

Ollscoil na hEireann, Gaillimh

THE NATIONAL UNIVERSITY OF IRELAND, GALWAY

Master of Information Technology

Management Decision Systems

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Time Allowed : Two and Half Hours

Candidates are required to answer 3 questions. All questions carry equal marks.

Question 1.

Maam Valley PLC is located on the Galway/Mayo border and is the third largest firm in the Irish food sector. Maam Valley began as a co-operative over sixty years ago and grew rapidly to become a key player in the dairy sector. As the largest bulk milk processor in the country it enjoyed considerable success in the early 1980's and in 1985 became a public company with a listing on the Irish stock exchange. Mike Staunton was appointed Group Finance Director in August of this year and replaces Dan O' Keefe who has been promoted to Group Chief Executive. Dan joined Maam Valley in 1979 as a management accountant and was part of the management team, which took the organisation public in 1985.

Maam Valley has made several large acquisitions over the past three years and now has over fifty operating sites in Ireland and the UK. These have recently been reorganised as Strategic Business Units (SBU's). Mike Staunton feels that while the existing management reporting systems are fine for financial control and stewardship purposes he is worried that they do not allow Maam Valley managers to effectively manage costs and revenues.

You are required to prepare a briefing memo for Mike Staunton on the potential contribution, which a new Enterprise Resource Planning (ERP) System could make to improve the companies operations. In particular Mike has asked you to address the following issues:

The functionality, which the ERP systems should provide

10 Marks

A review of the reasons why ERP implementations fail to deliver the promised benefits

13 Marks

The nature of Strategic Enterprise Management Systems which are currently emerging as part of ERP functionality.

10 Marks

Question 2

As part of a major restructuring arising from its separation from its parent accountancy firm a large consultancy organisation is in the process of re-assessing its approach to delivering services to clients. The firm specialises in providing advice to large multinational organisations, particularly in the areas of IS strategy and E-business application integration. The firm has rationalised its world wide network of 300 offices and nearly 8,000 staff to a situation where it now employs approximately 6,000 staff in 200 locations. As a result of the rationalisation the firm is keen to use knowledge management technologies such as Intranets to leverage the expertise of staff in different locations. In particular the firm feels that it can offer clients a better service by creating virtual problem solving teams based in different locations using the Internet.

As part of its strategy for implementing a knowledge management infrastructure it has retained you to advise the firm. In particular it has asked you to host a briefing for senior consultants in the firm outlining the potential contribution, which knowledge management technologies can make. In particular you have been asked to comment on the following issues:

The nature of knowledge management and the challenges it presents to the firm in question.

15 Marks

The types of knowledge management technologies which are available.

10 Marks

Critical success factors in deploying knowledge management technologies in a world wide organisation such as this.

8 Marks

Question 3

XAA Group is a large diversified financial services firm with significant share of the European Market. In mid 1999 XAA established a new subsidiary E-XAA to offer on line financial services to the 25-35 age group. The new venture has been extremely successful and the firm is now considering floating off the E-Business element under an IPO.

E-XAA enjoys a very good relationship with the parent company and relies on it for a large number of support functions including underwriting, capital markets and transaction processing. In particular E-XAA uses the XAA group IT infrastructure to administer all its client transactions. XAA group is paid a monthly transaction based fee for this service. The service offered by XAA group IT is limited to data processing and does not include any decision support systems or data analysis. As a result staff at E-XAA have had to rely on pc based modelling and analysis for their market and product analysis. This involves down loading large amounts of data from the XAA Group systems and analysing it using Excel. While this was feasible when E-XAA was quite small its rapid growth has made the continuation of this approach impossible.

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Meadhbh Barrett is the head of Business Analysis and Planning (BAP) within E-XAA. She has asked you to consult to the firm on the issue of data analysis and modelling. In particular she has asked for you advice on the following issues.

1. The potential role of data ware housing and data mining techniques in addressing the information and data analysis problems facing the firm.
18 Marks
2. A recommended approach to implementing a data warehousing strategy for the firm
15 Marks

Question 4.

HHD limited manufactures and distributes a range of drugs for the equine industry in Europe. Its clients include veterinary surgeons, pharmacies and those involved directly in the horse racing industry. The Personnel director of HHD Limited is interested in implementing a Human resource information system in a bid to improve the efficiency of the personnel function. In particular she feels that the introduction of the proposed system will improve the firms staff training and development and reduce staff turnover and recruitment problems. Since she knows very little about Information Systems she has asked you to prepare a briefing for members of the senior management team on the potential for HR information systems to improve the operation of the Personnel function of the firm.

Prepare a report for the Personnel Director in HHD on the following issues:

1. The types of HR functions which the new system should be expected to support
(10 Marks)
2. The inputs, outputs (including reports) which the system should have
(15 Marks)
3. Other relevant issues which the HR director should take into account when implementing the system across the group.
(8 Marks)

Question 5.

Write Notes on **Two** of the following

- Manufacturing Information Systems
- Decision Support Systems
- Customer Relationship Management Systems