

PAPER – 7: INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

SECTION – A: INFORMATION TECHNOLOGY

QUESTIONS

Multiple Choice Questions

A young boy, Mr. Mukesh in Mumbai, recently launched a local courier company using the services of Mumbai Dabbawala. He named his startup Paper N Parcel (PNP). The purpose and objective of PNP was to provide a reliable and dedicated courier service in Mumbai Metropolis to deliver low-weight parcels with benefits of 24 hours delivery time at reasonable cost. Besides having its own employee as delivery partners, PNP has tied up with famous MUMBAI Dabbawalas as their delivery partners. At present, PNP has more than 50 people as its delivery partners including around 300 Mumbai Dabbawalas deputed at various collection points spread over the entire city.

A customer drops his/her parcel in any of the PNP office, pays for the delivery charges and gets a system generated receipt against his/her payment. The system generates a Tracking Code number that enables its customers to check the status of his/her parcel. PNP in consolidation, is presently handling more than 500 deliveries per day by using a dedicated mobile application for its customers and delivery personnel. This mobile application allows the customers to know whether parcel is ready for delivery or not. All its delivery personnel have been provided with mobiles with the mobile application preloaded on the same.

The Mumbai Dabbawalas distribute around 2 lac Dabba's (Lunch Boxes) daily to their customers at various workplaces in Mumbai. To help Dabbawala do their job efficiently, railways has created dedicated compartments in Mumbai local trains. Mumbai local trains provide a reliable and fast connection across the entire city that help roughly 5,000 Dabbawalas to carry their Dabbas conveniently. Their delivery standards have been found to make an error of 1 in 10,00,000. To deliver the Dabbas, they use a nine digit coding scheme that helps Dabbawalas to identify the pick up address and delivery address of each Dabba.

A Sample of code is **VLP 3 E 9E12**. The code under coding scheme is written in circle on top of lunch box, having the following interpretation:

- VLP: Suburb Station. **VILE PARLE**
- 3: Destination Station: **NARIMAN POINT**
- E: Originating Code for **DABBAWALA**
- 9E12: Destination Building: **EXPRESS TOWER 12 Floor**

Based on the above case scenario, answer the Question no.(s) 1 to 4.

1. While taking the orders from its customers, the business process adopted by PNP shall be best classified as _____.

- (a) Order to Cash Cycle
 - (b) Procure/Purchase to Pay Cycle
 - (c) Financial Management Life Cycle
 - (d) Accounting Cycle
2. As specified in the case, Dabbawalas collect Dabbas from specific originating station considered as collection point, where segregation of dabbas is done based on destination station as specified in the source code mentioned over the top of the dabbas. Dabbas for specific destination are carried by Dabbawalas in Mumbai Local Train and then delivered to consumers. In terms of data processing in computers, which application processing method is the best fit to the method adopted by Dabbawalas?
- (a) Batch Processing System
 - (b) Online Processing System
 - (c) Real-time Processing System
 - (d) Immediate Processing System
3. PNP use of mobile phones for its application is representative of the way technology is changing the way we live today. Mobile phones are characterized by creating a certain type of transmission mode. Identify the same.
- (a) Simplex
 - (b) Full Duplex
 - (c) Half Duplex
 - (d) Half Simplex Mainframe Computing
4. The coding scheme created by Mumbai Dabbawala is a good example of _____.
- (a) Artificial Intelligence
 - (b) Tacit Knowledge
 - (c) Business Knowledge
 - (d) Mathematical Knowledge
5. X&X health care center, dealing in all kinds of orthopaedic services, wants to take rigours steps to analyse its services provided to its clients with an underline aim to generate more revenue. Which of the following application area of data analytics will be helpful to them?
- (a) Compiling report for weekly cash collections at the front-office
 - (b) Mining patient data to evaluate effectiveness of treatment for diseases
 - (c) Placing purchase order for procurement of medicines
 - (d) Recording of financial transactions across various departments

Descriptive Questions**Chapter 1: Business Process Management & IT**

6. M&M company, an established brand in the field of steel manufacturing, runs its business through online mode. In response to continuous feedback from its stakeholders, the company decides to follow a comprehensive and structured approach to improve the quality of its products and services. Identify the process improvement methodology that best fits under the current scenario and explain it in detail.
7. Each processing cycle like HR Cycle, Financing Cycle and Revenue Cycle etc., that are involved in Accounts Business Process Management (BPM) involves the data processing activities about the data to be collected, processed and stored. Discuss the processing activities involved in any Data Processing Cycle.

Chapter 2: Information Systems and IT Fundamentals

8. The top management of ABC Ltd. appointed Mr. Nagesh as an auditor. As an auditor, he has to look at both manual and automated parts of the system. Explain the general objectives of auditing in a computerized environment that could include the objectives of manual audit as well though the extent of coverage could vary on scope and objectives.
9. The Cloud Computing technology is making the e-business more competitive with an aim to make a one-stop shop for its stakeholders. Various service models of Cloud Computing provide new offerings focused on achieving the set target. Explain these service models of Cloud Computing.

Chapter 3: Telecommunication and Networks

10. Explain the classification of telecommunication networks that can be used in any organization based on the criterion of ownership.
11. Mr. A, a system administrator of XYZ Ltd. suggested the senior managers of the company to implement three-tier architecture in its network so as to provide increased performance, flexibility, maintainability, reusability and scalability; while holding the complexity of distributed processing from the user. Explain the functioning of three-tier architecture.

Chapter 4: Business Information System

12. Dreamz&travel a Delhi based travel agency, uses Transaction Processing System (TPS) for its Airline Reservation System to modify and retrieve the day to day transactions. Most of the Transaction Processing Systems include some attributes that are required to ensure that customer data is available to the processes that require it. Briefly explain these attributes of TPS.
13. Artificial Intelligence (AI) spans a wide horizon dealing with different techniques of intelligent search and various methods of resolving uncertainty of data and knowledge helpful in many commercial applications. Elaborate some commercial application areas of AI.

Chapter 5: Business Process Automation through Application Software

14. Noida based furniture manufacturer Elitsteel has decided to optimize and streamline its business processes by automating the process components so as to make the processes more efficient and responsive to customer and employee needs. Enlist the benefits of Business Process Automation (BPA) that the company may enjoy.
15. Technosoft Ltd., a software development company, received a project to develop an application software for a pharmaceutical company based on its specific requirements. During development of application software, one of the major objective of the access controls in the application boundary system is to restrict use of computer system resources to authorized users only. Discuss the concept of Access Controls exercised in the Boundary subsystem.

SUGGESTED ANSWERS

Multiple Choice Answers

1. (a) Order to Cash Cycle
2. (a) Batch Processing System
3. (b) Full Duplex
4. (b) Tacit Knowledge
5. (b) Mining patient data to evaluate effectiveness of treatments for diseases

Descriptive Answer

6. Under the current scenario, Total Quality Management (TQM) best fits as a process improvement strategy for M&M company. The life cycle of TQM comprises of following four sequential activities - Plan, Do, Check, and Act (the PDCA cycle). The detail of these phases are as follows:
 - (i) **Plan:** In the planning phase, people define the problem to be addressed, collect relevant data, and ascertain the problem's root cause;
 - (ii) **Do:** In the doing phase, people develop and implement a solution, and decide upon a measurement to gauge its effectiveness;
 - (iii) **Check:** In the checking phase, people confirm the results through before-and-after data comparison;
 - (iv) **Act:** In the acting phase, people document their results; inform others about process changes, and make recommendations for the problem to be addressed in the next PDCA cycle.

7. The Data Processing Cycle consists of following basic steps with alerts, controls and feedback at each step:
- **Data input:** This step involves the activities like capturing the data, implementing control procedures, recording in journals, posting to ledgers and preparation of reports.
 - **Data storage:** This step involves organizing the data in master file or reference file of an automated system for easy and efficient access.
 - **Data processing:** This step involves addition, deletion and updating of the data in the transaction file, master file or reference file.
 - **Information output:** This step involves generation of documents and managerial reports in printable or electronic form for addressing queries, to control operational activities and help the management in decision making.

The controls on the data are maintained using Audit Trails. This is done by capturing snapshots or by tracing the flow of data. This provides a means to check the accuracy and validity of ledger postings. Storage of these data is in files named General Ledger, Accounts Payable ledger and Accounts Receivable ledger.

8. The general objectives of auditing in a computerized environment that could include the objectives of manual audit as well though the extent of coverage could vary on scope and objectives are as follows:
- **Existence:** Verify that the assets, liabilities, ownership, and/or activities are real;
 - **Authorization:** Verify that events have occurred in accordance with management's intent;
 - **Valuation:** Verify that the accounting values fairly present items worth;
 - **Cutoff:** Verify that the transaction is re-coded in the proper accounting period;
 - **Compliance:** Verify that the processing is in compliance with governmental laws and regulations, generally accepted accounting procedures, and the organization's policies and procedures;
 - **Operational:** Verify that the program, area, or activity is performed economically, efficient, and effectively;
 - Assisting management in finding ways to implementing internal control recommendations;
 - Participating in specifying and designing computer control and other features for systems to be installed;
 - Determining whether efficient use is made of the organization's Computer resources; and

- Determining whether Computer system used accomplishes the business objectives and goals.
9. Various service models of Cloud Computing are as follows:
- **Infrastructure as a Service (IaaS):** It is the foundation of cloud services. It provides clients with access to server hardware, storage, bandwidth and other fundamental computing resources. The service is typically paid for on a usage basis. The service may also include dynamic scaling so that if the customer needs more resources than expected, s/he can get them on the fly (probably to a given limit). It provides access to shared resources on need basis, without revealing details like location and hardware to clients.
 - **Software as a Service (SaaS):** It includes a complete software offering on the cloud. Users can access a software application hosted by the cloud vendor on pay-per-use basis. This is a well-established sector. SaaS is a model of software deployment where an application is hosted as a service provided to customers across the Internet by removing the need to install and run an application on a user's own computer. It is seen as a way for businesses to get the same benefits as commercial software with smaller cost outlay. SaaS can alleviate the burden of software maintenance and support but users relinquish control over software versions and requirements.
 - **Platform as a Service (PaaS):** It provides clients with access to the basic operating software and optional services to develop and use software applications (e.g. database access and payment service) without the need to buy and manage the underlying computing infrastructure. For example, Google App Engine allows clients to run their web applications (i.e. software that can be accessed using a web browser such as Internet Explorer over the internet) on Google's infrastructure. It has evolved from Software as a Service (SaaS) and Infrastructure as a service (IaaS). The major drawback of Platform as a Service is that it may lock us into the use of a particular development environment and stack of software components.
 - **Network as a Service (NaaS):** It is a category of cloud services where the capability provided to the cloud service user is to use network/transport connecting services. NaaS involves optimization of resource allocation by considering network and computing resources as a whole. Some of the examples are: Virtual Private Network, Mobile Network Virtualization etc.
 - **Communication as a Service (CaaS):** CaaS has evolved in the same lines as SaaS. CaaS is an outsourced enterprise communication solution that can be leased from a single vendor. The CaaS vendor is responsible for all hardware and software management and offers guaranteed Quality of Service (QoS). It allows businesses to selectively deploy communication devices and modes on a pay-as-you-go, as-needed basis. This approach eliminates the large capital investments. Examples are: Voice over IP (VoIP), Instant Messaging (IM), Collaboration and Videoconferencing application using fixed and mobile devices.

10. Various types of telecommunication networks based on ownership based classification that can be used in any organization are as follows:
- **Public Network:** The network established for all users across the world is known as public network. Internet is an example of public network.
 - **Private Network:** This Network is used by particular organization, particular campus or particular enterprise only. This is a network that is not available to the outside world. Intranet is an example of it.
 - **Virtual Private Network (VPN):** A Virtual Private Network (VPN) is a network that uses a public network, such as the Internet, to provide secure access to organization's private network. A key feature of a VPN is its ability to work over both private networks as well as public networks like the Internet. Using a method called tunneling, a VPN uses the same hardware infrastructure as existing Internet or Intranet links.
11. Three-tier architecture is a client-server architecture in which the functional process logic, data access, computer data storage and user interface are developed and maintained as independent modules on separate platforms. Three-tier architecture is a software design pattern and well-established software architecture. It's three tiers are the presentation tier, application tier and data tier. The three tier architecture is used when an effective distributed client/server design is needed that provides increased performance, flexibility, maintainability, reusability and scalability, while holding the complexity of distributed processing from the user.
- The three tiers in three-tier architecture are as follows:
- i. **Presentation Tier:** Occupies the top level and displays information related to services available on a website. This tier communicates with other tiers by sending results to the browser and other tiers in the network.
 - ii. **Application Tier:** Also called the middle tier, logic tier, business logic or logic tier, this tier is pulled from the presentation tier. It controls application functionality by performing detailed processing.
 - iii. **Database Tier:** This tier houses the database servers where information is stored and retrieved. Data in this tier is kept independent of application servers or business logic.
12. The attributes of Transaction Processing System (TPS) that help in agency's working are as follows:
- **Access Control – TPS:** Most Transaction Processing Systems come with access control to put a ceiling on users to only those allowed to accomplish so. Access Control ensures that people who are not authorized to use the system are not permissible to influence or transform the transaction process.

- **Equivalence – TPS:** Transactions are processed in the similar format every time to ensure that full effectiveness is achieved. The TPS Interfaces are designed to get hold of identical data for each transaction, despite the consequences of the source.
- **High Volume Rapid Processing – TPS:** In most of the transaction processing, the foremost issue is momentum. The instantaneous processing of transactions is noteworthy to the success of certain industry such as banking. TPS is designed to process transactions in an immediate effect to make confident that the transaction data is available to other users or processes that entail it.
- **Trustworthiness – TPS:** A TPS system is designed to be robust and trustworthy. The system is capable to process transactions very rapidly, yet at the same time, conduct several checks to make certain that the data integrity is preserved.

13. Some of the commercial applications of Artificial Intelligence (AI) are as follows:

Decision Support

- Intelligent work environment that will help you capture the “why” as well as the “what” of engineered design and decision making.
- Intelligent human–computer interface (HCI) systems that can understand spoken language and gestures, and facilitate problem solving by supporting organization wide collaborations to solve particular problems.
- Situation assessment and resource allocation software for uses that range from airlines and airports to logistics centers.

Information Retrieval

- AI-based Intranet and Internet systems that distill tidal waves of information into simple presentations.
- Natural language technology to retrieve any sort of online information, from text to pictures, videos, maps, and audio clips, in response to English questions.
- Database mining for marketing trend analysis, financial forecasting, and maintenance cost reduction, and more.

Virtual Reality

- X-ray–like vision enabled by enhanced-reality visualization that allows brain surgeons to “see through” intervening tissue to operate, monitor, and evaluate disease progression.
- Automated animation interfaces that allow users to interact with virtual objects via touch (e.g., medical students can “feel” what it’s like to stitch severed aortas).

Robotics

- Machine-vision inspections systems for gauging, guiding, identifying, and inspecting products and providing competitive advantage in manufacturing.

- Cutting-edge robotics systems, from micro-robots and hands and legs.
14. The benefits of Business Process Automation (BPA) for a company are as follows:
- **Reducing the Impact of Human Error:** BPA removes human participation in the process, which is the source of many errors.
 - **Transforming Data into Information:** BPA can, apart from collecting and storing data also analyze data and make it available in a form that is useful for decision-making.
 - **Improving performance and process effectiveness:** In many cases, tasks that must be done manually are the bottleneck in the process. Automating those manual tasks speeds up the effective throughput of the application.
 - **Making users more efficient and effective:** People can focus their energies on the tasks they do best, allowing the computers to handle those that machines are best suited for.
 - **Making the business more responsive:** Enterprises can easily automate new applications and processes as they are introduced that provide greater control over business and IT processes.
 - **Improving Collaboration and Information Sharing:** Business processes designed through a collaborative interface mean IT can integrate its processes with the business-side logic that drives day-to-day operations.
 - **Cost Saving:** Automation leads to saving in time and labor costs through higher efficiency and better management of the people involved.
 - **To remain competitive:** To provide the level of products and services as offered by competition.
 - **Fast service to customers:** Automation shortens cycle times in the execution of processes through improved and refined business workflows and help enterprises to serve their customers faster and better.
15. Access Controls in an application subsystem restrict use of computer system resources to authorized users, limit the actions authorized users can take with these resources, and ensure that users obtain only authentic computer system resources. In a shared resource environment, auditors should have two concerns – first, they need to determine how well any access control mechanism uses safeguards assets and preserves data integrity and secondly, given the capabilities of the access control mechanism that are available for any particular application system; auditors must determine whether the access controls chosen for that system suffice. An access control mechanism processes users' requests for resources in three steps:
- **Identification:** First users identify themselves to the mechanism, thereby indicating their intent to request system resources.

- **Authentication:** It is a two way process wherein users must authenticate themselves, and the mechanism in turn must authenticate itself. That means, not only must the mechanism be sure it has a valid user, users must also be sure that they have a valid mechanism.
- **Authorization:** Users must request specific resources and specify the actions they intend to take with the resources.

User identification by an authentication mechanism with personal characteristics like name, birth date, employee code, function, designation or a combination of two or more of these can be used as a password boundary access control.

SECTION – B: STRATEGIC MANAGEMENT**Multiple Choice Questions**

1. Increasing investment in the share market, mutual funds, and equity/debt investment plans from the growing salaried middle class gave birth to Scripzy, an Artificial Intelligence based market predictor and digital brokerage company. The company is headquartered in Mumbai and has a team of 100+ IT professionals working on building a safe and secure digital infrastructure.

The market is saturated. There is fierce competition and big brands have all jumped in with digital offerings for their existing customers. Scripzy, on the other hand, is new and vulnerable but its organic reach to the young earning set of customers is a winning streak. This was achieved by project Force.

Project Force was a secret market analysis conducted by internal teams to find sustainable competitive advantages, focus on final product attributes most valued by customers and imitate the competitive capabilities of competitors. It was a complete final product-customer approach which helped them win over youngsters.

Interestingly, the company being AI based has also automated its internal decision making with in-house AI decision making bots. The top management explains their requirements to the AI bot and the bot makes functional decisions that are to be executed by respective teams. It also engages with team leaders and sends regular reports on fulfilments. This projected a very strong image for the company in the international market and a Chinese investor offered them a huge undisclosed amount to buy-out the AI system. Scripzy immediately accepted the offer and earned huge sums from the unexpected sale.

Repercussions followed and their core customers, the youth, boycotted their product. The team had to approach the share market leaders to support and with a little influence from the share market leaders, they were able to regain their “True Indian Company” status in the media. Nonetheless, damage had been done and they saw their customer base shattered to an all time low.

Decisions which seem economically attractive are multi-faceted, and this is one lesson that Scripzy shall remember for times to come. Business for now is low and weak, but a good strategy can change the landscape for Scripzy’s future.

Based on the above Case Scenario, answer the Multiple Choice Questions.

- (i) Which of the following statement by Ansoff is most appropriate for Scripzy’s strategy in the changing environment?
- (a) Preparedness of worst case scenarios
 - (b) Far fetched planning of leadership
 - (c) Money has the power to influence environment

- (d) Blend of proactive and reactive actions
- (ii) Project Force was crucial in determining Scripzy's position in the market. However, which of the following metrics was missed by the team while understanding KSFs?
 - (a) Crucial product attributes
 - (b) Sustainable competitive advantage
 - (c) Resources for competitive success
 - (d) Competitive capabilities to be competitively successful
- (iii) Scripzy's huge investment in Artificial Intelligence has caused its organisational structure to be which of the following structures?
 - (a) SBU Structure
 - (b) Divisional Structure
 - (c) Hourglass Structure
 - (d) Multidivisional Structure
- (iv) In future, to fight out uncertainties like geo-political influences, which of the following can be used by Scripzy?
 - (a) Strategic Audit
 - (b) Scenario Analysis
 - (c) Benchmarking
 - (d) ADL Matrix
- (v) Not all customers can be satisfied, and Scripzy addressed the same by connecting with the right customers. Arrange the following in the order that Scripzy followed while pursuing their customer reach out.
 - (i) Market Positioning
 - (ii) Market Segmentation
 - (iii) Market Target
 - (a) (i), (ii), (iii)
 - (b) (ii), (iii), (i)
 - (c) (iii), (ii), (i)
 - (d) (i), (iii), (ii)
- 2. Sanjivni Pharmaceuticals Limited manufactures a cough syrup Zenus. It has modified Zenus syrup, claiming that the Zenus cough syrup is sugar-free, and the consumer will not feel drowsiness after consuming this cough syrup. Consumers found this product as unique. The sales of Zenus cough syrup have increased as

expected. The price of this sugar-free syrup is higher by 20% than the earlier syrup. Identify the strategy adopted by Sanjivni Pharmaceuticals Limited.

- (a) Focus strategy
 - (b) Best cost provider strategy
 - (c) Differentiation strategy
 - (d) Cost leadership strategy
3. Everyouth Beauty Products Limited, the makers of Feel-Fresh soaps have been suffering from low sales volume from the last six months due to stiff competition. To regain its position, Everyouth Beauty Products Limited launched various schemes such as 'win a phone every hour', scratch cards, buy 1 get 1 free and contest on social media. This resulted into increase in sales. Which type of promotional activity did Everyouth Beauty Products Limited adopted?
- (a) Sales promotion
 - (b) Advertising
 - (c) Publicity
 - (d) Personal selling
4. ABC Ltd. has identified that all three of its main products are at the maturity phase of the product life cycle. Which of the following is ABC Ltd. likely to be experiencing due to this?
- (a) High, but declining sales
 - (b) Growing numbers of competitors
 - (c) Product diversification and differentiation strategies
 - (d) Adoption of price skimming strategies
5. A tool by which management identifies and evaluates the various businesses that make up a company is termed as:
- (a) Value chain analysis
 - (b) Portfolio analysis
 - (c) Competition analysis
 - (d) Strategic analysis
6. If suppliers are unreliable or too costly, which of these strategies may be appropriate?
- (a) Horizontal integration
 - (b) Backward integration
 - (c) Market penetration

- (d) Forward integration

Descriptive Questions

Chapter 1-Business Environment

7. Assume that you are an entrepreneur who has an intense desire to get into the business. What types of information relating to macro environment would you need to determine external opportunities and threats?
8. Explain briefly the competitive forces in any industry as identified by Michael Porter.

Chapter 2-Business Policy and Strategic Management

9. Dharam Singh, the procurement department head of Cyclix, a mountain biking equipment company, was recently promoted to look after sales department along with procurement department. His seniors at the corporate level have always liked his way of leadership and are assured that he would ensure the implementation of policies and strategies to the best of his capacity but have never involved him in decision making for the company.

Do you think this is the right approach? Validate your answer with logical reasoning around management levels and decision making.

10. "A company should focus on external perspective to define its mission". Support this statement with reasons.

Chapter 3-Strategic Analysis

11. ABC Ltd. manufactures and sells air purifier 'Fresh Breath'. The 'Fresh Breath' has seen sales growth of around 1% for the last two years, after strong growth in the previous five years. This is due to new products entering the market in competition with the 'Fresh Breath'. ABC Ltd. is therefore considering cutting its prices to be in line with its major rivals with a hope to maintain the market share. Market research indicates that this will now cause a significant increase in the level of sales, even though in previous years price cuts have had little effect on demand. ABC Ltd. is also planning to launch a promotional campaign to highlight the benefits of the 'Fresh Breath' against its rival products.

Identify and explain the stage of the product life cycle in which 'Fresh Breath' falls.

12. "Industry and competitive analysis begins with an overview of the industry's dominant economic features." Explain and also narrate the factors to be considered in profiling in industry's economic features.

Chapter 4-Strategic Planning

13. Mini theatre Ltd. was a startup venture of three young IIM graduates. They developed an application to watch web-based content like web series, TV Shows, theatre shows, etc. after purchasing their exclusive rights. They were successful in getting many

consumers enrolled with them. After a certain span of time, the company realized that some regional content like 'bangla movies', 'Gujarati shows' etc. were having high cost and less viewership. The leadership team of Mini theatre Ltd. decided to sell the rights and curtail any further content development in these areas.

Identify and explain the corporate strategy adopted by the leadership team of Mini theatre Ltd.

14. Justify the statement "Stability strategy is opposite of Expansion strategy".

Chapter 5-Formulation of Functional Strategy

15. What steps are to be considered for implementing the supply chain management in a business organization? Explain.
16. Define the term 'Marketing'. Distinguish between social marketing and service marketing.

Chapter 6-Strategy Implementation and Control

17. Manoj started his telecom business in 2010. Over next five years, he gradually hired fifty people for various activities such as to keep his accounts, administration, sell his products in the market, create more customers, provide after sales service, coordinate with vendors.

Draw the organization structure Manoj should implement in his organization and name it.

18. Why is Strategic Control important for organizations? Discuss briefly 4 types of strategic control that can be implemented to achieve the enterprise goals.

Chapter 7-Reaching Strategic Edge

19. Distinguish between DMAIC and DMADV Methodology of Six Sigma.
20. Explain concept and nature of BPR.

SUGGESTED ANSWERS

1. (i) (d) (ii) (c) (iii) (c) (iv) (b) (v) (b)
2. (c)
3. (a)
4. (c)
5. (b)
6. (b)

7. Macro environment mainly consists of economic, technological, political, legal and socio-cultural elements. For an entrepreneur it is important to identify those factors that are likely to affect the new business. Each of the elements can have a bearing on the opportunities and the threats.

Particularly, he should scan the relevant changes that have happened in recent past that can provide competitive edge. For example, a technological innovation in the production process can be opportunity. Incentives such as cheaper land, tax free periods can be other form of opportunities. Entrepreneur has to identify such opportunities that can be capitalized to enter markets or provide an edge over the competitors. Entrepreneur has to also take care as these opportunities can also act as threats when competitors are able to exploit them.

8. Five forces model of Michael Porter is a popular tool for systematically diagnosing the significant competitive pressures in the market and assessing their strength and importance. The model holds that the state of competition in an industry is a composite of competitive pressures operating in five forces as follows:

1. **Threat of new entrants:** New entrants place a limit on prices and affect the profitability of existing players. The new capacity and product range the new entrants bring increases competitive pressure. bigger the new entrant, the more severe the competitive effect.
2. **Bargaining power of customers:** The bargaining power of the buyers influences not only the prices that the producer can charge but also influence costs and investments of the producer. This force will become heavier depending on the possibilities of the buyers forming groups or cartels, particularly in case of industrial products.
3. **Bargaining power of suppliers:** Often suppliers can exercise considerable bargaining power. If the suppliers are also limited in number they stand a still better chance to exhibit their bargaining power. The bargaining power of suppliers determines the cost of raw materials and other inputs of the industry and, therefore, can affect industry attractiveness and profitability.
4. **Rivalry among current players:** The rivalry among existing players is quite obvious. This is what is normally understood as competition. The impact is evident more at functional level in the prices being charged, advertising, and pressures on costs, product and so on.
5. **Threats from substitutes:** Substitute products are a latent source of competition in an industry. Substitute products offering a price advantage and/or performance improvement to the consumer can have significant impact.

The five forces together determine industry attractiveness/profitability. This is so because these forces influence the causes that underlie industry attractiveness/profitability.

9. Functional managers provide most of the information that makes it possible for business and corporate level managers to formulate realistic and attainable strategies.

This is so because functional managers like Dharam Singh are closer to the customer than the typical general manager is. A functional manager 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 and involve them in decision making.

An equally great responsibility for managers at the operational level is strategy implementation: the execution of corporate and business level plans, and if they are involved in formulation, the clarity of thoughts while implementation can benefit too.

Thus, the approach of Cylcix Corporate management is not right. They should involve Dharam Singh, as well as other functional managers too in strategic management.

10. A business organization is a part of overall structure of society and functions within wide external environmental factors. It draws its resources from its external environment, processes them and provides output in the form of goods and services. Therefore, it is correct to say that a business enterprise should focus on external perspective to define its mission although enterprise's internal situation cannot be delinked while doing so. Bringing an external perspective justifies the very existence of company. The mission statement is a message designed to be inclusive of the expectations of all stakeholders for the performance of an enterprise / company over the long run. Some of the questions addressed by mission statement are: Why is the firm in business? What are the economic goals? What is the operating philosophy in terms of quality, firm's image and self-concept? What are the core competencies and competitive advantages? What customers do and can a company serve? How does enterprise / company view its responsibilities to stockholders, employees, communities, environment, social issues or competitors?
11. Product Life Cycle is a useful concept for guiding strategic choice. PLC is an S-shaped curve which exhibits the relationship of sales with respect of time for a product that passes through the four successive stages of introduction (slow sales growth), growth (rapid market acceptance) maturity (slowdown in growth rate) and decline (sharp downward drift). The product 'Fresh Breath' of ABC Ltd. falls under Maturity stage of product life cycle. In this stage, the competition gets tough, and market gets stabilised. Profit comes down because of stiff competition. At this stage, ABC Ltd. have to work for maintaining stability by cutting the prices to be in line with its major rivals with a hope to maintain the market share and by launching a promotional campaign to highlight the benefits of the 'Fresh Breath' against its rival products.
12. Industry is "a group of firms whose products have same and similar attributes such that they compete for the same buyers." Industries differ significantly in their basic character and structure. Industry and competitive analysis begins with an overview of the industry's

dominant economic features. The factors to be considered while profiling an industry's economic features are fairly standard and are given as under:

- ◆ Size and nature of market.
 - ◆ Scope of competitive rivalry.
 - ◆ Market growth rate and position in the business life.
 - ◆ Number of rivals and their relative market share.
 - ◆ The number of buyers and their relative sizes.
 - ◆ The types of distribution channels used to access consumers.
 - ◆ The pace of technological change in both production process innovation and new product introductions.
 - ◆ Whether the products and services of rival firms are highly differentiated, weakly differentiated, or essentially identical?
 - ◆ Whether organisation can realize economies of scale in purchasing, manufacturing, transportation, marketing, or advertising.
 - ◆ Whether key industry participants are clustered in a location.
 - ◆ Whether certain industry activities are characterized by strong learning and experience effects ("learning by doing") such that unit costs decline as cumulative output grows.
 - ◆ Whether high rates of capacity utilization are crucial to achieve low-cost production efficiency.
 - ◆ Capital requirements and the ease of entry and exit.
 - ◆ Whether industry profitability is above or below par?
- 13.** The leadership team of Mini theatre Ltd. decided to cut off the loss-making units, reduces the functions performed that some of regional content like 'bangla movies', 'Gujarati shows' etc. were having high cost and less viewership, it adopts a divestment strategy. The leadership team of Mini theatre Ltd. decided to sell the rights and curtail any further content development in these areas.
- Divestment strategy involves the sale or liquidation of a portion of business, or a major division, profit centre or SBU. Divestment is usually a part of rehabilitation or restructuring plan and is adopted when a turnaround has been attempted but has proved to be unsuccessful. The option of a turnaround may even be ignored if it is obvious that divestment is the only answer.
- 14.** 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.

15. A key requirement for successfully implementing supply chain management system in a business organisation are:
- (i) **Product development** – Customers and suppliers must work together in the product development process. Products are developed and launched in shorter time and help organisations to remain competitive.
 - (ii) **Procurement** – requires careful resource planning, quality issues, identifying sources, negotiation, order placement, inbound transportation and storage. Organisations coordinate with suppliers in scheduling without interruption.
 - (iii) **Manufacturing** – Flexible manufacturing process is required to respond to market changes like accommodate customisation and changes in tastes and preferences. Manufacturing is done on the basis of just in time and minimum lot sizes.
 - (iv) **Physical Distribution** – Delivery of final product to customers is the last position in a marketing channel. To ensure right place at right time is important for each channel participant. So supply chain management links a marketing channel with customers.
 - (v) **Outsourcing** – is not limited to the procurement of materials and components but also includes outsourcing of services that traditionally have been provided within an organisation. The company will focus on the core competency areas alone and outsource rest.
 - (vi) **Customer Service** – Organisations work with customers to determine mutually satisfying goals, establish and maintain relationships. This produces positive feelings in the organisation and among customers.
 - (vii) **Performance Measurement** – Supplier capabilities and customer relationships can be corrected with a firm's performance. Performance is measured in different parameters such as costs, customer services, productivity and quality.
16. In general, marketing is an activity performed by business organizations. In the present day for business, it is considered to be the activities related to identifying the needs of customers and taking such actions to satisfy them in return of some consideration. The

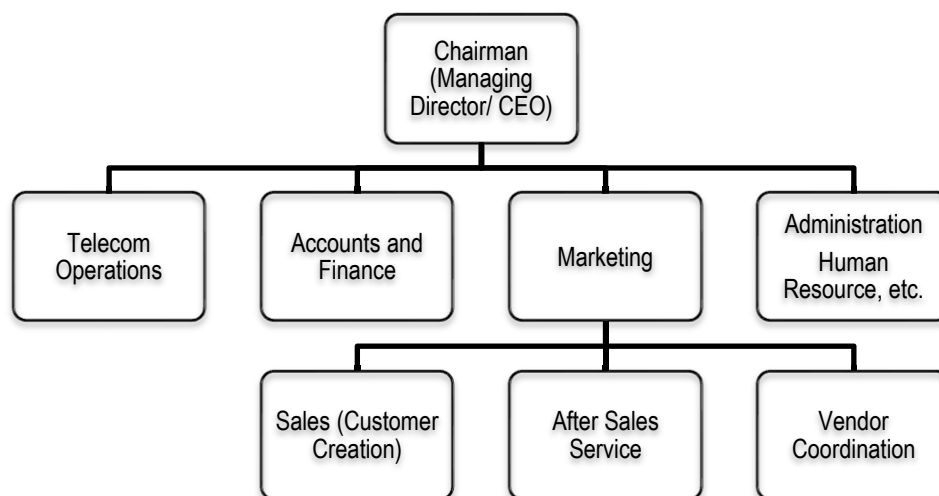
term marketing constitutes different processes, functions, exchanges and activities that create perceived value by satisfying needs of individuals.

Social marketing and service marketing are marketing strategies primarily with different orientations. Social Marketing refers to the design, implementation, and control of programs seeking to increase the acceptability of a social ideas, cause, or practice among a target group. For instance, the publicity campaign for prohibition of smoking or encouraging girl child, etc.

On the other hand, **service marketing is applying the concepts, tools, and techniques, of marketing to services.** Service is any activity or benefit that one party can offer to another that is essentially intangible and non-perishing. These may be from business to consumer and from business to business.

17. Manoj has started a telecom business. Accounts, Administration, Marketing (customer creation, after sales service, vendor coordination) are the functional areas that are desired in the organisational structure. Further there is inherent need to have a department for the management of telecom services/ operations.

Thus, the **functional structure in the telecom business** of Manoj can be as follows:



18. **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.

19. For implementing six sigma, there are two separate key methodologies for existing and new processes. They are known as DMAIC and DMADV.

DMAIC is an acronym for five different steps used in six sigma - Define, Measure, Analyze Improve, and Control. DMAIC methodology is directed towards improvement of existing product, process or service.

- **Define:** To begin with six sigma experts define the process improvement goals that are consistent with the strategy of the organization and customer demands. They discuss different issues with the senior managers so as to define what needs to done.
- **Measure:** The existing processes are measured to facilitate future comparison. Six sigma experts collect process data by mapping and measuring relevant processes.
- **Analyze:** Verify cause-and-effect relationship between the factors in the processes. Experts need to identify the relationship between the factors. They have to make a comprehensive analysis to identify hidden or not so obvious factor.
- **Improve:** On the basis of the analysis experts make a detailed plan to improve.
- **Control:** Initial trial or pilots are run to establish process capability and transition to production. Afterwards continuously measure the process to ensure that variances are identified and corrected before they result in defects.

DMADV is an acronym for Define, Measure, Analyze, Design, and Verify. DMADV is a strategy for designing new products, processes and services.

- **Define:** As in case of DMAIC six sigma experts have to formally define goals of the design activity that are consistent with strategy of the organization and the demands of the customer.
- **Measure:** Next identify the factors that are critical to quality (CTQs). Measure factors such as product capabilities and production process capability. Also assess the risks involved.
- **Analyze:** Develop and design alternatives. Create high-level design and evaluate to select the best design.
- **Design:** Develop details of design and optimise it. Verify designs may require using techniques such as simulations.
- **Verify:** Verify designs through simulations or pilot runs. Verified and implemented processes are handed over to the process owners.

However, in spite of different orientation in two methodologies, conceptually there is overlapping between the DMAIC and DMADV as both are essentially having similar objectives.

20. BPR stands for business process reengineering which means starting all over again from scratch. It refers to the analysis and redesign of workflows and processes both within and between the organisations. Its objective is to improve performance in terms of time, cost, quality, and responsiveness to customers. It implies giving up old practices and adopting the improved ones. It is an effective tool of realising new strategies.

Improving business processes is paramount for businesses to stay competitive in today's marketplace. New technologies are rapidly bringing new capabilities to businesses, thereby raising the strategical options and the need to improve business processes dramatically. Even the competition has become harder. In today's market place, major changes are required to just stay even.