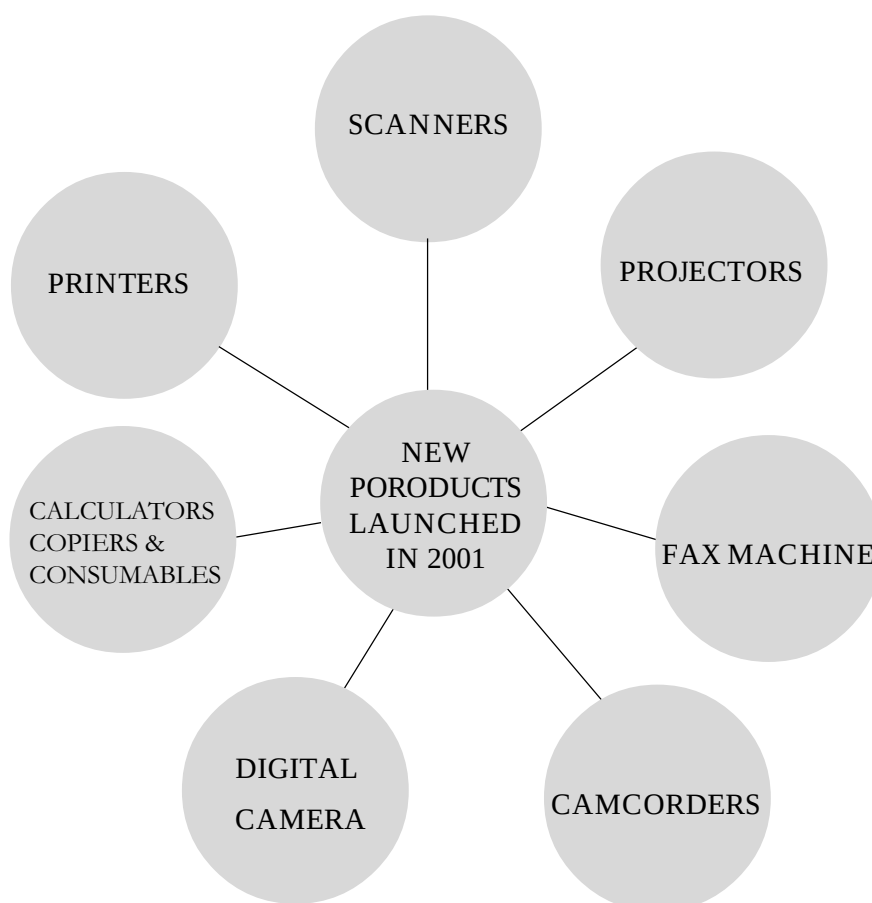
Dot matrix printer was phasing out and the demand for inkjet and laser was growing rapidly. The demand for copiers and cameras was growing (Officeworld segment was not picking up) Indians saw the company primarily as a camera manufacturer but Officeworld was a strong brand

IT Peripherals had huge potential in the near future

Looking at the results of the company was put up in the restructuring track. By 2001, Officeworld India had a network of 1000 assemblers, 50 retail partners, 30 resellers and 30 channel partners. It replaced its national distributional model with regional distributional model. It appointed 4 regional distributors and offered high margins to distributors and insured stock against price

fluctuations. In 2002 stabilized a regional distribution center at Noida and entered into agreement to transform 25 resellers in “Officeworld retail stations” in eight cities. By 2002 it established around 100 “Officeworld care points”.

### PRODUCT STRATEGY



Some of the brand building and advertising initiatives taken were as below:

Leading digital imaging co

Adcompany – advertising agency

Emotional message rather than an functional message

Positioning statement – “use it the way you like it”

Rs.150 million budget

Cannon Corners

— In shop branding thrust

Service Edge

— Provide proactive support



Fun-Do inter school creativity contest

Give old take new' offer

Wings of Glory

### **Customer Service and Promotion**

Road Show

Website

Cartridge online

In 2002 Officeworld had growth of 33% in revenues totaling to Rs.2.02 billion. In 2003 became the leading player and No.2 in 2 major segments, Inject printers,

Scanners and introduced 21 new products increasing total products offered to 110. Besides, Officeworld adopted a strategy of concurrent introduction of all the products in the Indian market when same were launched elsewhere in the world.

### **Discussion questions**

When Cannon came into India in 1997 they failed to make impact on the market. Why?

Cannon came into India in 1997 and introduced cameras in 1998. Subsequently they also introduced office equipment where they had much strong competition from Modi Xerox and RPG Ricoh. In regard to cameras of Cannon, they were at the high price bracket and the practices in the gray market also affected their sales. Again they were perceived as a camera company though they had a range of products this affected their entry and performance in the office equipment range. Again both Modi Xerox and RPG Ricoh had held their practices and established themselves. Thus an invisible entry barrier for Cannon.

How did Cannon restructure themselves and succeeded?

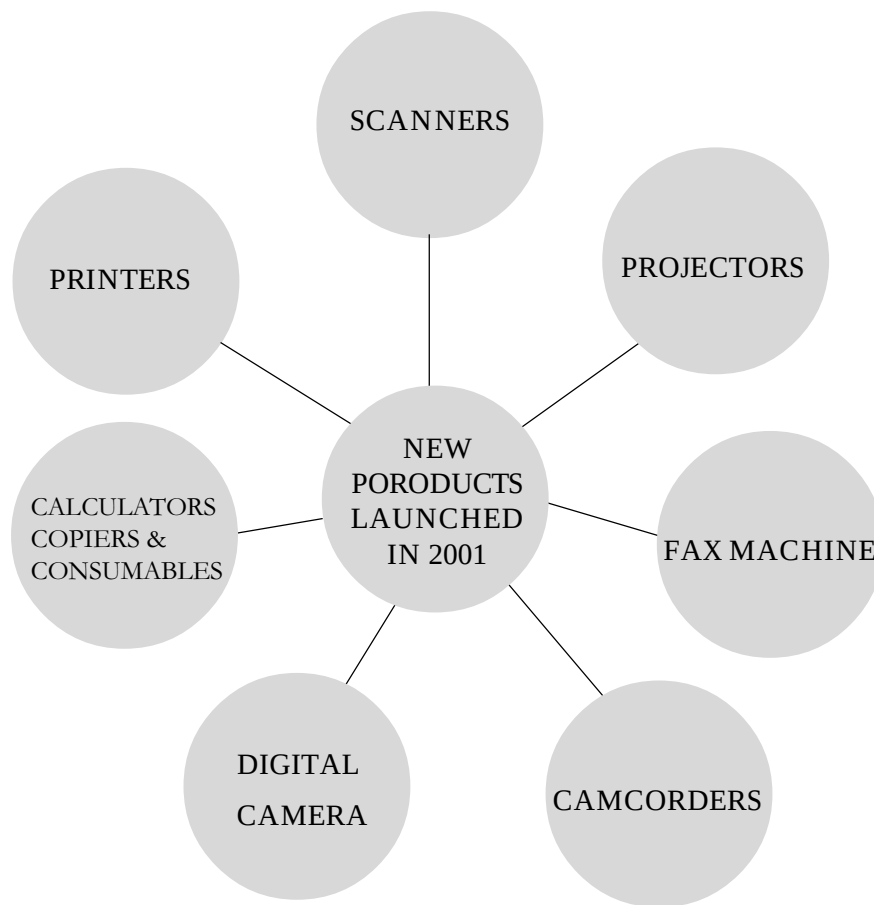
In 2001, the Director and General Manager of Consumer Information and Imaging Division (CIID) of Cannon conducted market study to understand the overall industry scenario. The results showed two distinct areas for restructuring where the company had to revamp their strategies:

Image building exercise

Product strategy

The study had identified the weakness in the public perception regarding the company as primarily as a camera manufacturer though Officeworld was a strong brand. Arising out of this, the company commissioned Adcompany, an advertising agency to build the image of the company. They wanted to build the brand of Officeworld and to erase the earlier perception of the public. Towards this they sent out an emotional message instead of a functional message "use it the way you like it". This campaign that cost the company around Rs. 15 Crores brought the desired results and the public became aware of the bigness of Officeworld and their network of distribution.

Second part of the revamping exercise was to develop a product strategy and the synergies and linkages that existed among the portfolio of products.



Having created awareness of the products and quality towards sustainable competitive advantage, Officeworld as a policy introduced all the new products simultaneously in India whenever a product is introduced elsewhere in the world. This put Officeworld ahead of its competitors in market place on a continuing basis.





## Airlines Reach a New Service Altitude

(A case on successful customer outcome)

\* Reproduced with permission from Mark Mc Gregor, Author of Thrive

We'll start with sickness bags! This may not sound like a promising place to begin, but bear with us for a while, easyJet, a European budget airline, continues to grow at the expense of many of its rivals. There include the large international monoliths who have until recently operated with some impunity towards passenger comfort and fears. In an environment of rising fuel costs, terrorists' threats, increasing competitive and inflexible organization structures, it is bottom line, cost performance that has become critical. This is even more pertinent for the budget carriers, where inexpensive items represent a large proportion of the ticket price. Many airlines have haphazardly reduced their offering to reduce the cost; easyJet has looked to innovate.

Taking an idea from Southwest Airlines, who advertise job vacancies on their sick bags, easyJet has gone a step further and removed the cost of the sickness bags by getting someone else to pay for them. Kodak provides the bags, which if unused (yuck!) can be employed as film enveloped for those vacation pictures. Even in this digital age many folks are wedded to their 35mm cameras. For the digitally liberated, Kodak also provides fast turnaround development services for photo media – you guessed it, right there in the arrivals lounge, easyJet of course can focus clearly on this type of opportunity because their Successful Customer Outcome, as articulated by their creator, Stelios, is “Buttocks on Seats”.

So what SCO-inspired survival tips can we propose that may help the troubled airline giants to survive, if it isn't already too late? Let's see what some customers think.

### *The Joy of Flying*

Tom Everyman collapsed into the seat in the departures lounge of Anytown airport. His friends Dick and Harry appeared to be in a similar state of nervous exhaustion, having finally negotiated the assault course known as check-in.

“I sometimes wish you could send the kids on ahead,” he said to anyone listening. “You know, a large scale chaperone service. It would be so much easier – the airlines could clean up!”

Dick, who'd managed to get them all coffees, had different ideas. “I think there are a few more basic things they could do with getting right first.”

“Go on then,” said Tom, “we're all ears – anything to kill time until boarding.” He reflected on why there had to be such a long time between arrival and getting, on the plane. Perhaps that was one of the things. Dick had in mind.

“Okay, take the kids,” continued Dick. “You said you'd like to send them on ahead, but let's assume we're stuck with them.”

“We might actually want to travel with them!” interrupted Harry.

“You always were the softy, Harry,” said Tom.

“Anyway how about keeping them entertained?” Dick was pressing on. “Half of our hand luggage is taken up with stuff for the kids. I'd like more help with giving the kids something to do.”



Harry was dismissive. “There are a few music channels, the in-flight movie. What more do you want?”

Dick was on a roll now. “What, those screens that hang over the seats? You should have been behind some of the heads and hairstyles that I’ve endured. Seat-back video is the only way. I’ve heard that some of the airlines are actually thinking about taking *out* screens to save weight and money. Next they’ll be making us stand all the way!”

Tom was warming to Dick’s ideas and found he had a suggestion of his own. “They could give us some way of plugging in all the stuff the kids have got – the games, mp3 players and the like. If I have to suffer another attack of battery rage....”

“Yes, but why do we have to bring all of our own stuff into the cabin?” Dick continued. “These things are all digital now – why not have a big library on board? It doesn’t weigh anything.”

“Except for the server, the cabling, the screens ...” Harry, the IT expert, could always be relied on to plug the gaps in his friend’s knowledge.

“Okay, okay, but that lot doesn’t weigh as much as a couple of hundred Playstations and iPods, does it?”

“What about TV on-demand then, choosing which programs to watch? I might be able to keep an eye on what they’re watching for once.” Tom could barely contain his idea now.

Dick brought him back to earth. “Sounds like you need parenting lessons, not in-flight entertainment.”

What these guys are talking about would make traveling more than just a necessary burden: it would become part of the vacation itself. This is the market that airlines are in. Of course, price is of critical importance, but not at the expenses of everything else. Doing these things doesn’t necessarily mean radical change; it just means doing the current things better, more imaginatively.

The technology is not expensive so what stops the others following suit? It’s simple: focusing on the wrong things, having the wrong priorities, and clinging to the delusion that the current problems are just a temporary blip. In the same vein, here are two more ideas.

Reading is such a popular pastime on flights that a whole genre of fiction has developed – the airport novel. Easily read and soon forgotten these books ten not to find a permanent place on the bookshelf at home. Hey not bring these books on board? Rather than buy them, customers could browse, read, and leave behind whatever took their fancy. Condensed novels, chapter samplers and short stories could also come into their own as word length and flight time are aligned. Book retailing is a competitive business, so there is a commercial angle that could be exploited. Intelligent use of sponsorship, discounts for subsequent purchases and other promotions should make this at least a cost-neutral offering. Perhaps the airlines are just waiting to exploit the technology that already exists to make e-books available. Should they get the benefit of the doubt?

What springs to mind when you think of in-flight coffee? The smell of fresh ground beans wafting along the aisle! Perhaps not. The coffee may taste too bad because it discourages us from asking for it, keeping the aisles clear for the more profitable activities like the duty free



trolley. Sponsored coffee provision from the likes of Costa Coffee or Starbucks would raise the quality and cut the cost.

Of course it's not only the leisure traveler that airlines cater to. Business travel is big business, not that you would know it sometimes. While it can sometimes be a blessing for frequent fliers to get away from an always-on world, this should be a choice not an imposition. Most carriers take the imposition route and resist the straightforward step of services like in-flight Internet. Lufthansa did it in 2003 and offers full access to mail and the Web. That makes them the airline of choice for many who have little else to do as they traverse the skies of Europe. Some airlines insist that it's a large cost overhead and that regulation is an obstacle. Hogwash! With Teutonic efficiency the Germans are leading the way and will continue to win business as others procrastinate.

And don't try complaining about it by phone on the flight. Even the FAA isn't in the way of conversations at 35,000ft – they just carry the blame (quite wrongly) as airlines seek to protect their investments in hardwired back of the seat lumps of plastic that no one uses because of the expense. There are other areas ripe for improvement.

### ***Fly me to the Moon***

There are still thirty minutes to boarding and Tom's mind was still on making the flying experience a bit more rewarding. "Harry, how many miles do you fly for work? Must be quite a number."

Harry answered quickly enough to give away that he knew the answer without having to work it out. "150,000 in the last year."

"Wow, and you've been doing that for years," said Dick. "That's astronaut like mileage. You must have some views on business flying. Is there anything you'd fix?"

Harry thought .. for half a second. "Loads," Tom and Dick exchanged glances – the risk of spending the entire flight listening to Harry's litany of suggestions was great.

"What's your number one?" asked Tom.

"Easy." Said Harry. "Frequent fliers. I don't see why those of us who fly regularly should be treated as non-paying passengers rather than loyal customers when we use the points we've earned. What's the point only having access to off-peak flights for instances? I can understand the need to make individual flights profitable, but I'd say that inconveniencing your best customers is a strange way to run a successful business."

Tom had to agree, but could feel that Harry was working up a head of steam. He was right.

"You see, with a bit of imagination, frequent flier rewards could be used in-flight too: drinks, food upgrades, gifts. I don't mind being a walking advert for a loyalty program if I feel I'm getting the value I want. There's no harm in having other passengers asking 'how do I get those benefits, is there?'"

Dick started to answer the question. "Well, I..."

"And then there are upgrades," Harry wasn't to be stopped. "I tell you, for some airlines 'easy upgrade' is a contradiction in terms. I flew with a major national airline recently and discovered



what's called a non-upgradeable ticket. I was bounced between check-in and what was laughingly called the Customer Service Desk to be told that I 'had bought the wrong ticket' and 'didn't understand how these things worked"! The attractive choices were to pay again for a completely new ticket or accept my fate. I chose the latter, and I can't tell you what I was thinking during that flight looking at those empty Business Class seats.

Harry, you're with the wrong airline," Dick said. "A guy I know at work asked to upgrade recently using his loyalty miles, and they said 'that's okay sir, we'll upgrade you without taking the miles!' Now that's service."

Dick's story highlights one of the key points that emerge from this look at airlines. Some of the most striking experiences come from individuals being able to do the right thing (even the unexpected thing) when it matters. A Virgin flight attendant who apologizes for the fact that we are not flying on one of the brand new aircraft in the fleet (but which is still is better than most); the generous and immediate compensation for a mid-flight entertainment system failure. These responses come from liberated staff in customer-focused organizations. Successful Customer Outcomes come from, and are delivered through, people – they should be given the opportunity to innovate to be great.

### **Discussion questions**

Airlines introduce or eliminate certain onboard services without actually responding to the customers' requirements. Discuss.

Many budget airlines have eliminated onboard services like offering lunch, coffee and snacks. Some of them have recently operated with some impurity towards passenger comfort and fares though some of the comforts are only inexpensive items. Actually, the flyers have certain common problems like accompanying children and their baggage which contain the stuff for kids for entertainment. If the airlines can engage the kids during the flight by offering entertainment from a library of games they could save on the weight also as individual passengers may not carry stuff for kids. Chaperones for kids on flight at a cost will also satisfy the customer while costs are taken care of.

How will application of IT help budget airlines?

Normally an aircraft has a big screen and films are projected on the screen. Many of the customers find viewing difficult when ever some body in the front seat can block their view. Again some of the customers find it as a nuisance when the picture comes on the screen as he cannot sleep. To avoid this application of IT can have small screens at the back of each seat with an earphone and a selection of pictures as per choice. This will obviate the weighty screen and the projection equipment and provide more space perhaps for seating additional passengers while satisfying all the customers without disturbing any one alone.

How the airlines can reward a loyal traveler?

Many airlines have schemes for offering a free trip on earning sufficient points but not always on the flights which the passenger would like to travel. Customers suggest that instead they can be given some special privileges compared to other casual passengers like drinks, food upgrades, gifts, etc. Again an up gradation from economy to business class can lead to greater customer satisfaction.



When ever airlines commit mistakes, how can they be corrected?

If the organization is customer focused, the behavior of the airlines staff towards customers can assuage the feelings of the customers whenever they are irritated or felt grieved. For example, the mid flight entertainment system fails, the staff on board offer generous and immediate compensation. In place of a new aircraft the airlines have to fly an old version, the flight attendant apologizes to the flyers in regard to that fact and engages them with an array of snacks and drinks.



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## Frustration in Hospitality

(A case on successful customer outcome)

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What SCO-inspired survival tips can we propose that may help the hotel industry to avoid customer frustration and deliver ever greater value to their guests? Let's start in a place that may be familiar to many of you.

### ***Another Night Away***

The hotel bar was in the quiet lull between after-noon meetings and pre-dinner drinks. Tom Every sat alone, browsing the menu for something both edible and claimable. A smartly dressed member of the hotel staff approached – it was the manager.

“Excuse me, sir. I hope you don't mind me asking, but I see you have a tag on your luggage, showing you've a Gold Card holder with another hotel chain. Have you considered registered for our card?”

Tom was happy to respond. “I don't actually spend enough nights with your hotels to make it worthwhile. I'm afraid. But that's very observant of you, and thanks for asking.”

“Well sir, if you don't mind me making a note of your room number, I'll arrange for Head Office to match the level of membership you have on your current scheme.”

The hotel manager took the number from Tom's key fob and left. Tom swapped the menu for a list of hotel locations. There would be no harm in trying out his new card, and it feels okay to be wanted.”

In the UK, at least, it is common practice for supermarkets to accept the competition's coupons, so why don't hotels take a leaf out of their book? As any frequent traveler knows, once you have gained Gold or Platinum status with one chain it is very hard to justify using other hotels unless you have to. If the others want your business they will have to work harder to get it.

Many frequent travelers also have changing travel habits: one year you travel a lot, the next not so much, the year after it picks up again. How frustrating is it to get great service as a Platinum member during your middle, less traveled, year, only to find that as your travel picks up you are downgraded again. In effect, regular customers are obliged to reconsider where to take their business and are open to influence. Why then don't hotels consider “lifetime” programs, with qualification over a period of years? Past customers are more likely to be future customers if you have a good product, so treat them like you want them to keep coming back.

In fact there are many ways that loyalty schemes could extend their benefits for the people they are aimed at.

Question: when are hotel guests not hotel guests? Well, when they're not staying at the hotel is the answer, certainly from the hotel's perspective. Is there any reason why that should be, though? The interaction is more than just staying the night. Much more could be done to entice regular customers to use a hotel's facilities, for meetings or a catch up on email and phone message over coffee. Free drinks and internet access would be a small price to pay for all of the additional business that would be encouraged. In recent years many hotels have made great



strides with creative use of the “Executive Lounge” concept, but there is still some way to go before they truly get it nailed.

On the subject of Internet access, isn’t it strange how the lower-cost hotels are increasingly providing free high speed connections, whereas the up-market brands in the same chains still assume that it is acceptable to charge large sums for the privilege? In today’s world it is not just the business traveler that relies on such niceties as high speed Internet – even leisure travelers are looking for this sort of service (especially as more and more people switch to using the Internet to make telephone calls).

And why charge for breakfast when the coffee shop across the street the street offers a better deal. Not only is the coffee better, but the café is probably a wi-fi hot-spot – more lost opportunities.

Surely the time has come for the up-market brands to realize that if they are to compete, this practice has to change. It is not longer acceptable to assume that people will pay a premium price for a hotel and then be expected to pay again when there are free or cheaper alternatives.

It is unfortunate that in the hospitality industry, with the volume of bookings made, things will go wrong sometimes. As customers, we actually do understand this, but it is the ability to resolve the problem speedily and to our satisfaction that will set the best providers apart. This is simply delivering on the promise, the promise that said we could have a room. If there is a problem then what we want to hear, at least, is that alternative accommodation will be organized locally and any addition costs will be met. Again, the place to look for inspiration is retailing – perhaps a variation on the guaranteed returns policy might be something to aspire to?

The final group of suggestions for improvement relate to getting suggestions for improvements! Have you ever seen one of those signs saying something like “as requested by our frequent guests” or “in response to customer demand?” Have you ever wondered who these helpful customers are? We have. A straw poll of regular travelers generated little evidence that this seasoned section of the hotel user market is tapped for feedback. Keeping in regular contact with your best customers is an absolute necessity for product innovation and customer retention. Perhaps management spends disproportionate amounts of time analyzing those guest questionnaires that are always left in rooms. They are mainly filled out by infrequent guest who had that one great experience and do as a thank you. Most of the business guests we have spoken to say they can’t be bothered. So perhaps the surveys are self-serving.

Compare this approach to that of top retailers, who frequently run events for their best customers, inviting them to previews, discount nights and other events. Customers are encouraged to keep coming back, and it’s an opportunity to talk on a one-to-one basis with them while keeping an eye out for change buying habits. It’s also a great way to pick up market intelligence on their competitors from the people who really know – the competitors’ customers!

This raises another critical factor for service improvement in hotels – pay more attention to the feed-back from front desk staff and less from middle management. The managers are aware of only the small proportion of issues that occur in the process, whereas front desk staff sees them all. In any situation the best source of pain points will be front line staff, and they will also usually have some good ideas on how to improve the situation, very often at little or no cost.



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These examples are taken both from our own experiences and those of people we have traveled with and coached. The suggestions are not scientifically based but are the results of people looking from the outside in. In many of the instances where bad service occurred it was put right, rarely though by an employee working within the system, but by one who recognized the lifetime value of a customer and attached an importance to that value. Hopefully, if enlightened hotel chains take heed of at least some of the advice and ideas, then all of our future travel experiences might get a little bit better.

### **Discussion question**

What the critical factors for improving service in hotel industry?

Inviting best customers to previews, discount nights and other events

Pay more attention to the feedback from the front desk staff rather than from higher ups in the management in the middle level

Introduction of internet access at free of cost as a privilege to the loyal customers

Take breakfast cost on the hotel as long as the guest stays for a full day

How a casual guest to a hotel be retained as a frequent guest?

A casual guest normally is not loyal to a particular hotel but stays at different hotels during his frequent visits to a city. However, an intelligent hotel manager develops a strategy to entice a casual guest to come more frequently by offering certain facilities even when they are not in the hotel. This can be through offering the hotels facilities for meetings or catching up with email and phone messages over a coffee in the restaurant. Internet access can also be provided at a small price while he visits the restaurant and not staying in the hotel. Such small ploys will help increasing the frequency of the customers.





## ANNEXURE 4

### SUGGESTED READINGS AND REFERENCES

#### Suggested readings

| Book title                                                      | Authors name                                              |
|-----------------------------------------------------------------|-----------------------------------------------------------|
| Strategic management                                            | Charles W. L. Hill and Gareth R. Jones                    |
| Strategic management                                            | Fred R. David                                             |
| Fundamentals of Investments                                     | Gordon J. Alexander, William F. Sharpe, Jeffery V. Bailey |
| Competing for the Future                                        | Hamel and Prahalad                                        |
| Financial management                                            | Prasanna Chandra                                          |
| Annual report 2006-2007                                         | Reserve Bank of India                                     |
| Modern production / operations management                       | Elwood S. Buffa, Rakesh K. Sarin                          |
| Introduction to management accounting                           | Horngren, Sundem, Stratton                                |
| Re engineering the corporation                                  | Michael Hammer and James Champy                           |
| Strategic management                                            | Arthur Sharplin                                           |
| Project planning analysis, selection, implementation and review | Prasanna Chandra                                          |
| Production and operations management                            | Everett E. Adam Jr., Ronald J. Ebert                      |
| Perspectives on HR and IT management                            | Edited by P. David Jawahar, Ramesh Venkat Raman           |
| Economic Survey 2006-2007                                       | Government of India                                       |
| Operations management                                           | Lee J. Krajewskai and Larry P. Ritzman                    |
| Critical chain                                                  | Eliyahu M. Goldratt                                       |
| Marketing management                                            | Philip Kotler                                             |
| Global marketing management                                     | Marren. Keevan                                            |
| Economic intelligence service                                   | CMIE                                                      |



## References

| <b>Title: Article / White paper</b>                                                                    | <b>Authors</b>                                          |
|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Enterprise wide risk management and the role of chief risk officer                                     | James Lamb                                              |
| Excellence in risk management                                                                          | Marsh                                                   |
| Risk measurement, risk management and capital adequacy in financial conglomerates                      | Andrew Kruitzkes, Till Schuermann and Scott M. Weiner   |
| On the ruin probability under a class of risk processes                                                | Wang Rongming and Liu-Haifeng                           |
| An examination of some tools for macro econometric model building                                      | Adrian Pagan                                            |
| Principles of market segmentation                                                                      | William D. Nieal                                        |
| Better branding                                                                                        | Nora A. Aufreiter, David Elzinga and Jonathan W. Gordon |
| Evolving strategy: Risk management and the shaping of large engineering projects                       | Roger Miller and Donald Lessard                         |
| Utility theory from Jeremy Bentham to Daniel Kahneman                                                  | Daniel Read                                             |
| Demand for insurance: Expected utility theory from a gain perspective                                  | John A. Nyman                                           |
| Derivative and corporate risk management, participation and volume decisions in the insurance industry | J. David Cummins, Richard D. Phillips, Stephen D. Smith |
| Ruin probability estimation                                                                            | Yuliva Bregman                                          |