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**UNIVERSITY OF SWAZILAND**

**FACULTY OF COMMERCE**

**DEPARTMENT OF BUSINESS ADMINISTRATION**

**MAIN EXAMINATION 2005**

**TITLE OF PAPER:** MANAGEMENT INFORMATION SYSTEMS II

**DEGREE AND YEAR:** BCOM

**COURSE NUMBER:** BA 416

**TIME ALLOWED:** TWO (2) HOURS

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

2. THE CASE STUDY SECTION (A) IS COMPULSORY

3. ANSWER ANY TWO 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

### **State Mutual Life Insurance Company.**

State Mutual Life Insurance Company is a well-established company dedicated to providing quality and service to its upper-middle-class insurance customers. It has achieved its position in the insurance industry by offering popular term life and whole life programs. More than 800 insurance agents around the country market State Mutual policies and handle claims.

In the early 1970s, the company developed information systems to automate the paperwork associated with policy creation and maintenance and claims administration. In the 1970s, State Mutual upgraded most of these early batch systems to on-line systems, enabling local sales agents to create and maintain policyholder records from local agency locations. The new system meant that policy information could be updated in hours, rather than in days. By 1980 more than 800 sales agents were linked into State Mutual Life's on-line network.

In the early 1980s, State Mutual used its telecommunications network to provide new services to its agents. Agents were able to receive training and promotional materials about new product and service offerings at their local sites. In addition, they could use programs to analyse alternative policy options for their clients. By 1985 State Mutual had designed policy analysis systems for personal computers so that agents could use spreadsheet programs to determine the results of what-if questions. State Mutual also began developing PC-based software enabling local agents to create prospect databases and use them to make queries and generate mailing labels for promotional mailings.

By 1980 the insurance industry had changed dramatically. Competitors were designing new financial services, and new insurance products were being introduced daily. The two-to five-year product development cycle for insurance products was reduced to less than a year. To speed up the product development life cycle, State Mutual Life purchased a fourth-generation language and began to use the prototyping approach in systems development. It was able to reduce the lead time for introducing a new product offering by over a year using this approach. Programmers were also charged with developing information systems for new products so that State Mutual could have insurance products 'on the shelf' for introduction at convenient times.

During the early 1980s, office automation systems were introduced at corporate headquarters to improve white-collar productivity. A number of personal computer-based systems were also developed to provide better information about the profitability of certain buyer groups and the profitability of various policies. Using this information, State Mutual executives planned to develop a target marketing strategy. According to this approach, specific insurance products would be designed and offered to highly profitable customer groups.

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- A) Given the information about State Mutual Life Insurance Company's information systems, identify which systems are providing the firm with an advantage in its industry by supporting a particular competitive strategy. 20 marks
- B) Use a framework that you know that describes how information systems can be used to support various competitive strategies at the industry, firm, and strategy levels to explain which competitive strategies the various information systems projects at State Mutual support. 20 marks

SECTION B

Question 1

Different project types call for the use of different management tools. Discuss the following:

High-structured/Low-Technology projects 7.5 marks

High –structured/High-Technology Projects 7.5 marks

Low-structure/Low-technology projects 7.5 marks

Low-structure/High-technology projects 7.5 marks

Question 2

The value chain has been a powerful tool for identifying and analyzing the stream of activities through which products and services are created and delivered to customers. It is now believed that IT can affect one or more of these value activities sometimes by improving effectiveness, sometimes by fundamentally changing the activity and sometimes by altering the relationship between activities. In addition, the actions of one firm can significantly affect the value chain of key customers and suppliers.

Analyse the value Chain for IT opportunities 30 marks

Question 3

a) Analyse the benefits of doing business on a networked infrastructure 16 marks

b) Discuss the pressure towards IT control 14 marks