KARACHI UNIVERSITY BUSINESS SCHOOL
University of Karachi
FINAL EXAMINATION, DECEMBER 2009: AFFLIATED COLLEGES
MANAGEMENT INFORMATION SYSTEM: BA (M) – 632
MBA –IV

Date: January 04, 2010   Max Time: 3 Hrs
                                                           Max Marks: 60

Instruction: Attempt any five questions, all questions carry equal marks.

Q-1
(a)   What strategic role does information technology play in business re-engineering
        process and total quality management?
(b)   Explain, how Analytical Information Technology (AIT) supports the achievement
        of business goals?

Q-2   Explain and illustrate, how Electronic Data Interchange (EDI) helps in
        restructuring business relationships among Organizations. Give its competitive
        advantages.

Q-3   Suppose you want to start a business for customer services. Develop a strategy for
        paperless office environment, using information and telecommunication
        technologies.

Q-4   Express the key issues and challenges faced by MIS manager during
        implementation of Management Information System in an Organization.

Q-5
(a)   What is Client Server Computing? State its benefits and drawbacks.
(b)   Briefly explain, how are biometric devices used for human identification?
Q-6
(a)   Give a detailed explanation as to in which situation would you recommend a
        distributed processing and situations where you would recommend a centralized
        processing for a business setup?
(b)   Illustrate an overview of computerized tasks in various functional domains of
        business.

Q-7
(a)   Enlist the Business Intelligence characteristics of various expert systems.
(b)   State the phases involves in business system development and designing.

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Date: June 23, 2009   Max Marks: 60

                                                                Max Time: 3 hours

Instructions: Attempt all questions.

<u>**QUESTION 1**</u>   (15 Marks in total)   _____

Answer all seven parts of question1.

Shipshape is one of the world's largest shipping firms with about 12,000 employees and operating a fleet of nearly 70 container ships. Their head office is in Southampton, UK, and they have over 50 branch offices around the world. Shipshape services about two thirds of the container traffic in Europe.

In the late 1980s computerization came to the shipping industry revolutionizing the way business was done and allowing far better coordination of loading and shipment procedures. Shipshape responded with an active multi-program strategy based on the rapid take-up of information technology and computer based business system now play a central role in their operations. Several of their competitors responded to computerization by centralizing their activities and managing operations as far as possible form head office. As a consequence and over time these companies faced increased coordination problems and escalation in their operating costs.

Shipshape took the opposite route and used computerization to decentralize as far as possible, giving branch offices more authority to make decisions and organize work in their own way as they see appropriate. The branches were, however, required to use a common data database and in this way to make al their operational data available across the company. Thus fundamental to the decentralization philosophy has been an emphasis on communication and data sharing among the company branches. Evidence for this is seen in the company's very successful intranet.

At head office the central operation unit with 200 employees undertakes active coordination activities for the global business, monitoring and advertising branches, and suggesting new business strategies. They have easy access to every branch office's data within the common data base and in this way the company does not risk loosing control of the business or missing new opportunities.

In 2007 over 85 percent of Ship shape's shipping activities were recorded in the central database either via a Web based application on the company intranet or via older electronic data interchange (EDI) systems. The use of these electronic connections has resulted in improved accuracy of shipping orders and higher overall productivity, thus lowering operating costs. Now, within 15 to 30 minutes of a local office preparing a consignment's shipping plan it is available to all branches. This allows far better use of the trans-shipment facilities and avoids ships traveling empty. This electronic shipping plan registration is, as noted above, based on two different communication platforms, a newer Web based system and an older EDI-based one. This situation has arisen because many branch offices that adopted local EDI system in the early 1990s still resist migrating to the new Web based technology.

   a)   Why has Shipshape followed a strategy of decentralization? What do you believe is the business case for this approach?
   b)   Are information systems technologies equally capable of supporting strategies of centralization and Decentralization?
   c)   Shipshape now has two parallel communications systems in place (EDI and Web). What problems do you see this poses for the IT managers of the company?
   d)   Local mangers are unwilling to move away form the old EDI systems. How could you persuade them to move?
   e)   The central operations unit has been created to facilitate coordination and innovation in the company. Why do you think this unit is seen as necessary given the company's commitment to decentralization?

f) Shipshape has been successful with its decentralized policy, while others have seen centralized systems leading to more coordination problems and increased costs. How would you explain this?

g) Shipshape claims to have built their business on the strategic use of information technology. Using Porter's model suggests what particular areas of the business they have addressed through the technology.

QUESTION 2 (5+2+4+3)

a. The transaction-cost model has often been used to inform e-business strategies. After a brief Presentation of this model discuss, providing examples, how transaction costs theory has informed **B2C** strategies.

OR

'Most of the talk on e-commerce is about B2C systems, but the real innovation, and the real pay back for most companies is found in B2B. It is in this area that the potential for efficiency savings and organizational restructuring is most profound. It is also the area of greatest risk'
Critically discuss this view.

b. You are offered a choice between two networks. Network A will usually transmit a file of 200 Megabytes in less than 20 seconds, Network B runs at a speed of 80 Megabits per second. Which would you choose?

c. What is the role of database and DBMS in information system explain with the help of examples?

d. Explain the difference between managerial efficiency and managerial effectiveness.

QUESTION 3 (4+4+4+3)

a. What is a decision-support system (DSS)? How does it differ from a management information system (MIS)?

b. What is the difference between systems analysis and system design? Discuss how the role of information systems evaluation changes through the systems evaluation changes through the systems development life cycle.

c. Explain the concept of strategic information systems. Discuss, with examples, the concept of alignment between IS and business goals and strategy.

d. Compare and contrast the functions of a **KMS** with those of a Transaction Processing Systems (**TPS**) main characteristic of a transaction processing system.

QUESTION 4 (4+4+5+3)

a. Explain the usage of EIS in an organization as a Problem Solving System.

b. Give an example of an IP address. What role does the Internet Protocol (IP) play within networks?

c. From a Human Resource Management perspective, how useful is the Human Resource Information System. Discuss in detail with examples.

d. Identify and explain the various parameters, both internal and external to the organization, that determine Internet strategy effectiveness for E-commerce.

BEST OF LUCK

Date: January 11, 2009   Max Marks: 60
Time allowed: 3 Hours

Instruction: Attempt all questions.

1- Outline a multistage model that describes how E-Commerce works with the help of example?   (5)

2- MIS manager at a large and reputable firm is at a fix. He has just implemented a new application for his HR (Human Resource) staff but they seem to avoid the use of that application. What could be wrong? What can be done to overcome this situation?   (5)

3- Identify the basic activities & business objectives common to all transaction processing systems? (5)

4- a. What is MRPH? How is it different from MRP?
   b.   What are the stages of problem solving?
   c.   What is the difference between what- if analysis & goal seeking analysis?
   d.   What are the components of DSS?
   e.   What is the difference between a data-driven DSS and a model-driven DSS? Give examples? (5)

5- Differentiate between OLTP & OLAP?   (5)

6- Discuss the systems classifications & their primary characteristics with the help of examples.   (5)

7- a. Discuss the difference between Efficiency & Effectiveness of a system with the help of example?
    b. Differentiate between distributed processing & decentralized processing with the help of an example? (5)

8- The uses of IS to add value to the organization is strongly influenced by organizational culture, structure and change. Discuss the above principle with the organizational perspective?   (5)

9-   (10)
Yorkton is the leading investment bank for Canada's knowledge-based industries, underwriting more initial public offerings and other equity financings for technology enterprises than any other institution. Since 1995, Yorkton has completed 300 financing worth in excess of $12 billion (CDN). Staff has grown to 650 and, as new investment bankers join the firm, they bring with them new personal contacts and experience that can help Yorkton increases revenues from future corporate financings.
Yorkton's senior investment bankers lead dedicated teams focused on fiber optics and photonics, software and the Internet, telecommunications, healthcare, media and entertainment, applied technology, airlines and aerospace, and energy – sectors that often overlap and share influential executives, directors and investors.
Yorkton's investment bankers were each intensely focused on their own sectors and corporate clients. Without a systematic way to share information, their personal influence and experience were often underutilized. Had those assets been visible to their colleagues, they could have been deployed intelligently to accelerate "deal flow" the process of getting a financing from initial discussions with the corporate client to the underwriting and the sale of new shares.
Yorkton executives were determined to turn the company's dormant wealth of personal knowledge and contacts into active assets that would be shared by its investment bankers. At the same time it wanted to monitor and record deal flow so that problems would be identified quickly and solutions from within the firm's newly mobilized assets of contacts and experience.

   a.   What type of software(s)/ systems can address this type of business situation? Why?
   b.   Device a strategy with possible outcomes.

**June 25, 2009**   **Max Marks: 60**
Time Allowed: 3 Hrs

Attempt all questions:

1- How does ESS differ from MIS? Discuss with the help of example?   (5)

2- Knowing the potential impact of information systems and having the ability to put this knowledge to work can result in a successful personal career, organizations that reach their goals, and a society with a higher quality of life. Discuss the above principle with personal, organization & society perspective. (10)

3- What can be done to improve E-commerce security on the Internet? Give several examples of security measure and technologies you would use?   (5)

4- Comment that the database approach to data management provides significant advantages over the traditional file based approach.   (5)

5- Fill in the blanks: (the answer of students may vary)   (5)

> D. _____ Decisions

A------

B_____
_____
_____

C_____
_____
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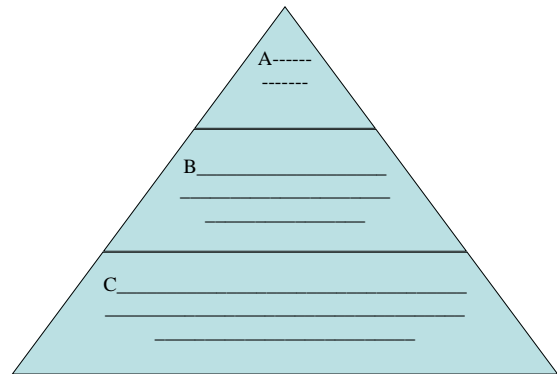
> E._____ Decisions

> F. _____ Decisions

6-
  a. Describe the process used in designing a database?   (15)
  b. Describe the two main ways of distributing a database?
  c. What is OLAP and what does it do?
  d. List at least six areas managers should examine when they analyze the potential of using a data warehouse?
  e. List at least three conditions that contribute to data redundancy?

7- Express Bank is a commercial bank operating throughout the country. The bank has a network of 150 retail branches, which offer various services to its clients. Operational performance of the bank has been reasonably satisfactory however potential for improvement exists. Recently, the President of the bank has been replaced and a seasoned banker with international experience has taken over. The new president is very much impressed by the technology infrastructure of the bank and believes that it can be leveraged to increase business as well as profitability. He also wants to develop alternate delivery channels of the bank to reduce reliance on the branches. One way of achieving this objective has been identified as implementation of B2C strategy by offering Internet Banking services to the clients. The President believes that this strategy would dramatically expand the customer base; increase bank's reach and ultimately improve the bottom line.

You are required to: (10)
a. Briefly explain B2C strategy in the context of Internet Banking.
b. Identify the main differences between conventional and Internet banking?

8- Classify the following as TPS, ESS, DSS, KWS or MIS: (5)

    a. Document Imaging System
    b. Desktop Publishing
    c. Work Processing System
    d. Sales Commission System
    e. Employee Record System
    f. Graphics Workstation
    g. Order Tracking System
    h. Cash Management System
    i. Inventory Control System
    j. Profit Planning

Max time: 3 hrs   Max Marks: 60
Date: December 27, 2006

Instruction: Attempt all questions.

Q1- How can Internet technologies help a business form strategic alliances with its customers, suppliers, and competitors.   (5 marks)

Q2- Suppose you are a manager being asked to develop e-business and e-commerce applications to gain a competitive advantage in an important market for your company. What reservations might you have in doing so? Why?   (5 marks)

Q3- What strategic role can Information play in business process reengineering and total quality management.   (5 marks)

Q4- List at least 4 business benefits and management challenges of Server-Client networks, Network Computing and Peer-Peer networks.

(5 marks)

Q5- Explain as to how Information Systems supports the Management Hierarchy as given:
        -Operational Level
        -Tactical Level
        -Strategic / Functional Level
   a. Why is IS planning most difficult at the Functional level and least difficult at the Operational
   b. At what levels would you implement Transaction Processing System, Management Reporting System and Decision Support System? Why?
   c. Why is Accounting Information System implemented at the Operational level?
(5 marks)

Q6- How light cultural, political or geo-economics challenges affects a global company's use of the Internet. Give 2 examples of cultural, political and geo-economics challenges and list 4 business natures most likely to face such challenges.   (10 marks)

Q7- In what ways has RAD 9rapid application development) been able to affect:
   a. Information Systems reengineering
   b. Outsourcing
   c. Application developments
   d. Managing Data Resources   (15 marks)

Time: 3 hrs   **Max Marks: 60**

"Attempt all Questions"

Q1) a- Explain the System Development Life Cycle.   5 Marks
      b- SDLC is as effective for both Customs developed Software (Vertical Applications) and
         Ready made (General Applications). Discuss.   5 Marks

Q2) a- Define the following:
         Routers, Modems, Protocols, Intranet, Gateways   5 Marks

      b- Why the implementation of Intranet in an Organization improves its ability to
         Communicate, Secure, and Manage different levels of Operations   10 Marks

      c- Why the implementation of different IS is relatively easy in an Intranet as compared to
         where the Intranet is not available. List at least 3 different IS components when doing
         the Comparison.   5 Marks

Q3) a- Define the following:
         Internal Schema, Data Dictionary, Query Language   3 Marks

      b- A Financial Organization would prefer implementing a Financial Information Systems
         for its Operations instead of relying on a Database. Why? What role does the Database
         would be having in this scenario.   7 Marks

Q4) a- How has the Information Systems improved the ability of Organizations in:
         Operational level, Tactical Level, and Functional Level / Strategic Level.
                                            6 Marks

      b- Define the following:
         Financial Information Systems, Decision Support Systems, Executive Information
         Systems, Accounting Information Systems.   4 Marks

Q5) a- List and Define the Components of Computer based Information Systems.
                                             6 Marks

      b- In your view which of the component of CBIS is more affected by the rapid changes in
         Technology.   4 Marks

Instructions: Do as directed. There is no typographical error in paper; hence there should be no interrogation in exam duration. Answers should not be too i.e. to the point. Write the question number prominent at start of every new question, and every new question should be attempted on new page. Expressing the idea through the figure will be a plus. Return the question paper with answer script.

Attempt ANY SIX, All Marks are equally distributed

Question-1
  a. Why are Information Systems essential in business today? Describe the trends in the global business environment that have made information systems so important?
  b. What are organization, management, and technology dimensions of information systems?

Question-2
  a. What is the relationship between network revolution, the digital firm, electronic commerce and electronic business?
  b. What are enterprise systems? How do they change way an organization works?

Question-3
  a. What features do all organizations have in common? In what ways can organizations differ?
  b. Why is there considerable organizational resistance to the introduction of information systems?

Question-4
  a. Why are strategic information systems difficult to build?
  b. How is the internet changing the economics of information and business models?

Question-5
  a. How can intranets support organization collaboration?
  b. What is multimedia? What technologies are involved in?

Question-6
  a. Why should mangers pay attention to the total cost of ownership (TCO) of technology resources? How would using the TCO model effect the computer hardware purchase decisions?
  b. Why should managers be interested in computer storage, scalability and hardware capacity planning?

Question-8
  a. What criteria should be used when selecting software for the organization?
  b. Describe the principal types of database?

Question-9
  a. What is a decision-support system (DSS)? How does it differ from a management information system (MIS)?
  b. Define and describe the capabilities of an executive support system (ESS)?

Question-10
  Describe the functions, features and capabilities of ANY TWO of the following systems:
  a. Accounting Information Systems
  b. Financial Information Systems
  c. Human Resource Information Systems

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