

8. CASE STUDY

Ankita Book House, a leading book house in the city, is known for a wide range of titles being available under one roof. The book house offers books on various subjects from architecture to zoology. The owner of the book house observes that at a given point in time the inventory is more than Rs. 20 lakhs.

Of late, it was observed that there are some titles which are just decorating the shelves. These titles have not moved since last year. A reduction sale was organised to clear such non-moving titles which helped to a great extent in reducing the dead stock. However the revenue collected was less than the list price and during last one year the inventory carrying involved interest cost.

The owner is interested in having an IS solution to prevent such cases in future. The existing system involves a personal computer based inventory system. The existing monthly stock report provides a stock statement by titles. It provides the transaction based status about opening balances, receipts, sales & balance. It is however very difficult to go through each and every entry of this report that runs into one hundred odd pages.

Questions :

- a) Evaluate the present system. **(5 Marks)**
- b) Discuss the information needs of the owner of book house to design a suitable MIS. **(5 Marks)**
- c) Suggest the various outputs, the computer system can provide so that the reports can be made actionable for control purpose. **(5 Marks)**
- d) What technology options can you suggest for an integrated system of stocking, billing, accounting, decision making? **(5 Marks)**

** * **

* Case Study:

Regional Inventory Control System

Good Food is a department store chain with a total of 15 stores in Andhra Pradesh and Karnataka. Headquarters are in Bangalore, Karnataka. While some of Good Food's administrative processes were computerized in the past, the purchase order management system has only recently been automated.

The manual system required Good Food buyers to monitor order and inventory information utilizing the unit control books. Accuracy and timeliness were often lacking since these factors depended on a variety of people with posting responsibilities.

Inventory of current orders and goods was taken monthly by buyers at the receiving and marking center. This was a time-consuming procedure in which the buyer's files were compared to the receiving center's files. Merchandise received on each order was checked. Existing inventory was counted and reviewed in light of the budget.

Error occurred in the preparation of original handwritten purchase orders. Extensions were also calculated by hand. Since this procedure was performed by 100 buyers and assistants, there were numerous errors in both pricing and penmanship. Copies of orders sent to vendors were sometimes not intelligible. This caused confusion and discrepancies between items ordered and items delivered.

The manual system has now been replaced by hardware and software systems which links regionally located computers. Prior to entering the data, buyers and assistants utilize worksheets to rough out orders. Once the data is entered, Purchasing budgets are monitored by the computer. Data entry operators are immediately notified if the budget is exceeded by a buyer. Authorization is required to process an over-budget order. For in-budget orders, routine extensions are calculated automatically from the merchandise price. The vendor is sent a purchase order printed by the computer.

The computer provides two methods of data access to the receiving center. When data is entered, it is printed automatically at the receiving center. This paper copy is the backup in case of hardware failure. The second method is online access through visual display terminals in the warehouse.

A remote terminal is used at the receiving center to record information on goods after they have been shipped to the stores. Buyers have online access to current inventory information. Reports are on an exception basis and are received by buyers weekly if they have not requested them earlier. All inventory and budget information is included in the stock status reports sent regularly to the buyers. Currently six of the fifteen stores have online, interactive terminals. In the near future, merchandising tickets will be automatically read by the computer once terminals are equipped with optical switching wands. Real-time inventory updates will be possible because the wands will transmit the transaction data to the computer.

Questions:

- 1) What were the problems with the system existing before computerization? How do you think this would affect Good Food? (05 Marks)
- 2) Which capabilities of Information Technology helped Good Food to solve the problems? (05 Marks)
- 3) Which type of Information System does the computerized system belong to? Explain your answer. (05 Marks)
- 4) An optical scanning wand (OCR) is a hand-held optical scanning device. It is moved by the clerk over the price ticket that has a bar code for the merchandise item. Price may also be encoded or may be obtained from a computer. Why is it an appropriate input device? What are the advantages and disadvantages relative to keying in the data using a keyboard? (05 Marks)

8 Case Study :

A Book house offers books on various subjects in science and technology. The owner of the book house maintains inventory of Rs 20 lakhs or more. It is also observed that there are some slow moving titles since last year, which result in dead stock. To clear this dead stock, a reduction sale was organized. The revenue generated out of this sale was less than the list price. During last year, inventory carrying accounts for interest cost.

The owner is interested to computerize to avoid such cases in future. The existing monthly stock report provides a stock statement by titles. It gives status of Opening balance, receipts, Sales and balances.

Questions :

- a. Evaluate existing system. (05 Marks)
- b. Explain information needs to design suitable MIS. (05 Marks)
- c. Advice various output requirements, so that reports can be useful to control the business. (05 Marks)
- d. Suggest new technologies to coordinate stocking, billing, accounting and decision – making. (05 Marks)

8 Case Study :

Infotel Technologies is a company engaged in the development of software application packages. Product manager Mr. Dutta is the main user for the new software package being developed for sale to the furniture industry. Jaya is the lead systems analyst for this effort, which now is one month into systems design phase that began on October 6. The completion and first installation of the package is scheduled for August 1 of the following year :

On November 6, Dutta received a request from the vice president of development for a new functional capability that needs to be added to the package. She asked Jaya to analyse this change and determine its impact to the project.

Dutta and Jaya reviewed the results of the analysis at a meeting on November 15. Adding the new requirements to the package at this time would increase the developmental cost by 12 lakhs, and would add one month to the schedule. Jaya evaluated a second alternative which is to continue to develop the package without the requested changes and to incorporate the changes into the package as part of a follow up release. This second alternative would take three months time and 30 lakhs to accomplish.

Questions :

- a. As the project is in the systems design phase and no programming has been started, why would incorporating the requested change add one more month and 12 lakhs? (05 Marks)
- b. Why would it take two extra months and 30 lakhs more if changes are performed after package development has been completed? (05 Marks)
- c. Suppose you are Dutta and must recommend action on the request. What would you consider as the factors and which alternative would you recommend. (05 Marks)
- d. What are the advantages and disadvantages of each alternative? (05 Marks)



USN

--	--	--	--	--	--	--	--	--	--

05MBA15

First Semester MBA Degree Examination, Dec. 07 / Jan. 08
Management Information System

Time: 3 hrs.

Max. Marks:100

- Note : 1. Answer any FIVE full questions from Q.No.1 to 7.**
- 2. Q.8 is compulsory.**
- 3. Draw diagrams to enhance your presentation.**

- 1 a. What is an Information System? (03 Marks)
- b. Discuss the components of Information System. (07 Marks)
- c. Define Software. Explain various types of software with an example. (10 Marks)
- 2 a. What is Supply Chain Management? (03 Marks)
- b. Explain waterfall system development model with a diagram. (07 Marks)
- c. Explain the components of Enterprises Management System. (10 Marks)
- 3 a. What is Database? (03 Marks)
- b. Discuss three feasibility studies to evaluate the selection of an IT. (07 Marks)
- c. Describe different kinds of systems serving at different organizational levels for different functional areas with a neat sketch. (10 Marks)
- 4 a. What is GDSS? (03 Marks)
- b. List out the benefits of ERP. (07 Marks)
- c. State the four kinds of organizational change that can be promoted with information technology. (10 Marks)
- 5 a. Distinguish between TPS and MIS. (03 Marks)
- b. Explain network topologies with diagrams. (07 Marks)
- c. Describe the stages in System Analysis of a new requirement. (10 Marks)
- 6 a. Distinguish between Internet and intranet. (03 Marks)
- b. List various Input and Output Devices. Explain Briefly. (07 Marks)
- c. Describe the interrelationship between various types of Information systems in an organization. (10 Marks)
- 7 a. What is Structured Systems Analysis and Design (SSAD)? (03 Marks)
- b. Explain the various phases in SDLC. (07 Marks)
- c. What is collaborative commerce? Explain with a sketch. (10 Marks)

8 CASE STUDY :

Service at Restaurant.

All of us are familiar with the services at restaurants, and most of us have encountered inconvenient scenarios such as long waits, cold food or even service of wrong order. These inconveniences are the result of a conventional process that works like this : a server takes your Juice order and then walks to the Juice counter to place the order. He knows that after approximately five minutes your Juice will be ready, so in the meantime the server takes an order from someone else and then heads back to the juice Counter. If your order is not ready, the server comes to your table, apologizes for the delay, and takes your food order. That order is written on a piece of paper, which the server carries to the kitchen and places on a table, which the chef rotates into view when he is ready to begin preparing the next order. After 10 or 15 minutes, the server may find that the kitchen is out of this selection, so he comes to your table and asks you to reorder. Sometimes the server makes a mistake in writing your order or the chef reads the handwritten order incorrectly. In such case, after a long wait, the consumer is very frustrated at getting the wrong food. In the end, no one is happy.

- a. Evaluate existing system. (05 Marks)
- b. Discuss how Information Technology can support the organization. (05 Marks)
- c. What are the Input, Output and storage devices you suggest? (05 Marks)
- d. Assuming that you are a system analyst, explain your role in this case. (05 Marks)

8 Case Study :

Asian Paints Industries Limited

APIL recognized low growth in decorative paint segment during quarter to Diwali as compared to previous year and also faces price worries of paint segment. Companies are facing increased pressure from unorganized sector. APIL reduced prices of its tractor distemper brands and APEX exterior paints to be more competitive and later reduced prices of tractor emulsion also. The Utsav range is targeted at lower end of consuming market. It has hiked the prices of solvent based products by 2 percent to compensate higher petroleum product price.

Like most chemical based products raw material cost constitutes a large portion of sales about 60 percent of sales. Of these, pigments are the largest components and contribute one third of material cost. Additives, solvents and oils are the other major constituents. Titanium dioxide is one of the main pigments used. Millenium Chemicals, the second largest producer has set of a 30 day lead time for all TiO_2 products which implies higher inventory costs for consumers. During the previous year, an increase of 4 pc in price of TiO_2 is reported. In addition to this, Millenium increased the price by 2.5 pc. However, this is not affecting APIL immediately as they are one of the largest buyers and price terms are negotiated. However, indicators are that price of solvents and oils are also increasing sharply. On one hand, the company is facing competition from unorganized sector and on the other, existing players engage in a fierce battle for larger market share. Goodlass has come out with a new distribution channel with improved rural penetration and focus on emulsion and distempers.

Companies have improved their supply chain operation with better working capital management and asset turnover which is crucial as inventory plays a major role in this business.

APIL's segment market declined to 5.2 pc from 7.6 pc for the same period last year where as Goodlass increased its margin to 16.7 pc from 14.5 pc. The next quarter is therefore crucial for APIL.

- a. Analyse APIL's business scenario and identify issues affecting business performance. (05 Marks)
- b. Define value chain for APIK. Which IT application will improve performance? (05 Marks)
- c. Where should be the focus of MIS in APIL in today's business scenario? (05 Marks)
- d. What is your learning from the above case? (05 Marks)

										3
--	--	--	--	--	--	--	--	--	--	---

First Semester MBA Degree Examination, Dec 08 / Jan 09
Management Information System

Time: 3 hrs.

Max. Marks:100

Note : *1. Answer any FOUR full questions from Q1 to Q7 and Question No. 8 is Compulsory.*
2. Assumptions for solving the case must be clearly mentioned.

- 1
 - a. What are the roles of Management Information System? (03 Marks)
 - b. With a neat sketch, explain the star, ring and bus network topologies. (07 Marks)
 - c. Explain the water fall model and spiral model of system development with the help of neat sketch. Also mention the suitability of each model. (10 Marks)

- 2
 - a. List the differences between system software and application software. (03 Marks)
 - b. With a neat sketch, explain the information system model indicating various components of it. (07 Marks)
 - c. What is Group Decision Support System (GDSS)? Explain the functions and components of it. (10 Marks)

- 3
 - a. Distinguish between LAN and WAN. (03 Marks)
 - b. Explain the application of MIS in production management. (07 Marks)
 - c. With a neat sketch, explain nine steps approach to ERP implementation. (10 Marks)

- 4
 - a. What is meant by Data warehouse? (03 Marks)
 - b. What are the different stages involved in the information system development cycle for a new applications? Explain briefly. (07 Marks)
 - c. What are the important security measures that are the part of security management of the information system? Explain them briefly. (10 Marks)

- 5
 - a. What is CRM? (03 Marks)
 - b. What is meant by Technical Ethics? Explain briefly the principles of technical ethics. (07 Marks)
 - c. With the help of neat sketch, explain four major types of systems found in a typical organization. (10 Marks)

- 6
 - a. What is SCM? (03 Marks)
 - b. What are the three dimensional selection criteria involved in evaluation and feasibility of IT solutions? Explain them briefly. (07 Marks)
 - c. What is DBMS? Explain the fundamental three database structures. (10 Marks)

- 7
 - a. What do you understand by the term "Hacking"? (03 Marks)
 - b. With the help of neat sketch, explain the components of Enterprise Management System (EMS). (07 Marks)
 - c. Explain the application of MIS in service industry like bank. (10 Marks)

8 CASE STUDY :

The branch of XYZ bank was established in a big city of India in the year 1995. It reports to its divisional office. The divisional manager, in turn sends his report to regional office. The bank has various deposit schemes and also the advance credit schemes to the public.

The branch has 25 employees, deposit of 300 crore and advances of 120 crores. The branch sends a weekly report to divisional office.

Due to substantial increase in number of account holders and a great need of information, there has been considerable increase in work load. The officers of bank are not finding it easy to access to and update records of existing system. For a single transaction, number of books, ledgers and files are to be updated. The branch manager is also facing security problems relating to information contained in books, ledgers and files, The customers has to move from counter to counter and has to wait for considerable time.

With a view to overcome the above mentioned problems, the branch manager decided to invite a consultant from a leading business school.

Questions :

- a. What are the problems and drawbacks in the existing systems of XYZ bank? (05 Marks)
- b. Write the DFD (Data Flow Diagram) for maintaining the savings bank. (05 Marks)
- c. If XYZ bank implements DBMS, what are the benefits do you expect? (05 Marks)
- d. If MIS is implemented, what are the weekly reports to be generated from XYZ bank? (05 Marks)

USN

--	--	--	--	--	--	--	--	--	--	--

First Semester MBA Degree Examination, Dec.08 / Jan.09
Management Information Systems

Time: 3 hrs.

Max. Marks:100

Note :1. Answer any Four full questions from Q1 to Q7.

2. Question No. 8 is compulsory.

3. Assumptions for solving the case must be clearly mentioned.

- 1**
- a. Define data and information. (03 Marks)
 - b. Explain the characteristics of MIS. (07 Marks)
 - c. What is meant by transaction processing system? Explain the methods of TPS with suitable examples. (10 Marks)
- 2**
- a. Define the term MIS. (03 Marks)
 - b. Define software. Explain the types of software. (07 Marks)
 - c. Write short notes on:
 - i) Hardware
 - ii) Internet.
 - iii) Intranet.
 - iv) Extranet. (10 Marks)
- 3**
- a. Define the term SCM. (03 Marks)
 - b. How does IT support the supply chain? Explain. (07 Marks)
 - c. What is CRM? Explain the CRM models with neat diagram. (10 Marks)
- 4**
- a. What is meant by system analyst? (03 Marks)
 - b. Define DFD. Draw the symbols and meaning of DFD. (07 Marks)
 - c. How information system is very much helpful in manufacturing sector? Explain. (10 Marks)
- 5**
- a. Define the term ERP. (03 Marks)
 - b. What is BPR? What are the elements of BPR? (07 Marks)
 - c. What is an expert system? Explain the functions of expert system with neat diagram. (10 Marks)
- 6**
- a. Define the term telecommunication system. (03 Marks)
 - b. What are the types of network? Explain. (07 Marks)
 - c. Define SDLC. Explain the various stages of SDLC with neat diagram. (10 Marks)
- 7**
- a. Define enterprise support system. (03 Marks)
 - b. Explain the features and benefits of ERP. (07 Marks)
 - c. What is meant by decision support system? Explain the types of decision support system. (10 Marks)

8 Case Study:

The success of W.L.Gore, maker of Gore-Tex and other high-technology materials, depends on its being able to finely target products to customer – to tailor a given material to a single customer’s needs, if necessary. That requires extremely tight links among marketing, product development and production employees.

The solution : an enterprise collaboration system based on Lotus Notes collaboration software, database of product and customer application data, and a company wide global internet. “ We have done a good job of connecting a world wide field sales force with our product development terms.” Says chief information officer David Clarke. “We are solving customer problems faster, and that translates directly into higher sales”.

Clarke says that in W.L. Gore’s aerospace business segment, “ a field engineer may be taking notes on a laptop while with a customer, and that shows up in our database within hours of flying the field trial”. Previously, the test results of a new material might have been put in a paper report and circulated among developers days or weeks later.

The notes/Intranet application has been operational for about a year and is now in use by 600 employees in 30 teams. Ken Robell, product manager for W.L. Gore sealant used in aircraft, says success in his business depends on being able to get into and out of markets very quickly.

Robells’s team and its customer are scattered around the world, and he says the system has greatly speeded communications. “Before, we used E-mail, Voice mail, Faxes and filing cabinets etc.” he says “our tools were of industrial age, not of information age”.

To Clarke, enterprise collaboration is first and foremost an exercise in communication. In fact, six months ago the company’s IS organization began calling itself the communication and collaboration team. “It’s a subtle but important change”, Clarke says. “For example we don’t think of an enterprise planning system as this big transaction engine attached to a database. We think of it, literally, as a communication system”. In fact, W.L.Gore is building just such a system for production planning that will use a commercial enterprise resource planning package, Lotus notes, an intranet, and video conferencing. It will bring together complex inventory, product, customer and manufacturing data from multiple sites and present it as a “Shared notes” for use by production planning teams.

“The key is for team members to develop a shared space to work in”, Clarke says “Instead of each of them trying to make their own decisions based on reams of reports or screen layouts, they will have the same picture in front of them a simple picture of what production capacity looks like”.

Questions:

- a. What are the business benefits of W.L. Gore’s approach to global enterprise collaboration?
(06 Marks)
- b. What information system components do you recognize to Gore’s enterprise collaboration systems?
(06 Marks)
- c. How could other types of companies benefit from enterprise collaboration system like W.L. Gore’s?
(08 Marks)

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

First Semester MBA Degree Examination, June-July 2009
Management Information Systems (MIS)

Time: 3 hrs.

Max. Marks:100

Note: 1. Answer any FOUR full questions from Q.No.1 to Q.No.7.
2. Questions No.8 is compulsory.

- 1 a. What is an Expert system? (03 Marks)
b. How do you protect Software and Intellectual property from piracy? (07 Marks)
c. Explain the influence of IT over corporate sector? (10 Marks)
- 2 a. What is system Analysis? (03 Marks)
b. Explain briefly SCM? (07 Marks)
c. Explain various levels of Information systems? (10 Marks)
- 3 a. What is Cybertheft? (03 Marks)
b. Explain "CRM" in brief? (07 Marks)
c. Explain different network topologies? (10 Marks)
- 4 a. What is "RAD"? Explain. (03 Marks)
b. Explain I/O devices with examples? (07 Marks)
c. Bring out the differences between System Software and Application Software. (10 Marks)
- 5 a. What is a "MODEM"? (03 Marks)
b. Briefly explain different wireless technologies. (07 Marks)
c. What are the challenges faced in implementation of "ERP". (10 Marks)
- 6 a. What is Ergonomics? (03 Marks)
b. IS it decision in strategic? Justify. (07 Marks)
c. Explain the role of IS in Banking Industry. (10 Marks)
- 7 a. What is Extranet? (03 Marks)
b. What are the functions of Operating System? (07 Marks)
c. What are the responsibilities of a system analyst? (10 Marks)

8 CASE STUDY:

Computerization in an Indian Private Bank

In competition to foreign banks in India, the Indian private banks are now providing effective banking solutions through centralized approach of computerization. Home, Tele and Internet banking are the new ways of banking in India. HDFC Bank Ltd (Housing Development Finance Corp.) was the first private bank to receive approval from RBI, in August 1994, to set up a bank, as part of RBI's deregulation policy of the Indian banking industry. The bank's 20 percent equity is held by NatWest markets, the worldwide Corporate and Investment banking arm of National Westminster bank plc., UK. This alliance offered the HDFC bank an access to world class banking technologies, customer relationships, product expertise combined with international expertise.

The initial emphasis of the bank was only on corporate banking and custodial services, but the fluctuations in money markets and the restriction that a bank can only deal on behalf of a customer, pushed HDFC into retail banking. The systems implemented are on a centralized host with clients from the branches getting attached via leased lines using a standard TCP/IP protocol. For the wholesale banking practices, HDFC bank uses Micro banker from CITIL, essentially used for processing deposits, loans, letters of credit, bills discounting and foreign exchange. These activities operate centrally on a Sun Enterprise 3000 system. To support retail banking business, Finware, from CITIL, is used, which caters exclusively to retail banking functions affords a high degree of parametrisation and multiple product support.

The Custodial software supported by Price Water House Associates is meant for large institutional investors and mutual funds. It is implemented using Oracle on a Sun Solaris platform. It offers the bank the ability to secure the share certificates given by customers for safe custody and electronically monitor their passage through various operations. The customers are, in turn, informed about their assets under the bank's custody, which benefits them while dealing with a volatile share market. The bank's premises uses AT and T's Systemax PDS level 5 cabling and security system. For networking, HDFC bank uses RAD modems for 64 kbps transmissions and Motorola 3266, 4x for analog transmissions and Cisco routers. For smaller applications like ATMs, the RAD short-range modems were introduced with Bay Network's hubs with CAD5 cabling.

HDFC bank has 27 branches in nine cities, with 24 ATMs in eight cities. HDFC bank uses the NCR and Diebold ATMs (Automated Teller Machines). The bank recently introduced ATMs which converse in regional languages. All the ATMs in the north (Delhi) and the west (Ahmedabad, Mumbai and Pune) and Bangalore have the options of transacting in both English and Hindi. HDFC bank is part of the SWIFT (Society for Worldwide Interbank Funds Transfer) network. SWIFT is a network of banks, through which member banks settle remittances with each other. HDFC bank is also offering Internet banking, which is the latest way of banking in India.

Questions:

- i) Describe the computerized facilities provided by your bank. Are you satisfied with those services? Compare the services of a private and a nationalized bank of India. (08 Marks)
- ii) Describe the software used by HDFC for wholesale and retail banking practices. (08 Marks)
- iii) What are ATMs? Discuss their benefits. (04 Marks)

* * * * *

Sri Lanka Institute of Technology
Department of Information Technology

First Semester MBA Degree Examination, June-July 2009
Management Information Systems

Time: 3 hrs.

Max. Marks:100

Note : 1. Answer any **FOUR** full questions from 1 to 7.
2. **Question No. 8 is compulsory.**
3. **Assumptions for solving the case must be mentioned.**

- 1 a. What is Management Information System? (03 Marks)
- b. List the various types of Telecommunication network and explain Ring Network. (07 Marks)
- c. Explain with a neat sketch the components of Enterprise Management System (EMS). (10 Marks)

- 2 a. List the three components of Data Base System. (03 Marks)
- b. Explain with a neat sketch, the information system model expressing its major components and resources. (07 Marks)
- c. Explain the water fall model and spiral model of system development and mention the differences between them. (10 Marks)

- 3 a. What is C R M? (03 Marks)
- b. What are the essential steps of systems development irrespective of the model? (07 Marks)
- c. Describe with a neat sketch the different kinds of systems serving at different levels of organization for different functional areas. (10 Marks)

- 4 a. What are Structured Systems Analysis and Design (SSAD)? (03 Marks)
- b. While choosing information and technology, what are the dimensions need to be satisfied in evaluation phase? Explain them briefly. (07 Marks)
- c. What is an expert system? What are the essential components of expert systems? List the business applications of expert systems. (10 Marks)

- 5 a. What is Business Process Re – engineering (BPR)? (03 Marks)
- b. How GDSS can enhance group decision making? What are the limitations of GDSS? (07 Marks)
- c. Describe the applicational requirements that are to be considered to develop MIS for service industry like hospital. (10 Marks)

- 6 a. List the key factors and their MIS focus while designing the MIS for service industry. (03 Marks)
- b. Describe how the firms can be benefited from the supply chain management systems. (07 Marks)
- c. Explain various input documents, applications, query and decision analysis that have to be maintained and managed by MIS related to production management system. (10 Marks)

- 7 a. List the three attributes of Decision Support Systems. (03 Marks)
- b. What are the evaluating dimensions for the selection of ERP? (07 Marks)
- c. What is meant by Transaction Processing Systems (TPS)? Considering the pay roll as an example, explain with a neat sketch the payroll TPS. (10 Marks)

8 CASE STUDY :

X – India Limited is a leading bank having eight centers across the country. X – India expected its employee to answer customer queries quickly, completely and politely. But as the systems that the employees used could not find all the answer. A customer was sometimes transferred to several operators before all his questions were answered.

In 2005, X – India increased the training for its employees enabling them to have more information on a range of products and services related to its business to reduce the number of call transfers. But it did not work.

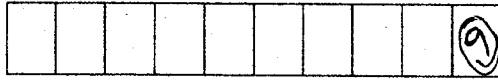
To increase customer satisfaction, X – India is changing its approach. It is using a software that links its eight centers and variety of product and service data base related to its business so that an employee can answer questions without transfer of call. An employee can also answer through internet via e – mail.

X – India has recently chosen a customer communications solution software and is rolling it to a total of 800 employees in all the centers across the country. Once the system is in place, a customer will be able to call any one of X – India's center and can gather required information related to its business like account details, report, credit card details etc.

Instead of transferring a call to different employees, new software will give to each employee access all information's related to business of X – India limited. The new approach will help X – India to save Rs 38 Million annually.

Questions :

- a. What business problems were solved by linking all centers and product / service data bases in X – India Limited? (05 Marks)
- b. What business benefits does X – India expects from its new approach? (05 Marks)
- c. What are the reports an MIS should generate in a typical Bank like X – India Limited related to its account holders / customers? (05 Marks)
- d. What are the particulars a customer data base should contain in a bank like X – India Limited? (05 Marks)



First Semester MBA Degree Examination, Dec.09/Jan.10
Management Information Systems

Time: 3 hrs.

Max. Marks:100

Note: 1. Answer any FOUR full questions from 1 to 7.
2. Question No. 8 is compulsory.

- 1
 - a. Why is MIS looked upon as a strategic need of management today? (03 Marks)
 - b. What are the health issues that are of concern in an IT firm? What are the remedial measures? (07 Marks)
 - c. Explain the different topologies of telecommunication networks, with diagrams. (10 Marks)

- 2
 - a. What is an hypertext? (03 Marks)
 - b. What strategic advantage do you perceive in a company's use of extranet? (07 Marks)
 - c. Describe the information systems at different organization levels, with a neat sketch. (10 Marks)

- 3
 - a. What in data encryption? (03 Marks)
 - b. Explain the parameters on which quality of information is measured. (07 Marks)
 - c. List the factors for evaluating hardware and software. (10 Marks)

- 4
 - a. What is a query language? (03 Marks)
 - b. Can you be sure that if an ERP solution is implemented, MIS is in place? Discuss. (07 Marks)
 - c. Schematically explain the stages of a development life cycle. (10 Marks)

- 5
 - a. What is an exception report? Give an example. (03 Marks)
 - b. What is MRP and JIT? What role do information systems play in this context? (07 Marks)
 - c. Discuss the various network security defenses that must be in place in an IT system. (10 Marks)

- 6
 - a. What is an inference engine? (03 Marks)
 - b. Business rule, formula, algorithm and heuristics are extensively used in DSS. Explain these terms. (07 Marks)
 - c. 'Information systems facilitate supply chain arrangement' explain how the various modules of SCM ensure this. (10 Marks)

- 7
 - a. What do you mean by prototyping? (03 Marks)
 - b. Explain online processing and batch transaction processing system, with an example each. (07 Marks)
 - c. With a neat diagram, explain the components of enterprise management systems. (10 Marks)

- 8
 - a. In XYZ corporation, the salesmen are paid bonus corresponding to their performance. Every year the sales clerk collects details of the sales personnel and their sales target achieved. Based on this information, the bonus amount is calculated and updated in the bonus file. Draw a data flow diagram (DFD) that communicates the above transaction at XYZ corporation. (10 Marks)
 - b. Discus the advantages and disadvantages of a DFD. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

USN

										4
--	--	--	--	--	--	--	--	--	--	---

05MBA15

First Semester MBA Degree Examination, Dec.09-Jan.10
Management Information Systems

Time: 3 hrs.

Max. Marks:100

Note: 1. Answer any FOUR full questions from the Q.No.1 to 7.
2. Question No. 8 is compulsory.
3. Assumptions for solving the case must be mentioned clearly.

- 1 a. Define Executive support Systems. (03 Marks)
b. Explain the three dimensions on which an ERP package selection is made. (07 Marks)
c. Elaborate the plan for successful implementation of Information Technology. (10 Marks)
- 2 a. Distinguish between service and product. (03 Marks)
b. Explain the major steps involved in the design of a computer system. (07 Marks)
c. Explain the various types of information systems in an organization. (10 Marks)
- 3 a. What is expert system? (03 Marks)
b. List out various forms or documents that serve as inputs for personnel department. (07 Marks)
c. Explain major applications of telecommunications network. (10 Marks)
- 4 a. What is workflow management? (03 Marks)
b. What is Group Decision Support System? Explain the software tools used in GDSS. (07 Marks)
c. What are steps of SDLC? Explain. (10 Marks)
- 5 a. Distinguish between data and information. Give an example to illustrate the distinction. (03 Marks)
b. Briefly explain various internet services. (07 Marks)
c. What are the components of hardware and software? (10 Marks)
- 6 a. Write a short note on COBOL. (03 Marks)
b. What are knowledge work and office systems (KWS)? Describe its features. (07 Marks)
c. Briefly explain various types of information systems. (10 Marks)
- 7 a. What do you mean by business process reengineering? (03 Marks)
b. What are the characteristics of ideal data/information? (07 Marks)
c. What information support MIS provides to a hotel industry? (10 Marks)

Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg, 42+8=50, will be treated as malpractice.

8 **CASE-STUDY :**

Hotel Namrata is a well known hotel in the locality. It provides both lodging and boarding facilities. It has served 80,000 guests in the last year.

Hotel Namrata has the following departments :

- Front office
- Finance
- Food and Beverages
- HRD
- Security
- Sales and PR

Front office takes care of all needs of guests, making reservations, handling check-ins and check-outs. The front office comes into contact with the traveler in the following ways :

- By answering queries and registering the reservations, cancellations and modifications.
- By allotting rooms.
- By handling guest's demands.
- By making arrangements for taxi, return tickets, etc.

At hotel Namrata the basic arrangements are done by three front office assistants and two cashiers. Accounts, house keeping, maintaining data about guests are the other activities performed by front office.

Questions :

- a. Identify the data involved. What possible information can be generated by this set of data?
(05 Marks)
- b. Discuss the benefits incurred if hotel Namrata prefers to implement a suitable IT/IS solutions.
(05 Marks)
- c. Draw a general model of information processing system.
(05 Marks)
- d. What kind of system development life-cycle approach to be followed in the above case?
(05 Marks)

* * * * *

3M Company :

“Increasingly, IT organizations, have to work with business units on international projects”, said David Drew, Vice president of IS at 3M in St. Paul, Minnesota. There is an ongoing effort of the \$15 billion company to give managers a better view of global demand, for each of the company’s 50,000 products. That has resulted in an infusion of new software tools, data warehouses, advanced modeling technologies and management policies. For instance, senior IS managers from different business groups now report to the chief IS executive and to their business unit chiefs. “Huge amounts of historical data from around the world are being “Cleaned” for reuse in decision making”, Drew said.

Whirlpool Corporation :

Whirlpool Corporation in Benton Harbor, Michigan, is working on a similar global supply chain initiative, to reduce working capital costs by more than 30 percent, in the next two years. “The single biggest change for IS will be the implementation of a huge global business planning system that will allow Whirlpool to plan across a worldwide portfolio of business, division, plants, product families, seasonal fluctuations and pricing changes”, said Gill Urban, a regional IS director at Whirlpool.

“A global task force of 18 senior company executives, including two IS chiefs, has identified several areas that will require significant changes”. Urban said. The list includes inventory and demand management, accounts receivable and planning systems.

“This whole thing basically is a business initiative, but you have got to invest in IT to implement it” Urban said.

Group Schneider :

“An ongoing push to put some global glue on group Schneider’s far – flung operations means big changes for its highly autonomous IS staff ”, said Steve Little, Vice president of information services at the \$7.5 billion company’s North American subsidiary in Palatine, Illinois.

Group Schneider, maker of electrical distribution and control products, previously left most IS decisions to its business units. But last April, executives decided it was time to “figure out how to be a global company”, Little said. Working groups were set up to devise corporate standard in sin technology areas, including systems development, E – mail and application software.

Little who is part of the E – mail / groupware team, said “picking technology was a lot easier than getting everyone to agree on a new IS structure for managing E – mail and groupware throughout the company”. “The biggest issues are cultural and political barriers”, he said. For example, “we argued about who wanted to call whom to get the technical support”.

Questions :

- Do you agree with 3M’s new policy of requiring senior IS managers of business units to report to the CIO as well as the head of their business units? Why or why not? (07 Marks)
- What does Gill Urban mean when he says that “this whole thing is a business initiative, but you have to invest in IT to implement it”? (07 Marks)
- Do you agree with the changes Group Schneider is making to “figure out how to be a global company”? Why or why not? (06 Marks)
