

## PAPER – 7: INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

### SECTION – A: INFORMATION TECHNOLOGY

*Question No. 1 is compulsory.*

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

#### Question 1

- (a) *Application Software includes all those computer software that cause a computer to perform useful tasks beyond the running of the computer itself. Discuss in brief three benefits of Application Software. (3 Marks)*
- (b) *Discuss any two limitations of using Data Flow Diagram (DFD). (2 Marks)*

#### Answer

- (a) Some of the most popular and widely accepted benefits of Application Software are as follows:
- ◆ **Addressing User needs:** Their biggest advantage is that it meets the exact needs of the user. Since it is designed specifically with one purpose in mind, the user knows that s/he has to use the specific software to accomplish his task.
  - ◆ **Less threat from virus:** The threat of viruses invading custom-made applications is very small, since any business that incorporates it, can restrict access and can come up with means to protect their network as well.
  - ◆ **Regular updates:** Licensed application software gets regular updates from the developer for security reasons. Additionally, the developer also regularly sends personnel to correct any problems that may arise from time to time.
- (b) Limitations of using Data Flow Diagram (DFD) are as follows:
- It makes the programmers little confused concerning the system.
  - It simply takes a long time to create, so long that the analyst may not receive support from management to complete it.
  - Physical considerations are left out.

#### Question 2

- (a) *The primary goal of Business Process Management (BPM) is to improve products and services through structured approach to performance improvement that centers on systematic design and management of a company's business processes. Management of the company wants to implement BPM in the company. As a consultant of this company, explain various key factors and related considerations in implementing BPM. (6 Marks)*
- (b) *Briefly explain any two advantages and two disadvantages of Three-Tier systems. (4 Marks)*

**Answer**

- (a) Key factors to be considered in implementing Business Process Management (BPM) are as follows:

Factors	Key Considerations
Scope	A single process, a department, the entire company
Goals	Process understanding, improvement, automation, re-engineering, optimization
Methods to be used	Six Sigma, BPM Life Cycle Method, TQM, Informal methods
Skills Required	Consultants, Train Employees, Formal Certification, Basic Education, Existing Skill sets
Tools to be used	White-Boards, Sticky Notes, Software For Mapping, Documenting, Software for Simulation, Comprehensive BPMS
Investments to Make	Training, Tools, Time
Sponsorship/Buy-in Needed	Executive Level, Department Level, Process Owner Level, Employee Level

- (b) The advantages of Three-Tier systems are as follows:

- **Clear separation of user-interface-control and data presentation from application-logic:** Through this separation, more clients are able to have access to a wide variety of server applications. The two main advantages for client-applications are quicker development through the reuse of pre-built business-logic components and a shorter test phase.
- **Dynamic load balancing:** If bottlenecks in terms of performance occur, the server process can be moved to other servers at runtime.
- **Change management:** It is easy and faster to exchange a component on the server than to furnish numerous Personal Computers with new program versions.

The disadvantages of Three-Tier systems are as below:

- It creates an increased need for network traffic management, server load balancing, and fault tolerance.
- Current tools are relatively immature and are more complex.
- Maintenance tools are currently inadequate for maintaining server libraries. This is a potential obstacle for simplifying maintenance and promoting code reuse throughout the organization.

**Question 3**

(a) *Mobile Computing is rapidly moving from gadget status to essential for consumers compelling more and more business services to be offered through this mode. Being an IT consultant, briefly explain various examples of business application of Mobile Computing.*

**(6 Marks)**

(b) *There are confident factors that show "Why knowledge has gained so much momentum in recent times?" Discuss these factors in brief.*

**(4 Marks)**

**Answer**

(a) Various examples of business applications of Mobile Computing are as follows:

- There is an increase in workforce productivity as mobile device enables employees to work from anywhere, anytime by accessing and updating information as required. For example: employees can read/respond to emails using laptops, PDAs or smart phones from office, residence and even when on the move.
- Customer service can be improved by responding to customer queries onsite or offsite. For example: customer complaints can be accessed and responded by accessing past/latest information of client as required.
- Incident management can be improved by resolving problems faster without limitation of time as the concerned employees can attend to these regardless of their location. Further, escalations can be updated in real time which ensures timely resolution of problems. For example: Computer breakdowns can be serviced by service engineers from their desks/outside by logging into the specific computer, identify problem and resolve it online.
- Enterprises can reengineer core business processes that can further be transformed using mobile devices. The new and reengineered processes can focus on utilizing the key features of location and time independence. Enterprises can focus on providing customers and employees with access to information in different ways and provide the latest information. This enables employees, customers, and businesses to be available to one another as per their choice. For example: billing can be done by employees using hand held devices at customer site and the information updated online and deliveries to customers can be speeded up.
- Enterprises can dynamically modify and update their offerings and offer new products and services altogether. For example: enterprises can implement telecommuting with flexible working hours and locations allowing for cost savings and better efficiency.
- Mobile computing gives users the freedom to roam with access to data and services at any time and in any place. For example, Most of the high-end ERP and business software applications for SMEs have in-built capabilities of mobile computing enabling users to access data. Used with proper security, enterprises can harness the power of this technology to create innovative opportunities for improving the quality and

efficiency of business processes and services. Mobile devices are increasingly acquiring the must-have status for enterprises on account of the increasing acceptance as business tools.

- (b) Many confident factors that show “Why knowledge has gained so much momentum in recent times” are as below:
- ◆ **Altering Business surroundings:** Previously the business environment used to be stable one, so the people of any organization naturally became knowledgeable over time. They absorbed and hang-out knowledge about company’s product and service, its market, customers, competitors and suppliers. But now rapid change means speedy knowledge obsolescence, so need is there to manage it before it disappears without leaving a trace.
  - ◆ **Burgeon Connections:** Extremely dispersed operations, global expansion, continual change –none of these would have been possible if it were not possible to deploy knowledge officially and deliberately. Cheap computing has made it probable. IT is now translucent to the user and is more accomplished of capturing knowledge. The authentic, interactive networks can put knowledgeable people in stroke through communication & technologies.
  - ◆ **Globalization:** It’s putting heaviness on firms for innovation as markets are at the present release for new-fangled players and competition is stiff. Now companies have started selling knowledge in addition. For a research lab or software firm, not managing knowledge is similar to Wal-Mart not managing inventory.
  - ◆ **Modification in Organizational composition:** In today’s state of affairs, the organizational structures are changing. The new arrangement “Virtual Organization” is a composition that is used to integrate far flung operations and Knowledge Discovery in Databases is required.

#### Question 4

- (a) *Network management is essential to command and control practices and is generally carried out of a network operations center. A network administrator of an organization wants to characterize network management functions with the help of a model or framework. You are requested to suggest a model or framework for network management. Mention the name of the suggested model and explain this model with reference to network management functions. (1 + 5 =6 Marks)*
- (b) *Explain any four characteristics of Cloud Computing. (4 Marks)*

#### Answer

- (a) FCAPS (Fault, Configuration, Accounting, Performance and Security) is the ISO Telecommunications Management Network model and framework for network management.

The FCAPS Model with reference to network management functions are as below:

- **Fault Management** - A fault is an event that has a negative significance. The goal of fault management is to recognize, isolate, correct and log faults that occur in the network. Most fault management systems poll the managed objects for error conditions and present this information to the network manager. Fault management identifies and isolates network issues, proposes problem resolution, and subsequently logs the issues and associated resolutions.
  - **Configuration Management** - Monitors network and system configuration information so that the impact on network operations (hardware and software elements) can be tracked and managed. Frequency allocation, predetermined traffic routing to support balancing, Network planning including the changes, additions, and deletions need to be coordinated with the network management personnel.
  - **Accounting Management** - Accounting management is concerned with tracking network utilization information, such that individual users, departments, or business units can be appropriately billed or charged for accounting purposes. For non-billed networks, accounting refers to administration whose primary goal is to administer the set of authorized users by establishing users, passwords, and permissions and to administer the operations of the equipment such as by performing software backup and synchronization.
  - **Performance Management** - Measures and makes network performance data available so that performance can be maintained and acceptable thresholds. It enables the manager to prepare the network for the future, as well as to determine the efficiency of the current network. The network performance addresses the throughput, network response times, packet loss rates, link utilization, percentage utilization, error rates and so forth.
  - **Security Management** - Controls access to network resources as established by organizational security guidelines. Most network management systems address security regarding network hardware, such as someone logging into a router. Security management functions include managing network authentication, authorization, and auditing, such that both internal and external users only have access to appropriate network resources, configuration and management of network firewalls, intrusion detection systems, and security policies such as access lists.
- (b) Some characteristics of Cloud Computing are as follows:
- **Elasticity and Scalability:** Cloud computing gives us the ability to expand and reduce resources according to the specific service requirement. For example, we may need a large number of server resources for the duration of a specific task. We can then release these server resources after we complete our task.

- **Pay-per-Use:** We pay for cloud services only when we use them, either for the short term (for example, for CPU time) or for a longer duration (for example - Cloud-based storage or vault services).
- **On-demand:** Because we invoke cloud services only when we need them, they are not permanent parts of the IT infrastructure. This is a significant advantage for cloud use as opposed to internal IT services. With cloud services, there is no need to have dedicated resources waiting to be used, as is the case with internal services.
- **Resiliency:** The resiliency of a cloud service offering can completely isolate the failure of server and storage resources from cloud users. Work is migrated to a different physical resource in the cloud with or without user awareness and intervention.
- **Multi Tenancy:** Public cloud service providers often can host the cloud services for multiple users within the same infrastructure. Server and storage isolation may be physical or virtual depending upon the specific user requirements.
- **Workload Movement:** This characteristic is related to resiliency and cost considerations. Here, cloud-computing providers can migrate workloads across servers both inside the data center and across data centers even in a different geographic area. This migration might be necessitated by cost (less expensive to run a workload in a data center in another country based on time of day or power requirements) or efficiency considerations (for example, network bandwidth). A third reason could be regulatory considerations for certain types of workloads.

**Question 5**

- (a) *Grid computing is a computer network in which each computer's resources are shared with every other computer in the system. To develop security architecture of grid computing, discuss the various constraints, which are taken from the characteristics of grid environment and application.* **(6 Marks)**
- (b) *Write a short note on Scorecards.* **(2 Marks)**
- (c) *Explain the types of planning languages that are commonly used in Decision Support Systems (DSS).* **(2 Marks)**

OR

*Mention any four elements of Core Banking.*

**Answer**

- (a) To develop security architecture, following constraints are taken from the characteristics of grid environment and application.
- **Single Sign-on:** A user should authenticate once and they should be able to acquire resources, use them, and release them and to communicate internally without any further authentication.

- **Protection of Credentials:** User passwords, private keys, etc. should be protected.
  - **Interoperability with local security solutions:** Access to local resources should have local security policy at a local level. Despite of modifying every local resource, there is an inter-domain security server for providing security to local resource.
  - **Exportability:** The code should be exportable i.e. they cannot use a large amount of encryption at a time. There should be a minimum communication at a time.
  - **Support for secure group communication:** In a communication, there are number of processes which coordinate their activities. This coordination must be secure and for this there is no such security policy.
  - **Support for multiple implementations:** There should be a security policy which should provide security to multiple sources based on public and private key cryptography.
- (b) (i) Scorecards provide a visual representation of the enterprise strategy by taking critical metrics and mapping them to strategic goals throughout the enterprise.
- (ii) Scorecards offer a rich, visual gauge to display the performance of specific initiatives, business units, or the enterprise as a whole and the individual goals in the context of larger enterprise strategy.
- (iii) Scorecards distil information into a small number of metrics and targets and provide users with an at-a-glance perspective of information.
- (iv) A scorecard has a graphical list of specific, attainable strategic milestones, combined with metrics that serve as benchmarks. Specified activities are linked in the scorecard with graphical display highlighting the status of each goal, to measure specifically on how well the company has actually performed.
- (c) Two types of planning languages that are commonly used in Decision Support System (DSS) are as follows:
- **General-purpose planning languages** allow users to perform many routine tasks, for example - retrieving various data from a database or performing statistical analyses. These languages enable user to tackle abroad range of budgeting, forecasting, and other worksheet-oriented problems. The languages in most electronic spreadsheets are good examples of general-purpose planning languages.
  - **Special-purpose planning languages** are more limited in what they can do, but they usually do certain jobs better than the general-purpose planning languages. Some statistical languages, such as Statistical Analysis System (SAS) and Statistical Package for the Social Sciences (SPSS) are examples of special purpose planning languages.

OR

The various elements of Core Banking include the following:

- Making and servicing loans;
- Opening new accounts;
- Processing cash deposits and withdrawals;
- Processing payments and cheques;
- Calculating interest;
- Customer relationship management (CRM) activities;
- Managing customer accounts;
- Establishing criteria for minimum balances, interest rates, number of withdrawals allowed and so on;
- Establishing interest rates; and
- Maintaining records for all the bank's transactions.

## SECTION –B: STRATEGIC MANAGEMENT

Question No. 6 is compulsory

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

### Question 6

*ABC Company plans to make some fundamental changes by reducing paperwork, towards efficient inventory management, scheduling payments more effectively and using proficiencies of internet more efficiently.*

*The company wants to hire a new CTO (Chief Technological Officer) for this purpose.*

*Discuss the key aspects the CTO needs to consider for the assessment of the technological environment. (5 Marks)*

### Answer

ABC Company aims to reduce its paperwork, schedule its payments more efficiently, and be able to coordinate its inventories efficiently and effectively by using the capabilities of the Internet. The Chief Technological Officer (CTO) needs to be analytical in implementing new technology in the company and therefore, some of the key questions to ask in assessing the technological environment could be:

- ◆ What are the technologies used by the company?
- ◆ Which technologies are utilised in the company's business, products, or their parts?
- ◆ How critical is each technology to each of these products and businesses?
- ◆ Which external technologies might become critical and why? Will they remain available outside the company?
- ◆ What has been the investment in the product and in the process side of these technologies? For the company and for its competitors? Design? Production? Implementation and service?
- ◆ What are the other applications of the company's technologies? In which applications does the company currently participate and why? In which application does the company does not participate and why?
- ◆ Which technological investments should be curtailed or eliminated?
- ◆ What additional technologies will be required in order to achieve the current corporate business objectives?
- ◆ What are the implications of the technology and business portfolios for corporate strategy

### Question 7

- (a) *Functional level managers are the source of important information for business and corporate level managers have a strategic role. Validate the statement. (5 Marks)*

- (b) *Business environment is the sum of internal and external forces which influence the function of an organization. Discuss the problems that a manager faces while conducting environmental analysis.* **(5 Marks)**

**Answer**

- (A) Functional level managers provide most of the information that makes it possible for business and corporate-level general managers to formulate realistic and attainable strategies. The statement holds value because they are closer to the customer than the typical general managers. They are at the level where actual customer interaction takes place, and the feedback they gather from the customers shapes an organisation's short term as well as long term strategies. Further, functional managers themselves may generate important ideas that subsequently may become major strategies for the company. Thus, it is important for general managers to listen closely to the ideas of their functional managers. An equally great responsibility for managers at the operational level is strategy implementation: the execution of corporate and business-level plans.
- (B) Business environment in which an organization exists can be broadly divided into two parts: the external and the internal. Since the environment is complex and has multiple elements, it becomes quite challenging for managers to react and respond to it.

External environmental factors are largely beyond the control of individual enterprise and are extremely dynamic in the sense that they keep on changing. These are technological, physical, political and socio-cultural.

Internal environment is the environment that has a direct impact on the business and is within the control of the entrepreneurs. These are internal management, machinery, methods of production, etc.

A manager might face the challenges while doing Environment Analysis, due to the characteristics of the business environment;

- **Environment is Complex:** Number of factors that influence various components of business.
- **Environment is Dynamic:** Changing with every passing day, especially with advancement in technology.
- **Environment is Multi-Faceted:** One single event can have multiple repercussions on different businesses. A change in law can be benefit for one while a problem statement for another.
- **Environment has Far Reaching Impact:** Environment can have a short term as well as long term impact on a business and its strategies.

**Question 8**

- (a) *What are the various alternative strategies which the managers need to identify that will create and sustain a competitive advantage in the business? Discuss.* **(5 Marks)**

- (b) Explain the term Merger and Acquisition as a growth strategy. Differentiate between both of them. State the situations in which such strategies are considered by any organization.

(5 Marks)

**Answer**

- (A) According to Porter, strategies allow organizations to gain competitive advantage from three different bases: cost leadership, differentiation, and focus. These bases form different generic strategies as follows:

- **Cost leadership** emphasizes producing standardized products at a very low per-unit cost for consumers who are price-sensitive. It frequently results from productivity increases and aggressive pursuit of cost reduction throughout the development, production, marketing, and distribution processes. It allows a firm to earn higher profits than its competitors.
- **Differentiation** is a strategy aimed at producing products and services considered unique industry wide and directed at consumers who are relatively price-insensitive. It concerns with distinguishing a product/service from that of its competitors through unique design features, technological leadership, unique uses of products and attributes like quality, environmental impact and customer service.
- **Focus** means producing products and services that fulfill the specific needs of small groups of consumers. It involves selecting or focusing a market or customer segment in which to operate.

- (B) Acquisition or merger with an existing concern is an instant means of achieving expansion. It is an attractive and tempting proposition in the sense that it circumvents the time, risks and skills involved in screening internal growth opportunities, seizing them and building up the necessary resource base required to materialise growth.

Apart from the urge to grow, acquisitions and mergers are resorted to for purposes of achieving a measure of synergy between the parent and the acquired enterprises. Synergy may result from such bases as physical facilities, technical and managerial skills, distribution channels, general administration, research and development and so on.

Many organizations in order to achieve quick growth, expand or diversify with the use of mergers and acquisitions strategies. Merger and acquisition in simple words are defined as a process of combining two or more organizations together. There is a thin line of difference between the two terms but the impact of combination is completely different in both the cases.

**Merger** is considered to be a process when two or more organizations join together to expand their business operations. In such a case the deal gets finalized on friendly terms. Owners of pre-merged entities have right over the profits of new entity. In a merger two organizations combine to increase their strength and financial gains.

While, when one organization takes over the other organization and controls all its business operations, it is known as **acquisition**. In the process of acquisition, one financially strong organization overpowers the weaker one. Acquisitions often happen during economic recession or during declining profit margins. In this process, one that is financially stronger and bigger establishes its power. The combined operations then run under the name of the powerful entity. A deal in case of an acquisition is often done in an unfriendly manner; it is more or less a forced association.

**Question 9**

- (a) *Which principal aspects should be considered for effective management of the strategic execution? Explain.* **(5 Marks)**
- (b) *Discuss in brief the different issues which are involved in strategy implementation.* **(5 Marks)**

**Answer**

- (A) Implementation and execution are an operations-oriented activity aimed at shaping the performance of core business activities in a strategy-supportive manner. It is the most demanding and time-consuming part of the strategy-management process. To convert strategic plans into actions and results, a manager must be able to direct organizational change, motivate people, build and strengthen company competencies and competitive capabilities, create a strategy-supportive work climate, and meet or beat performance targets.

In most situations, strategy-execution process includes the following principal aspects:

- ◆ Developing budgets that steer ample resources into those activities critical to strategic success.
- ◆ Staffing the organization with the needed skills and expertise, consciously building and strengthening strategy-supportive competencies and competitive capabilities and organizing the work effort.
- ◆ Ensuring that policies and operating procedures facilitate rather than impede effective execution.
- ◆ Using the best-known practices to perform core business activities and pushing for continuous improvement.
- ◆ Installing information and operating systems that enable company personnel to better carry out their strategic roles day in and day out.
- ◆ Motivating people to pursue the target objectives energetically.
- ◆ Creating a company culture and work climate conducive to successful strategy implementation and execution.
- ◆ Exerting the internal leadership needed to drive implementation forward and keep improving strategy execution. When the organization encounters stumbling blocks

or weaknesses, management has to see that they are addressed and rectified quickly.

- (B) The different issues involved in strategy implementation cover practically everything that is included in the discipline of management studies. A strategist, therefore, has to bring to his or her task a wide range of knowledge, skills, attitudes, and abilities. The implementation tasks put to test the strategists' abilities to allocate resources, design structures, formulate functional policies, and take into account the leadership styles required, besides dealing with various other issues.
- ◆ The strategic plan devised by the organization proposes the manner in which the strategies could be put into action. Strategies, by themselves, do not lead to action. They are, in a sense, a statement of intent: implementation tasks are meant to realise the intent. Strategies, therefore, have to be activated through implementation.
  - ◆ Strategies should lead to plans. For instance, if stability strategies have been formulated, they may lead to the formulation of various plans. One such plan could be a modernization plan. Plans result in different kinds of programmes. A programme is a broad term, which includes goals, policies, procedures, rules, and steps to be taken in putting a plan into action. Programmes are usually supported by funds allocated for plan implementation. An example of a programme is a research and development programme for the development of a new product.
  - ◆ Programmes lead to the formulation of projects. A project is a highly specific programme for which the time schedule and costs are predetermined. It requires allocation of funds based on capital budgeting by organizations. Thus, research and development programmes may consist of several projects, each of which is intended to achieve a specific and limited objective, requires separate allocation of funds, and is to be completed within a set time schedule.
  - ◆ Projects create the needed infrastructure for the day-to-day operations in an organization. They may be used for setting up new or additional plants, modernising the existing facilities, installation of newer systems, and for several other activities that are needed for the implementation of strategies.

**Question 10**

(a) *Diversification endeavours can be categorized into four broad classification. State the basis for this classification and name the four categories. How is concentric diversification different from vertically diversification? Explain.* (5 Marks)

(b) *Write a short note on the following:*

*Strategic role of Human Resource Management* (5 Marks)

OR

*Any five Features of E-commerce environment.*

**Answer**

(A) Diversification strategy involves expansion into new businesses that are outside the current business and markets of an organisation. Based on the nature and extent of their relationship to existing businesses, diversification can be classified into four broad categories:

- (i) Vertically integrated diversification
- (ii) Horizontally integrated diversification
- (iii) Concentric diversification
- (iv) Conglomerate diversification

Concentric diversification takes place when the products are related. The new product is a spin-off from the existing facilities and products/processes. This means that in concentric diversification too, there are benefits of synergy with the current operations. However, concentric diversification differs from vertically integrated diversification in the nature of the linkage the new product has with the existing ones.

In vertically integrated diversification, firms opt to engage in businesses that are related to the existing business of the firm. The firm remains vertically within the same process. Sequence moves forward or backward in the chain and enters specific product/process steps with the intention of making them into new businesses for the firm. The new product falls within the firm's current process-product chain. In concentric diversification, there is a departure from this vertical linkage, a new related product is added to the existing business. The new product is only connected in a loop-like manner at one or more points in the firm's existing process/technology/product chain.

(B) Prominent areas where the Human Resource Manager can play strategic role are as follows:

1. **Providing purposeful direction:** The human resource manager leads people and the organization towards the desired direction involving people. He can ensure harmony between organisational objectives and individual objectives.
2. **Creating competitive atmosphere:** In the present business environment, maintaining competitive position or gains is an important objective of any business. Having a highly committed and competent workforce is very important for getting a competitively advantageous position.
3. **Facilitation of change:** The human resource manager will be more concerned about furthering the organization not just maintaining it. He can devote more time to promote acceptance of change rather than maintaining the status quo.
4. **Managing workforce diversity:** In a modern organization, management of diverse workforce is a great challenge. Workforce diversity can be observed in terms of male and female, young and old, educated and uneducated, unskilled and

professional employee and so on. Motivation, maintaining morale and commitment are some of the key tasks that a HR manager can perform.

5. **Empowerment of human resources:** Empowerment involves giving more power to those who, at present, have little control on what they do and little ability to influence the decisions being made around them.
6. **Building core competency:** The human resource manager has an important role to play in developing core competency of the firm. A core competence is a unique strength of an organization which may not be shared by others. Organization of business around core competence implies leveraging the limited resources of a firm.
7. **Development of works ethics and culture:** A vibrant work culture will have to be developed in the organizations to create an atmosphere of trust among people and to encourage creative ideas by the people.

**or**

The impact of the internet and the rapidly emerging e-commerce environment is substantial and widespread. Characteristics of e-commerce environment changing competitive scenario are as under:

- (i) The internet makes it feasible for companies everywhere to compete in global markets.
- (ii) There are new e-Commerce strategic initiatives of existing rivals and new entrants in the form of e-commerce rivals.
- (iii) Entry barriers into the e-commerce world are relatively low.
- (iv) Increased bargaining power of customers to compare the products, prices and other terms and conditions of rival vendors.
- (v) Possibility for business organizations to locate the best suppliers across the world to gain cost advantage.
- (vi) Internet and PC technologies are advancing rapidly, often in uncertain and unexpected directions.
- (vii) Faster diffusion of new technology and new idea across the world.
- (viii) The e-commerce environment demands that companies move swiftly.
- (ix) E-commerce technology opens up a host of opportunities for reconfiguring industry and company value chains.
- (x) The Internet can be an economical means of delivering customer service.
- (xi) The needed e-commerce resource in short supply is human talent in the form of both technological expertise and managerial know-how.
- (xii) The capital for funding potentially profitable e-commerce businesses is readily available.