

**UNIVERSITY OF SWAZILAND**  
**DEPARTMENT OF BUSINESS ADMINISTRATION**  
**MAIN EXAMINATION PAPER**  
**MAY, 2014**

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**TITLE OF PAPER : STRATEGIC INFORMATION SYSTEMS**

**COURSE CODE : BA 502 FULL TIME /IDE BA 502**

**TIME ALLOWED : THREE (3) HOURS**

- INSTRUCTIONS:**
- 1. THE NUMBER OF QUESTIONS IN THIS PAPER SIX (6)**
  - 2. SECTION A IS COMPULSORY.**
  - 3. ANSWER ANY THREE (3) QUESTIONS IN SECTION B**
  - 4. THE MARKS TO BE AWARDED FOR EACH QUESTION ARE INDICATED ALONGSIDE THE QUESTION.**

**NOTE: MARKS WILL BE AWARDED FOR GOOD COMMUNICATION IN ENGLISH, AS WELL AS FOR ORDERLY AND NEAT PRESENTATION OF WORK. FURTHER MARKS WILL BE AWARDED FOR USE OF RELEVANT EXAMPLES.**

**SPECIAL REQUIREMENTS: NONE**

**THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.**

SECTION A

**Delta and Tellabs Seek Higher Return on Investment,**

In these days of performance-based information systems, managers have to work hard to get their information system requests approved. Requests to develop a new information system or improve on existing systems are closely scrutinized by senior managers to assure that the investment is effectively supporting corporate goals and will bring in a quick return.

Delta Technology, the IT arm of \$16 billion Atlanta-based Delta Air Lines, presents a good example of this trend. "We have been carefully reviewing every project and every spend [expense] with approvals at the senior vice president level. Before, we delegated decisions to a lower level," says Curtis Robb, senior vice president and chief technology officer. "Finance is also much more actively involved in business cases that are developed [for IT projects]." In other words, Delta and many other companies have found it necessary to implement return on investment (ROI) standards and procedures for measuring return on information system investment.

Curtis Robb says there are critical issues that businesses must address to ensure ROI. The first is total cost of ownership. Each of Delta's business teams must develop plans that look ahead four years, he says. They look at not only the purchase price but also the "tail behind that purchase price"—hardware, software, maintenance, and support, Robb says. The second issue is finding the right level of support for the system once it is in place. Rightsizing maintenance contracts has helped Delta shed \$10 million in expenses. Standardizing technology has also helped the company save on training and development costs. Rather than building new systems from scratch, Delta designs generic systems to allow portions of systems to be reused on new projects as they arise. The final issue is time to market. At Delta, "solution architects" are assigned to projects from the start to help create a blueprint and determine a timeline.

Once an information system project is under way, it is important to provide oversight to ensure that the project brings in a return. Some companies create technology review boards to provide monthly reviews of IS proposals. Projects are reviewed each month to make sure scope, costs, and time frames are on target.

Implementing a system such as Delta's often meets with a considerable amount of cultural resistance. Tellabs, a Naperville, Illinois-based communications equipment maker, has faced obstacles in implementing its new procedures for measuring return on IT investment. When information system proposals were reviewed for approval, CIO Cathy Kozik found a number of inaccuracies and a general lack of honesty. Managers and staffers were finding it hard to be objective due to concerns over budget cuts and worries about automating themselves out of their jobs. To overcome the honesty and accuracy problems, Kozik asked that financial controllers from each unit oversee the calculations of each proposal.

Implementing ROI standards must be a gradual process, Kozik warns. If Tellabs forced its ROI process on workers, "it would have collapsed under its own weight," she says. "Instead of going from 0 to 120, we're going from 0 to 30, 30 to 60."

The role of the CIO becomes all the more valuable to an organization when striving toward a high ROI. The CIO bridges the gap between top-level executives who may be technically naïve, and lower-level staff who may be more interested in preserving their jobs than saving the company money. Only the CIO can assure that the organization is getting the highest possible return on its information system investments to gain an advantage over the competition.

## QUESTIONS

1. How will the quest for leaner, meaner information systems affect innovation in the industry? Which IS employees are in danger of losing their jobs? 20 marks
2. As Delta and its competitors strive for higher return on investment, what types of initiatives will give these companies a competitive advantage? 20 marks

**SECTION B**

ANSWER ANY 3 QUESTIONS

**Question 1**

The Johannesburg stock exchange is an organisation that is performing very well and wants to move from one level of IT leadership to the next level. Which level would you suggest it moves too, and why? 20 marks

**Question 2**

Discuss the IT investment categories. 20 marks

**Question 3**

There are no single best model of IT governance. Discuss the principles that promote effectiveness in designing and implementing an IT governance initiative. 20 marks

**Question 4**

Discuss the business model capability audit in relation to business network analysis and leadership analysis 20 marks

**Question 5**

Discuss the IT impact on capabilities 20 marks