

Ollscoil na hEireann, Gaillimh  
**THE NATIONAL UNIVERSITY OF IRELAND, GALWAY**  
**SUMMER EXAMINATIONS 2005**  
**HIGHER DIPLOMA IN SYSTEMS ANALYSIS**

**Business Information Systems (MS899)**

**Professor Sven Carlsson**  
**Professor J.F.Collins**  
**Dr. M. J.Fahy**

**Time Allowed : Two and a Half Hours**

**Candidates are required to answer three questions. All questions carry equal marks.**

**Question 1.**

Great Craic Teo is a travel agency specialising in the area of niche traditional Irish cottage/pub holidays. In the past the company has managed to exploit its well-developed network of contacts and reputation in the Industry to identify and exploit top class rental locations along the west coast. In addition it has succeeded in attracting considerable attention from overseas younger visitors looking for a non traditional Irish holiday. Last year the firm invested over €100,000 in its marketing and brand building activities and it now feels it is in a position to exploit the emerging "digital market".

Maire O Leary is the Managing Director of Great Craic Teo and she has retained your firm to advise her on key technology and strategy issues facing the firm. Specifically she has asked you to prepare a briefing memorandum for the senior management team on the following issues:

The role of IT in transforming a business such as Great Craic Teo.

**15 Marks**

Advice on how Great Craic Teo can exploit IT for competitive advantage

**10 Marks**

Other relevant issues including the challenges that face Great Craic Teo with respect to developing an e-business strategy.

**8 Marks**

### **Question 2**

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
2. The inputs, outputs (including reports) which the system should have
3. Other relevant issues which the HR director should take into account when implementing the system across the group.

### **Question 3**

The Capital Hotel Group owns and operates a large number of hotels in Ireland and the UK. In recent years the group has faced increased competition for low cost chains of budget hotels offering rates per room. As a result of this competition and the falling number of traditional tourists in the Irish provincial market the firms reported earnings have fallen significantly over the past eighteen months. In the past Capital has relied primarily on the hotel reservation system for financial performance measurement. This reflects the view of the previous Financial Controller that room profitability was the key performance metric. As a result the group has lost substantial market share and has not managed to grow revenues in value added services such as conferencing, pay per view, etc.

Capital Hotel Group has retained a team of consultants to carry out a review of the firms operations. Part of the consulting teams brief is to implement a new financial reporting system. As a member of the consulting team you have been asked to write a report for the Hotel Group on the following issues:

The nature of Financial/Accounting Information Systems

The type of reports and analysis capabilities you would expect the system to have.

Other issues to be considered when selecting and installing financial reporting systems

#### **Question 4**

Gerry Barry is the Marketing Director of a building society with offices through out the country. In recent years the society has faced increased competition from banks and insurance companies. In an attempt to improve the firm's operational control and financial performance Gerry is considering introducing a data warehouse. The objective of the proposed system is to allow the marketing department within the building society to better meet the needs of customers and to improve revenues.

The firm has well established branch transaction processing system that is linked to an existing customer database. The reports from this system are very detailed and are used mainly by branch and regional managers. Marketing executives in the building society currently rely on reports compiled manually using spreadsheets. These reports are produced by extracting information manually on each branch from the monthly printouts. In recent months senior executives have requested additional information on customer service, quality and opportunities for cross selling. Gerry's staff have had to generate this data manually in most cases. Gerry feels that the effectiveness of the building society could be improved if the society was to implement a data warehouse.

Gerry has asked you to prepare a memorandum for him and his staff on the following issues:

The key features of a data warehouse.

**15 Marks**

The benefits and the risks associated with data warehouses and

**13 Marks**

Other relevant issues.

**5 Marks**

#### **Question 5**

Focus is a large retail DIY chain with branches across the UK and Ireland. In 2001 the organisation implemented a state of the art Point of sales solution which capture detailed sales transaction data. Last year the organisation also introduced a loyalty card scheme which has proved very popular. To date however the firm has only carried out very elementary analysis on the data which has been captured. Chris Woods is the new marketing director of Focus and he has retained you as a consultant and he has asked you to brief marketing staff in Focus on the following issues;

The difference between data warehousing, data marts and data mining

**10 Marks**

The steps involved in the data mining process and advise on how Focus can turn the large amount of data into "actionable" knowledge.

**13 Marks**

The advantages and disadvantages associated with data mining

**10 Marks**

**Question 6 begins on next page..**

### **Question 6**

Turbine Limited (TL) is a large company involved in the manufacture of specialist chemicals for the international drug market. Since it began operations in Galway in 1993 the firm has used a combined accounting/production management system called BPCS. This system was widely used across the group but is now due for replacement. The Group Financial Controller feels that the time has come for TL to stream line its accounting information systems. In particular she feels that it is time for the Group to implement a corporate wide system based on a single software product such as SAP or Oracle. She has read a number of articles in recent months on moves towards this approach in a large number of multinational organisations. This headquarters based mainframe server would provide multi-company, multi-user and multi-currency capability. The real advantage of the system however would be that it will allow the Group Finance staff to extract consolidated monthly figures directly from the system themselves.

The Group Financial Controller visited the Irish plant last week and was impressed with the efficiency of the operation particularly with the IS function. She remarked that the IS function in Ireland was one of the most progressive she had seen within the Group. One of the results of the Group Financial Controllers visit is that a high level working group consisting of the Group Finance Director, the Head of European IS, three plant financial controllers and you, has been set up to review and report on the proposed changes to the systems in the group. In preparation for a meeting next week you have been asked to brief members of the working group on the proposed implementation.

#### **Required:**

Prepare a short report for the working group on the following issues;

The nature of Enterprise Resource Planning Systems (such as SAP, Oracle and Peoplesoft).  
**10 Marks**

The benefits associated with implementing such systems  
**13 Marks**

The causes of failure in ERP implementations.  
**10 Marks**