

PAPER – 7: INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

SECTION – A: INFORMATION TECHNOLOGY

Question No. 1 is compulsory.

*Answer any **three** questions from the rest.*

Question 1

- (A) *Expert System allows non-experts to make decisions comparable to those of an expert. Briefly discuss different types of Expert Systems.* **(3 Marks)**
- (B) *Explain the issues involved in Client/Server network.* **(2 Marks)**

Answer

- (A) Different types of Expert Systems (ES) can be Example-based, Rule-based or Frame-based and are explained as below:
- **Example-Based System:** In this system, the developers enter the case facts and results. Through induction, the Expert System converts the examples to a decision tree that is used to match the case at hand with those previously entered in the knowledge base.
 - **Rule-Based System:** These are created by storing data and decision rules as If-Then rules. The system asks the user questions and applied the if-then rules to the answers to draw conclusions and make recommendations. Rule-based systems are appropriate when a history of case is unavailable or when a body of knowledge can be structured within a set of general rules.
 - **Frame Based System:** It organizes all the information (data, description, rules etc.) about a topic into logical units called Frames, which are like linked records in data files. Rules are then established about how to assemble or inter-relate the frames to meet the user's needs.
- (B) Issues involved in Client/Server Network are as follows:
- When the server goes down or crashes, all the computers connected to it become unavailable to use.
 - Simultaneous access to data and services by the user takes little more time for server to process the task.

Question 2

- (A) *An enterprise wants to implement Business Process Reengineering (BPR) project, which would potentially impact every aspect of the business and the changes would be of a scale that could result in either substantial improvement or massive failures. As a consultant of this enterprise, you are required to explain the key factors for the success of their BPR project.* **(6 Marks)**

- (B) *Discuss any four (04) common examples of Unguided transmission media in a telecommunications network.* **(4 Marks)**

Answer

- (A) Various factors for the success of Business Process Reengineering (BPR) projects are as follows:
- (i) **Organization wide commitment:** Changes to business processes would have a direct impact on processes, organizational structures, work culture, information flows, infrastructure & technologies and job competencies. This requires strong leadership, support and sponsorship from the top management. Top management not only has to recognize the need for change but also must convince every affected group about the potential benefits of the change to the organization as a whole and secure their commitment.
 - (ii) **BPR team composition:** A BPR team is formed which would be responsible to take the BPR project forward and make key decisions and recommendations. The BPR team would include active representatives from top management, business process owners, technical experts and users. The teams must be kept of manageable size say 10 members to ensure well-coordinated, effective and efficient completion of the entire BPR process.
 - (iii) **Business needs analysis:** It is important to identify exactly what current processes need reengineering. This would help determine the strategy and goals for BPR. A series of sessions are held with the process owners and stakeholders and all the ideas would be evaluated to outline and conceptualize the desired business process. The outcome of this analysis would be BPR project plan – identifying specific problem areas, setting goals and relating them to key business objectives. This alignment of the BPR strategy with the enterprise strategy is one of the most important aspects.
 - (iv) **Adequate IT infrastructure:** Adequate investment in IT infrastructure in line is of vital importance to successful BPR implementation. An IT infrastructure is a set of hardware, software, networks, facilities, etc. in order to develop, test, deliver, monitor, control or support IT services. Effective alignment of IT infrastructure to BPR strategy would determine the success of BPR efforts.
 - (v) **Effective change management:** BPR involves changes in people behaviour and culture, processes and technologies. Hence, resistance would be a natural consequence which needs to be dealt with effectively. An effective change management process would consider the current culture to foster a change in the prevailing beliefs, attitudes and behaviours effectively. The success of BPR depends on how effectively management conveys the need for change to the people.
 - (vi) **Ongoing continuous improvement:** BPR is an ongoing process hence innovation and continuous improvement are key to the successful implementation of BPR.

(B) Some common examples of Unguided transmission media are as follows:

- **Terrestrial Microwave:** Terrestrial microwave involves earthbound microwave systems, which transmit high-speed radio signals in a line-of-sight path between relay stations spaced approximately 30 miles apart. Terrestrial microwave media uses the atmosphere as the medium through which to transmit signals and is used extensively for high-volume as well as long-distance communication of both data and voice in the form of electromagnetic waves. However major disadvantage of terrestrial microwave is that it cannot bend around the curvature of the earth.
- **Radio Waves:** Wireless networks do not require any physical media or cables for data transmission. Radio waves are an invisible form of electromagnetic radiation that varies in wavelength from around a millimetre to 100,000 km, making it one of the widest ranges in the electromagnetic spectrum. Radio waves are most commonly used transmission media in the wireless Local Area Networks.
- **Micro Waves:** Microwaves are radio waves with wavelengths ranging from as long as one meter to as short as one millimetre, or equivalently, with frequencies between 300 MHz (0.3 GHz) and 300 GHz. These are used for communication, radar systems, radio astronomy, navigation and spectroscopy.
- **Infrared Waves:** Infrared light is used in industrial, scientific, and medical applications. Night-vision devices using infrared illumination allow people or animals to be observed without the observer being detected. Infrared tracking, also known as infrared homing, refers to a passive missile guidance system which uses the emission from a target of electromagnetic radiation in the infrared part of the spectrum to track it.
- **Communication Satellites:** Communication satellites use the atmosphere (microwave radio waves) as the medium through which to transmit signals. A satellite is some solar-powered electronic device that receives, amplifies and retransmits signals; the satellite acts as a relay station between satellite transmissions stations on the ground (earth stations). They are used extensively for high-volume as well as long-distance communication of both data and voice. It is cost-effective method for moving large quantities of data over long distances. However, satellites are very expensive to develop and place in orbit and have an age limit of 7-10 years. Signals weaken over long distances; weather conditions and solar activity can also cause noise interference. Anyone can listen in on satellite signals, so sensitive data must be sent in a secret, or encrypted form.

Question 3

- (A) *"With the right user interface, accessing a Grid Computing system would look no different than accessing a local machine's resources". In light of the above statement, briefly explain Grid Computing and also discuss various types of resources used in a grid.*

(1 + 5 = 6 Marks)

(B) Describe the four broad themes into which Network security threats are categorized.

(4 Marks)

Answer

(A) **Grid Computing** is defined as a computer network in which each computer's resources are shared with every other computer in the system. It is a distributed architecture of large numbers of computers connected within the same network share one or more resources to solve a complex problem. In the grid computing model, servers or personal computers run independent tasks and are loosely linked by the Internet or low-speed networks. Every authorized computer would have access to enormous processing power and storage capacity.

In other words, in a Grid Computing System, every resource is shared, turning a computer network into a powerful supercomputer. Every authorized computer would have access to enormous processing power and storage capacity. A grid computing system can be as simple as a collection of similar computers running on the same operating system or as complex as inter-networked systems comprised of every computer platform we can think of.

Various types of resources used in a Grid are as follows:

- **Computation:** The most common resource is Computing Cycle provided by the processors of the machines on the grid where processors can vary in speed, architecture, software platform and other associated factors such as memory, storage, and connectivity. There are three primary ways to exploit the computation resources of a grid.
 - To run an existing application on an available machine on the grid rather than locally;
 - To use an application designed to split its work in such a way that the separate parts can execute in parallel on different processors; and
 - To run an application that needs to be executed many times on many different machines in the grid.
- **Storage:** The second most common resource used in a grid is Data Storage. A grid providing an integrated view of data storage is sometimes called a Data Grid. Each machine on the grid usually provides some quantity of storage for grid use, even if temporary. Storage can be memory attached to the processor or it can be secondary storage using hard disk drives or other permanent storage media. More advanced file systems on a grid can automatically duplicate sets of data, to provide redundancy for increased reliability and increased performance.
- **Communications:** Communications within the grid are important for sending jobs and their required data to points within the grid. The bandwidth available for such communications can often be a critical resource that can limit utilization of the grid.

Redundant communication paths are sometimes needed to better handle potential network failures and excessive data traffic. In some cases, higher speed networks must be provided to meet the demands of jobs transferring larger amounts of data.

- **Software and Licenses:** The grid may have software installed that may be too expensive to install on every grid machine. Some software licensing arrangements permit the software to be installed on all the machines of a grid but may limit the number of installations that can be simultaneously used at any given instant. License management software keeps track of how many concurrent copies of the software are being used and prevents more than that number from executing at any given time.
- **Special equipment, capacities, architectures, and policies:** Platforms on the grid will often have different architectures, operating systems, devices, capacities, and equipment. Each of these items represents a different kind of resource that the grid can use as criteria for assigning jobs to machines. For example, some machines may be designated to only be used for medical research. These would be identified as having a medical research attribute and the scheduler could be configured to only assign jobs that require machines of the medical research resource.

(B) Network Security threats can be categorized into four broad themes:

- **Unstructured Threats** - These originate mostly from inexperienced individuals using easily available hacking tools from the Internet. Many tools available to anyone on the Internet can be used to discover weaknesses in a company's network. These include port-scanning tools, address-sweeping tools, and many others. Most of these kinds of probes are done more out of curiosity than with a malicious intent in mind.
- **Structured Threats** - These originate from individuals who are highly motivated and technically competent and usually understand network systems design and the vulnerabilities of those systems. They can understand as well as create hacking scripts to penetrate those network systems. An individual who presents a structured threat typically targets a specific destination or group. Usually, these hackers are hired by industry competitors, or state-sponsored intelligence organizations.
- **External Threats** - These originate from individuals or organizations working outside an organization, which does not have authorized access to organization's computer systems or network. They usually work their way into a network from the Internet or dialup access servers.
- **Internal Threats** - Typically, these threats originate from individuals who have authorized access to the network. These users either have an account on a server or physical access to the network. An internal threat may come from a discontented former or current employee or contractor. It has been seen that majority of security incidents originate from internal threats.

Question 4

(A) *Application programs usually require an Operating System to function which provides a convenient environment to users for executing their programs. Explain the variety of activities executed by operating system, which makes it a vital component of the system software in a computer system.* **(6 Marks)**

(B) *Briefly discuss any four (04) control objectives in Business Process Automation (BPA).*

(4 Marks)

Answer

(A) Variety of activities executed by Operating System (OS) which makes it a vital component of the system software in a computer system includes the following:

- ◆ **Performing hardware functions:** Operating System facilitates application programs to perform tasks that must obtain input from keyboards, retrieve data from disk and display output on monitors. OS acts as an intermediary between the application program and the hardware.
- ◆ **User Interfaces:** An important function of any operating system is to provide user interface. Nowadays Graphic User Interface (GUI) is used which uses icons and menus like in the case of Windows. So, how we interface with our system will be provided by Operating system.
- ◆ **Hardware Independence:** Every computer could have different specifications and configurations of hardware. The operating system provides Application Program Interfaces (API), which can be used by application developers to create application software, thus obviating the need to understand the inner workings of OS and hardware. Thus, OS gives us hardware independence.
- ◆ **Memory Management:** Memory Management feature of Operating System allows controlling how memory is accessed and maximize available memory and storage. Operating System also provides Virtual Memory by carving an area of hard disk to supplement the functional memory capacity of Random-Access Memory (RAM). In this way, it augments memory by creating a virtual RAM.
- ◆ **Task Management:** Task Management feature of Operating system helps in allocating resources to make optimum utilization of resources. This facilitates a user to work with more than one application at a time i.e. multitasking and allows more than one user to use the system i.e. timesharing.
- ◆ **Networking Capability:** Operating systems can provide systems with features and capabilities to help connect computer networks. Like Linux and Windows 8 that give us an excellent capability to connect to internet.

- ◆ **Logical Access security:** Operating systems provide logical security by establishing a procedure for identification and authentication using a User ID and Password. It can log the user access thereby providing security control.
- ◆ **File management:** The operating system keeps a track of where each file is stored and who can access it, based on which it provides the file retrieval.

(B) Major Control objectives of Business Process Automation (BPA) are as follows:

- ◆ **Authorization:** This ensures that all transactions are approved by responsible personnel in accordance with their specific or general authority before the transaction is recorded.
- ◆ **Completeness:** This ensures that no valid transactions have been omitted from the accounting records.
- ◆ **Accuracy:** This ensures that all valid transactions are accurate, consistent with the originating transaction data and information is recorded in a timely manner.
- ◆ **Validity:** This ensures that all recorded transactions fairly represent the economic events that actually occurred are lawful in nature and have been executed in accordance with management's general authorization.
- ◆ **Physical Safeguards and Security:** This ensures that access to physical assets and information systems are controlled and properly restricted to authorized personnel.
- ◆ **Error Handling:** This ensures that errors detected at any stage of processing receive prompt corrective action and are reported to the appropriate level of management.
- ◆ **Segregation of Duties:** This ensures that duties are assigned to individuals in a manner that ensures that no one individual can control both the recording function and the procedures relative to processing a transaction.

Question 5

- (A) *Executive Information System (EIS) are designed for top management as they present information in condensed view. Explain the components of an EIS which make it so easy to use for top management. Also explain, why EIS are called high risk/high return systems?*
(4 + 2 = 6 Marks)
- (B) *Describe any two (02) types of flowcharts.* (2 Marks)
- (C) *Write a short note on Ultra-Mobile PC (UMPC).* (2 Marks)

OR

Explain major concerns related to Mobile Computing.

Answer

(A) The components of an Executive Information Systems (EIS) can typically be classified as under:

- **Hardware:** This includes Input data-entry devices, CPU, Data Storage files and Output Devices.
- **Software:** This includes Text base software, Database, and Graphic types such as time series charts, scatter diagrams, maps, motion graphics, sequence charts, and comparison-oriented graphs (i.e., bar charts) Model base.
- **User Interface:** This includes hardware (physical) and software (logical) components by which people (users) interact with a machine. Several types of interfaces can be available to the EIS structure, such as scheduled reports, questions/answers, menu driven, command language, natural language, and input/output.
- **Telecommunication:** This involves transmitting data from one place to another in a reliable networked system.

Executive Information Systems (EIS) are high-risk/high-return systems principally because the clientele these systems serve, are not merely important in the unyielding, but encompass information needs that are extremely easier said than done to provide through computer-based information systems. Consequently, it is significant to appreciate the explanation to EIS development and constant operation.

(B) Different types of Flowchart are as below:

- **Document Flowchart:** This flowchart traces the physical flow of documents through an organization – that is, the flow of documents from the departments, groups, or individuals who first created them to their final destinations.
- **System Flowchart:** This typically depicts the electronic flow of data and processing steps in an Information System. While Document Flowcharts focus on tangible documents, system flowchart concentrates on the computerized data flows of Information systems.
- **Program Flowchart:** It is most detailed and is concerned with the logical/arithmetic operations on data within the CPU and flow of data between the CPU on one hand and the input/output peripherals on the other.

(C) **Ultra-Mobile PC (UMPC):** An Ultra-Mobile PC is a small form factor version of a pen computer, which is a class of laptop smaller than subnotebooks. It has a Thin Film Transistor (TFT) display measuring (diagonally) about 12.7 to 17.8 cm (5 to 7-inch screen) and operate like tablet PCs using a touch screen or a stylus and can also have a physical keyboard. However, there is no clear boundary between subnotebooks and UMPCs.

Or

Major concerns relating to Mobile Computing are as follows:

- Mobile computing has its fair share of security concerns as any other technology.
- Dangers of misrepresentation: Another problem plaguing mobile computing are credential verification.
- Power consumption: When a power outlet or portable generator is not available, mobile computers must rely entirely on battery power.
- Potential health hazards.

PAPER – 7: INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

SECTION –B: STRATEGIC MANAGEMENT

Question No. 6 is compulsory

*Answer any **four** questions from the rest.*

Question 6

Do you think it is necessary for an organization to have a vision and a mission? Elucidate.

(1 + 4 = 5 Marks)

Answer

Yes, it is necessary for all organisations to have vision and mission. Organisations, irrespective of their size and nature need vision and mission to give direction to business.

Identifying vision, mission, objectives, and strategies is the starting point for strategic management process. In order to grow and prosper and move ahead in a competitive environment organisation needs to have clear vision and mission. Every organization has these elements, even when they are not consciously designed, written, or communicated.

A vision statement outlines what the organization wants to be. It concentrates on the future. It is a source of inspiration for the organisation. A strategic vision steers an organization in a particular direction, charts a strategic path for it to follow in preparing for the future, and moulds organizational identity. At the same time, a mission statement defines the fundamental purpose of the organization. It concentrates on the present. It defines the customer and the critical processes. It gives information about the desired level of performance.

Overall vision and mission help an organisation to:

- (i) Give a direction to organisational efforts.
- (ii) Form a basis for finalisation of objectives and creation of strategies.
- (iii) Allocation of organizational resources.
- (iv) Provide a basis for motivation to organisational resources.

Question 7

(A) *Competitive pressures operate as a composite in five areas of the overall market. Elaborate.*

(5 Marks)

(B) *State the four strategic options described in BCG Growth-Share matrix. Briefly explain the scenario in which each strategic option is suitable to pursue.*

(1 + 4 = 5 Marks)

Answer

- (A) Competition makes organizations work harder, however, it is neither a coincidence nor bad luck. All organizations have competition and its benefit are enjoyed by the markets. The customers are able to get better products at lower costs. They get better value for their

money because of competition. A powerful and widely used tool for systematically diagnosing the significant competitive pressures in a market and assessing the strength and importance of each is the Porter's five-forces model of competition. This model holds that the state of competition in an industry is a composite of competitive pressures operating in five areas of the overall market as follows:

- (i) **Rivalry among current players:** Competitive pressures associated with the market manoeuvring and jockeying for buyer patronage that goes on among rival sellers in the industry.
 - (ii) **Threat of new entrants:** Competitive pressures associated with the threat of new entrants into the market.
 - (iii) **Threats from substitutes:** Competitive pressures coming from the attempts of companies in other industries to win buyers over to their own substitute products.
 - (iv) **Bargaining power of suppliers:** Competitive pressures stemming from supplier bargaining power and supplier-seller collaboration.
 - (v) **Bargaining power of customers:** Competitive pressures stemming from buyer bargaining power and seller-buyer collaboration.
- (B) In the BCG growth-share matrix portfolio of investments are represented in two dimensional space. The vertical axis represents market growth rate and the horizontal axis represents relative market share. Using the matrix, organizations can identify four different types of products or SBU as stars, question marks, cash cows and dogs.

In the light of BCG Growth Share Matrix, four strategic options that can be pursued by an organization are: build, hold, harvest and divest. Different strategic options can be pursued in different situations as follows:

- (i) **Build:** Here the objective is to increase market share, even by forgoing short-term earnings in favour of building a strong future with large market share. It is done by increasing investment. For example, investments can be made to push question marks into stars.
- (ii) **Hold:** Here the objective is to preserve market share. It can be in a situation where the organization is not in position to invest or has other commitments.
- (iii) **Harvest:** A relevant situation can be when the product or SBU is in position of being cash cow. Here the objective is to increase short-term cash flow regardless of long-term effect.
- (iv) **Divest:** Divest is relevant in case of dog quadrant. Here the objective is to sell or liquidate the business because resources can be better used elsewhere.

Question 8

- (A) *What is Supply Chain Management? How can you say that it is conceptually wider than Logistic Management?* (5 Marks)
- (B) *Justify the statement "Stability Strategy is opposite of Expansion Strategy".* (5 Marks)

Answer

- (A) **Supply Chain Management:** Supply chain management helps in integrating all major business activities and business processes within and across organisations. It is defined as the process of planning, implementing, and controlling the supply chain operations. Management of supply chains include closely working with channel partners – suppliers, intermediaries, other service providers and customers. It refers to the linkages between suppliers, manufacturers and customers. Supply chains involve all activities like sourcing and procurement of material, conversion, and logistics.

Supply chain management is an extension of logistic management. However, there are differences between the two. Logistical activities typically include management of inbound and outbound goods, transportation, warehousing, and handling of material, fulfilment of orders, inventory management and supply/demand planning. Although these activities also form part of supply chain management, the latter is much broader. Logistic management can be termed as one of its part that is related to planning, implementing, and controlling the movement and storage of goods, services and related information between the point of origin and the point of consumption.

Supply chain management includes more aspects apart from logistics function. It is a tool of business transformation and involves delivering the right product at the right time to the right place and at the right price. It reduces costs of organizations and enhances customer service.

- (B) **Stability Strategies**, as name suggests, are intended to safeguard the existing interests and strengths of business. It involves organisations to pursue established and tested objectives, continue on the chosen path, maintain operational efficiency and so on. A stability strategy is pursued when a firm continues to serve in the same or similar markets and deals in same products and services. In stability strategy, few functional changes are made in the products or markets, however, it is not a 'do nothing' strategy. This strategy is typical for mature business organizations. Some small organizations also frequently use stability as a strategic focus to maintain comfortable market or profit position.

On the other hand, expansion strategy is aggressive strategy as it involves redefining the business by adding the scope of business substantially, increasing efforts of the current business. In this sense, it becomes opposite to stability strategy. Expansion is a promising and popular strategy that tends to be equated with dynamism, vigor, promise and success. Expansion also includes diversifying, acquiring and merging businesses. This strategy may take the enterprise along relatively unknown and risky paths, full of promises and pitfalls.

Question 9

(A) *How can management communicate that it is committed to creating a new culture assuming that the old culture was problematic and not aligned with the company strategy?*

(5 Marks)

(B) *What do you understand by Six Sigma as a process of quality management? Name any 2 companies who are pioneers in this field. How is six sigma different from traditional TQM processes?*

(5 Marks)

Answer

(A) Corporate culture refers to company's values, beliefs, business principles, traditions, ways of operating and internal work environment. Changing problem cultures is very difficult because of deeply held values and habits. It takes concerted management action over a period of time to replace an unhealthy culture with a healthy culture or to root out certain unwanted cultural obstacles and instil ones that are more strategy-supportive.

- ◆ The first step is to diagnose which facets of the present culture are strategy supportive and which are not.
- ◆ Then, managers have to talk openly and forthrightly to all concerned about those aspects of the culture that have to be changed.
- ◆ The talk has to be followed swiftly by visible, aggressive actions to modify the culture-actions that everyone will understand are intended to establish a new culture more in tune with the strategy.

Management through communication has to create a shared vision to manage changes. The menu of culture-changing actions includes revising policies and procedures, altering incentive compensation, shifting budgetary allocations for substantial resources to new strategy projects, recruiting and hiring new managers and employees, replacing key executives, communication on need and benefit to employees and so on.

(B) **Concept of six sigma:** Six sigma is a highly disciplined process that helps in developing and delivering near-perfect products and services. It strives to meet and improve organizational outputs in terms of quality, cost, scheduling, manpower, new products and so on. It works continuously towards revising the current standards and establishing higher ones. It aims at improving quality and reducing cost by taking systemic and integrated efforts.

Names of pioneer companies:

Six sigma is often related to Motorola, the company that has invented it in the eighth decade of the 20th century. Many giants like Xerox, Boeing, GE, Kodak followed Motorola's lead.

Three key characteristics that separate Six Sigma from other quality programs of the past are:

1. **Six Sigma is customer focused.** There is a lot of emphasis to keep external customer needs in plain sight, driving the improvement effort.
2. **Six Sigma projects produce major returns on investment.** Six sigma leads to considerable savings, reduction in wastage and improvement in returns.
3. **Six Sigma changes how management operates.** Six Sigma is much more than improvement project. Senior executives and leaders throughout business learn tools and concepts of Six Sigma to bring new approaches in thinking, planning, and executing. It is about putting into practice the notions of working smarter, not harder.

Question 10

- (A) *Why is Strategic Control important for organizations? Discuss briefly 4 types of strategic control that can be implemented to achieve the enterprise goals.* **(5 Marks)**
- (B) *Write short notes on Synchro-Marketing and Demarketing.* **(5 Marks)**

OR

Concept of experience curve.

Answer

- (A) **Importance of strategic control:** Strategic control is an important process that keeps organisation on its desired path. It involves evaluating strategy as it is formulated and implemented. It is directed towards identifying problems and changes in premises and making necessary adjustments. Strategic control focuses on the dual questions of whether: (1) the strategy is being implemented as planned; and (2) the results produced by the strategy are those intended.

There are four types of strategic control:

- ◆ **Premise control:** A strategy is formed on the basis of certain assumptions or premises about the environment. Premise control is a tool for systematic and continuous monitoring of the environment to verify the validity and accuracy of the premises on which the strategy has been built.
- ◆ **Strategic surveillance:** Strategic surveillance is unfocussed. It involves general monitoring of various sources of information to uncover unanticipated information having a bearing on the organizational strategy.
- ◆ **Special alert control:** At times, unexpected events may force organizations to reconsider their strategy. Sudden changes in government, natural calamities, unexpected merger/acquisition by competitors, industrial disasters and other such events may trigger an immediate and intense review of strategy.

- ◆ **Implementation control:** Managers implement strategy by converting major plans into concrete, sequential actions that form incremental steps. Implementation control is directed towards assessing the need for changes in the overall strategy in light of unfolding events and results.

(B) **Synchro-marketing:** When the demand for the product is irregular due to season, some parts of the day, or on hourly basis, causing idle capacity or overworked capacities, synchro-marketing can be used to find ways to alter the same pattern of demand through flexible pricing, promotion, and other incentives. For example, products such as movie tickets can be sold at lower price over week days to generate demand.

Demarketing: Marketing strategies are created to reduce demand temporarily or permanently through demarketing. The aim is not to destroy demand, but only to reduce or shift it. This happens when there is overfull demand. For example, buses are overloaded in the morning and evening, roads are busy for most of times, zoological parks are overcrowded on Saturdays, Sundays and holidays. Here demarketing can be applied to regulate demand.

OR

Concept of experience curve: Experience curve concept is akin to a learning curve which explains the efficiency increase gained by workers through repetitive productive work. Experience curve is based on the commonly observed phenomenon that unit costs decline as a firm accumulates experience in terms of a cumulative volume of production. The implication is that larger firms in an industry would tend to have lower unit costs as compared to those for smaller companies, thereby gaining a competitive cost advantage.

Experience curve results from a variety of factors such as learning effects, economies of scale, product redesign and technological improvements in production. The concept of experience curve is relevant for a number of areas in strategic management. For instance, experience curve is considered a barrier for new firms contemplating entry in an industry. It is also used to build market share and discourage competition.