

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MBA – SEMESTER-II– • EXAMINATION – SUMMER 2015

Subject Code: 2820002

Date: 19/05/2015

Subject Name: Management Information System (MIS)

Time: 10:30 am – 01:30 pm

Total Marks: 70

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1(a) Write an appropriate option for multiple choice questions. 06

- 1 Which of the following are the reasons for the importance of MIS in business? 1. Globalisation of businesses 2. Strategic and end user support 3. Business Intelligence 4. Humongous amount of data processing
A. Options 1 &2 B. Options 1 &4 C. Options 1 &3 D. Options 2 &3
- 2 Which of the following options are the two basic factors of the Porter's Forces for driving industry competition? 1. Servicing 2. Delivery 3. Low cost 4. Product differentiation
A. Options 2 &3 B. Options 1 &2 C. Options 3 & 4 D. Options 1 &4
- 3 TPSs are the basic business systems that serve which level of the organization?
A. Senior Management B. Middle Management C. Operational Management D. Knowledge Management
- 4 The principal liaison between the information systems groups and the rest of the organization is a(n):
A. Programmer B. CIO C. System Analyst D. System Manager
- 5 Which type of threat cannot replicate itself within a system, but transmit its copies by means of email?
A. Malware B. Virus C. Worm D. Trojan Horse
- 6 Intellectual property is subject to protection under:
A. Copy right B. Trade secrete C. Patent D. All of them

Q.1(b) Explain the following with example. 04

1. Client / Server Network
2. Knowledge Workers
3. Structured Decisions
4. Phishing

Q.1(c) Answer the following questions. 04

1. What are the customer relationship management systems?
2. What is the Internet?
3. What are the three basic components of a DSS?
4. What is information systems literacy? How does it differ from computer literacy?

- Q.2** (a) Describe the relationship between TPS, MIS, DSS, and ESS. **07**
 (b) To fully understand information system, you must understand the broader organization, management and information technology section. Explain the statement. **07**
- OR**
- (b) Information systems can reduce the number of levels in organization. Explain the statement. **07**
- Q.3** (a) Name and describe the principle network topology. **07**
 (b) Supply chain management is less about managing the physical movement of goods and more about managing information. Discuss the implications of this statement. **07**
- OR**
- Q.3** (a) Distinguish between operational and analytical CRM. **07**
 (b) If businesses used DSS, GDSS and ESS more widely, would managers and employees make better decisions? Why or why not? **07**
- Q.4** (a) What is identity theft? Why is it such a big problem today? How does phishing promote identity theft? **07**
 (b) ERP has its base in the manufacturing and evolved from there to serve practically every type of industry. **07**
- OR**
- Q.4** (a) Define ERP system. Explain advantages as well as limitations of same. **07**
 (b) Explain why information systems are so essential in business today. **07**
- Q.5** **Read out the case carefully and answer the following questions.** **14**

THE INTERNET: FRIEND OR FOE TO CHILDREN?

The Internet has so much to offer people of all ages, including children. School-age children typically use the Internet for school assignments, for downloading music, playing games, and for connecting with others. A child might use e-mail or instant messaging to stay in touch with friends who have moved away or family members in distant locations. Shy children may find an online community and set of “friends” with whom to share feelings that they are unable to express in person. Children living in rural areas can stay in touch with others who are isolated geographically.

But there’s a dark side to all that Internet use. It can also socially isolate children and expose them to unhealthy activities and experiences.

According to child and adolescent psychiatrist Dr. David Bassler, certain children become too isolated as a result of heavy Internet use. A shy or overweight child can become a football star in an online game or a persona in MySpace. Bassler believes that “a degree of this is healthy, but if it starts to become the primary focus, it can become a problem.” Staying online for long periods of time may make a shy or depressed child even more shy or depressed.

When children spend too much time online, they don’t do their homework or can’t focus on their work in school because their online activities have drained their energy. They miss out on sports and other activities and they don’t spend enough time with their real-world peers and

family members. E-mail and instant messaging can help youngsters stay in touch with friends and family but they have also become instruments for “cyberbullying.” Kids will use these tools to send insulting remarks to each other or to distribute personal details meant for a few close friends to a wide circle of strangers. One 16- year-old boy whose girlfriend had broken up with him over the telephone was shocked to find a detailed explanation for her actions on her instant messenger profile. She had used instant messaging to tell their entire network of social contacts, including friends of friends in different high schools, details about the reasons for the breakup. The boy was so upset he skipped school the next day.

Ten million young people use the Internet each day, and one in five have been solicited or approached by a child predator, according to the FBI. Federal arrests for online exploitation of children doubled from 863 to 1,649 between 2003 and 2005. Fifty percent of child victims of online sex abuse are in the seventh through ninth grades.

Online predators monitor screen names and scrutinize personal information on social networking sites such as MySpace, Friendster, and Facebook to find youngsters with self-esteem problems. They’ll ask youngsters questions such as “Do you like this band? Can I help you with your homework?” Then they’ll try to arrange a physical meeting with these juveniles.

Dr. Robert Kraut, a professor at Carnegie-Mellon University who has studied online behavior for more than a decade, found that the more people use the Internet, the less they socialize and the less they communicate with family members. High Internet usage among teenagers is associated with a decline in social support. Many hours spent online in casual conversation with other strangers don’t translate into meaningful relationships.

Obesity, now an epidemic in the United States, is especially prevalent among youngsters who sit at their computers for hours at a time munching on snack food. And there are plenty of Web sites encouraging them to do just that.

Food companies aggressively use Internet games and other perks such as screen-saver downloads to entice children into buying their brands. Their Web sites offer childrens’ games linked to snacks, such as Chips Ahoy Soccer Shootout, Pop-Tart Slalom, and Lucky Charms Wild Chocolate Mine. A Kaiser Family Foundation study found that between June and November 2005 more than 12.2 million children had visited 77 food company Web sites it examined.

According to the study’s lead researcher Vicky Rideout, Internet advertising “still doesn’t have the reach TV advertising has. But who it does reach, it reaches more deeply.” This study is the first to investigate the scope of Internet advertising aimed at children.

Questions:

1. Does use of the Internet by children and teenagers pose an ethical dilemma? Why or why not?
2. Should parents restrict use of the Internet by children or teenagers? Why or why not?

OR

7-ELEVEN STORES ASK THE CUSTOMER BY ASKING THE DATA

There is probably a 7-Eleven store in your neighbourhood, and it's a convenient place for picking up a can of Coke or a quick ham-and-cheese sandwich. It's the largest convenience retailer in the world and the number one convenience store chain in the United States, with 5,300 stores.

This company started out about 75 years ago as an ice-dock operator. When refrigerators started replacing iceboxes, the manager of each store asked customers

one-by-one what items they'd like to stock in their new appliances. By asking customers directly and stocking only the items customers most wanted, the company grew and prospered.

Over time, the company moved away from its roots, losing touch with customers along the way. It had no means of knowing what sold in each store and allowed vendors to decide what to stock on its shelves. Although large vendors, such as Coca-Cola and Frito-Lay, had powerful information systems for analysing what they sold in individual stores, other vendors didn't have such systems. Moreover, the vendors' systems were designed to maximize opportunities for their businesses, not for 7-Eleven.

7-Eleven stores are not all alike. What their customers want depends a great deal on the neighbourhood and region of the country where they are located. What sells well in Boston may not work in Texas.

Without detailed knowledge of its customer and sales patterns, 7-Eleven was unable to determine which items were selling well, or which items were most profitable to sell in the first place. This made a difference to the company's bottom line because of missed sales opportunities, lower profits, and excess store inventory, some of which consisted of perishable goods that had a very short shelf life. Profit margins are very thin in the convenience store business, so a quarter-point increase in sales volume can spell the difference between success and failure.

In 2004, 7-Eleven installed Hewlett-Packard servers and networking switches in all its U.S. stores to implement a Retail Information System. This system collects data from point-of-sale terminals in every store about each purchase made daily by its six million U.S. customers and transmits the information in real time to a 7-terabyte Oracle database operated by Electronic Data Systems (EDS).

With this database, 7-Eleven keeps track of its purchase transactions and analysing them to a mass information about customer demand, pricing, and interest in new products, such as the Diet Pepsi Slurpee. Analysis of the data shows which items are selling well in which stores, which items customers are most interested in, seasonal demand for items, and which items are most profitable to sell in the first place.

Management uses this information to identify sales trends, improve product assortment, eliminate slow-moving products from inventory, and increase same-store sales by stocking products that are high in demand.

Insights gleaned from the data also help 7-Eleven develop new products such as its fresh-food offerings that attract new customers and increase transaction size.

The system provides store managers with information on daily, weekly, and monthly sales of each item to help them determine which items to order and the exact quantities they will need for their stores. Managers use this information plus their on-the-spot knowledge of the analysing good to make final ordering decisions.

Store managers enter orders into workstations or handheld computers by 10 A.M. each day. The system consolidates these orders and transmits them to 7-Eleven's suppliers. Orders are consolidated four times daily, one for each U.S. time zone in which 7-Eleven stores operate. 7-Eleven's orders for fresh food items are aggregated at 7-Eleven headquarters and transmitted to fresh food suppliers and bakeries for preparation and delivery the next day. Thanks to information technology, 7-Eleven has come full circle in its ability to respond to the needs of the customer. By tracking and analysing its data, it knows its customers as intimately as it did when store owners talked to each customer face-to-face. According to 7-Eleven President and CEO James Keyes, "Now we can use technology as a surrogate for being able to talk to every customer who walks in the door."

Questions:

1. Why is knowing about the customer so important to a company such as 7-Eleven?
2. What are the benefits of 7-Eleven's Retail Information System?
3. In terms of Porter's model, what strategic forces does the Retail Information System seek to address?
