

UNIVERSITY OF SWAZILAND

FACULTY OF COMMERCE

DEPARTMENT OF BUSINESS ADMINISTRATION

MAIN EXAMINATION 2007

TITLE OF PAPER: MANAGEMENT INFORMATION SYSTEMS I

DEGREE AND YEAR: DCOM III/IDE

COURSE NUMBER: BA 311

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS: 1. THIS PAPER CONSISTS OF SECTIONS (A) AND (B)

2. THE CASE STUDY SECTION (A) IS COMPULSORY

3. ANSWER ANY THREE QUESTIONS FROM SECTION B.

Note MARKS WILL BE AWARDED FOR GOOD COMMUNICATION IN ENGLISH AND FOR ORDERLY PRESENTATION OF WORK

THIS EXAMINATION PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

SECTION A

THE MACMILLAN MANUFACTURING COMPANY.

The MacMillan Manufacturing Company has a systems development backlog of 52 months. Managers are very anxious to accomplish some information systems development projects and are beginning to seek help of consultants. The information systems department, headed by Richard Price, does not want to lose critical projects that should be developed by MIS professionals. Richard also wants to investigate the possibility of using alternative development approaches to accomplish some of the projects. A list of some of MacMillans projects are as follows below.

- a. A manager in the production planning department wants an information system to help branch managers determine target ending inventory levels for their respective branch distribution centres.

The production planners need to access a sales history database for the past 18 months consisting of 3,500,000 records. Using these data, they would determine sales trends for various product lines. The sales analysis information would be used to determine the target ending inventory levels.

- b. The accounting department needs an information system to maintain records on funded government contracts. The budgets for each contract have to be updated weekly to reflect charges for manpower and equipment, transportation, services, and overhead expense. Monthly reports have to be prepared for the government agencies funding the contracts.
- c. The members of the corporate strategic planning department need an information system to enable them to analyse alternative capital budgeting decisions, including investments in real estate, new acquisitions, and new facilities.
- d. Senior management proposes developing an international order entry and billing system, making it possible to enter orders and invoice customers from all 12 district offices.
- e. The personnel office wants a computerised job applicant information system. This system would make it possible to identify prospective candidates for job openings [for example, Give me a list of all the job applicants with MBAs in finance]. In addition, the personnel director wants a database of current job openings so that the criteria for selecting candidates for particular positions could be matched with the applicant data file. In this way, lists of candidates with the qualifications for each job opening could be generated automatically and used to set up interview schedules.

Use Gremillion and Puyburn's framework to determine the development approach for each project. Traditional development, software packages, user development, and prototyping are possible development alternatives.

SECTION B

Question 1 is compulsory

Question 1 Normalise the following

Customer number, customer name, customer address, quantity, price, shipment method,
order number, item number, order date item number order date , customer number,
required delivery date, order number. 20 marks

Answer any two from the following questions

Question 2

List and briefly describe components that might be included in a database management software package. 20 marks

Question 3

Discuss the three (3) different types of controls. 20 marks

Question 4

Discuss the decision support system life cycle. 20 marks

Question 5

Discuss the roles of users and information processing specialists in the following systems development activities: 20 marks

Study of existing systems
Requirements determination
Assessment of feasibility
Design
Testing
Conversion
Post-implementation