

UNIVERSITY OF SWAZILAND

FACULTY OF COMMERCE DEPARTMENT OF BUSINESS ADMINISTRATION

SUPPLEMENTARY EXAMINATION - JULY 2008

COURSE TITLE : INFORMATION SYSTEMS II
COURSE CODE : COM 502 - FULLTIME
CLASS : BACHELOR OF COMMERCE
TIME ALLOWED : TWO (2) HOURS

INSTRUCTIONS:

1. THIS PAPER CONSISTS OF SECTION (A) AND (B)
2. SECTION (A) IS COMPULSORY
3. ANSWER ANY TWO (2) QUESTIONS FROM SECTION B
4. THE TOTAL NUMBER OF QUESTIONS IN THIS PAPER IS FOUR (4)

NOTE: MARKS WILL BE AWARDED FOR GOOD COMMUNICATION IN ENGLISH AND FOR ORDERLY PRESENTATION

THIS EXAMINATION PAPER SHOULD NOT BE OPENED UNTIL INVIGILATOR HAS GRANTED PERMISSION

SECTION A

DataChoice

DataChoice (DC) is a Cape Town based corporation that provides risk-management and fraud-prevention services. Traditionally, DataChoice provided motor vehicle reports, claims history, and similar data to the automobile insurance industry. In recent years it broadened its customer base to include general business and government agencies. Today, it also offers data for volunteer and job-applicant screening and data to assist in the location of missing children. DataChoice has over 100 employees and its annual revenue ranges around R40 million.

At the beginning of the 2005 festive season (around November), DC was a victim of a fraudulent attack in which unauthorized individuals posed as legitimate customers and obtained personal data on more than 145, 000 individuals. According to the company's website:

These criminals were able to pass our customer authentication due diligence processes by using stolen identities to create and produce the documents needed to appear legitimate. As small business customers of DataChoice, these fraudsters accessed products that contained basic telephone-type data (name and address information) as well as a combination of Identity Numbers and/or Drivers license numbers and, at times, abbreviated credit reports. They were also able to obtain other public record information including, but not limited to, bankruptcies, liens, judgments, professional licenses, and real estate data.

DC became aware of the problem in January 2006, when it noticed unusual processing activity on some accounts in Pretoria. Accordingly, the company contacted the Pretoria Police Department, which requested that DC not reveal the activity until the Department had conducted and finalized an investigation. In March, the Police Department notified DC that it could go ahead and contact the customers whose data had been compromised.

This crime is an example of hackers in action. The infiltrators obtained valid Pretoria business licenses, and until their unusual processing activity was detected, appeared to be legitimate users. As such they were able to manipulate the system to their advantage.

In response to this problem, DC established a hotline for customers whose data were compromised, to call for assistance. They also purchased a credit report for each of these people and paid for a one-year credit report monitoring service. In April 2006, attorneys initiated a class action lawsuit for all 145,000 customers, with an initial loss claim of R75,000 each.

1. Based on your knowledge of network security issues, what type of attack was this? (10 marks)
2. Discuss 5 possible defensive measures that DataChoice should have had in place to minimize the attack on their systems. Give examples, related to the case, to how these measures would have helped. (25 marks)
3. What issues should DataChoice management consider when it comes to assuring security of their networks. Briefly discuss only 5. (15 marks)

SECTION B

1.
Discuss and elaborate, by using examples, the key drivers for outsourcing. (25 marks)

2.
Consider the primary activities of the Value Chain. Link these activities to the Operating and Innovating capabilities that corporations should aim for. (25 marks)

3.
Suppose you were a student-business that was involved in selling old textbooks to students. Pick one of the Market Networks Models and explain how your business would operate. (25 marks)