

Final Level

Management Accounting – Information Strategy

14

FLIS

20 November 2003

Thursday morning

INSTRUCTIONS TO CANDIDATES

Read this page before you look at the questions

You are allowed three hours to answer this question paper.
Answer the ONE question in section A (this is on pages 2 and 3).
Answer TWO questions ONLY from section B (these questions are on pages 4 – 7).
Write your examination number, your contact ID and your name on a double-sided card, which must be attached to your answer book.
Write FLIS on the line marked "Subject" on the front of the answer book.
Do NOT write your name or your contact ID anywhere on your answer book.
Tick the appropriate boxes on the front of the answer book to indicate which questions you have answered.

SECTION A – 50 MARKS

ANSWER THIS QUESTION

Question One

Background

The PRK Company owns and operates five "leisure parks" within one country. Each park consists of a central leisure complex containing a swimming pool, water slides and similar water-based activities with other sports, including tennis and windsurfing, being available in specialist accommodation at other locations in the park. Use of the central leisure complex is included in the price of admission to the park; all other activities must be paid for.

Customers at each park hire small houses to stay in for periods ranging from 2 to 14 days. Each house is located within a forest setting, with narrow paths linking it to the main walkways. Using these paths and walkways, customers can access any of the sporting activities within the park. The only methods of transport within the park are walking or cycling, which make it very safe for children.

While prices are not cheap (they range from €600 to €1,400 for a 7-day stay), demand is high due to the access to many different activities and the child-friendly layout of the park. The PRK Company expects a 98% occupancy rate during the summer months, falling to around 60% in the middle of winter. Between 500 and 1,000 houses are available at each of the five parks, with the leisure activities being built to accommodate the expected number of customers based on this number of houses.

Information on the PRK Company

The Company has been trading for 15 years, and built the parks within six years of commencing trading. The original finance was via an issue of share capital and a substantial bank loan. However, the bank loan has been repaid and there is now a small positive cash flow each year.

The five parks were built in existing forests. Care was taken to retain as many trees as possible; however, some tree-free areas were created for the main swimming complex and other leisure activities. The houses were normally built between existing trees, limiting environmental damage and adding to the "feel" of living in a forest.

Over the past three years, planning regulations have been amended, making the construction of any new park extremely difficult in terms of obtaining government approval. Other expansion plans include building new houses within existing parks, or investing in a completely new venture. Increasing the number of houses in existing parks is possible, as the PRK Company owns areas of open grassland around existing leisure parks. Another idea of building a leisure park based on the theme of children's plastic building blocks was considered by the Board to be too high risk.

The Board is now considering building 50 new houses in one of the parks. The Board is keen to accept the proposal to build, although the Management Accountant has requested more information on the precise costs and benefits involved.

Park information systems

Within each park, an information system collects details on the activities used by each customer. Every time a customer books a sporting activity, makes a purchase from a shop or orders food in a café or restaurant, the house number is recorded by a member of the PRK Company's staff. Payment is made at the same time via cash or credit card on a separate EPOS (Electronic Point Of Sale) system.

This information is maintained on a large database located in the park and referenced by house number and type of customer (for example, young adult, family group with young children, family group with older children). This information is required for two reasons:

- to check the bookings made for different sporting facilities so the appropriate facility can be made available to that customer at a specific time;
- to monitor use of facilities in order to try and forecast demand.

While the system works, it is very labour-intensive as a member of the PRK Company's staff must be available at all times to input customer bookings. Customers also tend to get frustrated with the amount of queuing necessary at busy times to book activities.

Fortunately, prices are amended only once every 12 months, making it relatively easy to maintain the bookings section of the database.

Upgrade of information systems

Three options for upgrading the information systems are being considered by the directors of the PRK Company:

- (1) Implement a new Executive Information System. This will provide information on all parks, showing trends in both sales and utilisation of facilities, as well as comparisons, where possible, with competitors.
- (2) Upgrade the existing information system to allow customers to make their own bookings, rather than having to contact a park representative. Bookings and payment would be made via touch-screen computer terminals in the park.
- (3) Design and implement an Internet site allowing potential customers to browse the facilities available at the parks and make on-line bookings to stay.

The Management Accountant has indicated that only one of these projects can be carried out in the current financial year, assuming that the proposed building project is accepted.

Required:

- (a) Identify and evaluate the information that should be required by the Board in order to make a decision on whether or not to invest in additional houses within an existing park. Your answer should *not* refer to financing or cost of financing.

(12 marks)

(b)

- (i) Explain the McFarlan strategic grid in the context of determining the importance of information systems.

(6 marks)

- (ii) For each of the three different information systems upgrade proposals, discuss the extent to which the McFarlan grid can be used to make an investment choice. Mention any additional information you would need to make this decision.

(10 marks)

For requirements (c) and (d), assume that information system option (2) is chosen by the Board.

- (c) Discuss how the Human Computer Interface can be designed to minimise input errors by park customers.

(12 marks)

- (d) Recommend to the Board an appropriate IT support system for option (2).

(10 marks)

(Total = 50 marks)

SECTION B – 50 MARKS

ANSWER TWO QUESTIONS ONLY

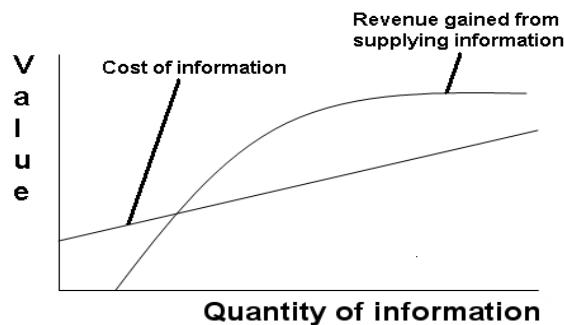
Question Two

The Q Company ("Q") is an information provider. It has been in existence for three years and has grown relatively rapidly, but in response to customer demand rather than following any specific strategy.

Companies and individuals approach Q and ask it to research and provide information on a wide variety of topics. Topics range from weather forecasts for specific regions or cities to complete case histories of individuals including their names, directorships, addresses, telephone numbers, family and any other details that can be obtained legally on the Internet.

To provide this service, Q employs a team of 20 staff: 4 receptionists/administrators, 6 software engineers and 10 information managers. The information managers use Q's specialist software to search the Internet to obtain the information requested by clients. Information is returned to the client within 48 hours, normally by an encrypted attachment to an e-mail.

The cost incurred and revenue received per customer by Q for this service are shown graphically below. To encourage new business, Q tends to offer an initial consultation and the first 500 words of information free to any customer. Revenues increase steeply after this, although most customers specify a maximum amount of information required, and therefore the revenue curve becomes horizontal.



After considerable discussion within Q, various suggestions were put forward to try and increase the company's profits.

- Decrease fixed costs by decreasing the number of software engineers and administration staff.
- Make Q's specialist software available to third parties under a licence agreement by an annual fee or one-off payment.
- Provide information in graphical format, not just text, and make this available to customers.
- Upgrade Q's Internet connection to "state of the art" to allow more rapid searches of the Internet, significantly decreasing the amount of time spent waiting for information.

No agreement was reached on a course of action, so an independent Management Accountant has been asked to provide a recommendation.

Required:

- (a) Prepare a report for Q, evaluating the four suggestions, with a recommendation on which suggestions, if any, to follow.

(16 marks)

- (b) Advise Q on how to develop an IS / IT / IM strategy.

(9 marks)

(Total = 25 marks)

Question Three

Required:

- (a) Explain the concepts of Process Innovation and Business Process Re-engineering.

(9 marks)

- (b) The Criminal Justice System in Xanadu aims to capture, detain and bring to court in a reasonable amount of time, individuals who may have broken one or more of the country's laws. A number of different departments are involved in this process, namely:

- the police;
- the Prosecution Service which collects evidence on crimes, with the assistance of the police force;
- the Criminal Courts where suspected criminals and their acts are discussed before a panel of judges; and
- the Probation Service which monitors known criminals to try and ensure that new crimes are not committed.

Each department implements and maintains its own IT systems on a regular basis. Communication between the departments is by typed memo or telephone call. E-mail cannot be used due to poor security with this communication medium.

Following a recent government spending review, an extra €30 billion has been allocated to improve the IT infrastructure within government departments. There is now a proposal to implement a new information system to transfer data over a new type of secure WAN between the four departments. The new system will also provide a common data format standard across these departments. Two departments have already indicated that their own separate information systems will be updated within the next 12 months.

Required:

Discuss a decision-making process that can be used to determine whether a system is suitable for process innovation, providing examples from the scenario to support your comments.

(16 marks)

(Total = 25 marks)

Question Four

The RBT Company manufactures tractors, harvesting machinery and similar farm equipment. The Company maintains one integrated office and factory near the capital of the country in which it operates. Due to restricted demand and the cost of manufacture of individual items, all equipment is manufactured to specific orders from clients. No stocks of finished goods are maintained although stocks of spare parts are available for sale.

The farm equipment is sold to farm owners by one of 20 sales representatives. The general procedure for making a sale is for the representative to visit the farm owner to discuss the owner's requirements. Basic price and model specification information are obtained from printed manuals that the representative carries. The representative then telephones the RBT office and confirms with production staff that the order can be made, checks the price and receives an estimated delivery date. An order confirmation is written out and the representative moves on to the next appointment. The farmer pays for the equipment on receipt.

As the country in which RBT operates is large, representatives cannot often visit RBT's office, so their price and model specification manuals may be out-of-date.

The Board of RBT is considering the introduction of a new information system. Each representative will be given a portable PC. Information on such things as products and prices will be kept on an Intranet and downloaded by telephone line when needed by the representative. A number of modems will be available at RBT's office for this purpose. Access to production managers and sales representatives will also be made via the Intranet; the voice telephone system will be discontinued and e-mail is thought to be unnecessary.

Required:

- (a) Evaluate the proposed use of the Intranet within the RBT Company showing whether it would provide an appropriate communication channel for the sales representatives. Suggest ways in which any problems you have identified with the new systems may be resolved.

(16 marks)

- (b) Identify and evaluate any information systems that can be used to provide clients with information on the progress of their orders with RBT while they are being manufactured.

(9 marks)

(Total = 25 marks)

Question Five

(a) Two sources of information that a manager may require are:

- times of trains running between two cities;
- detailed information on companies, including real-time current prices of shares on a stock exchange.

Required:

Discuss why some information has to be paid for, but other information is essentially free. Use the examples above to illustrate your answer.

(10 marks)

(b) *"Information Strategies are a waste of time."*

Required:

Discuss this statement.

(15 marks)

(Total = 25 marks)

End of paper