



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018

**FIRST SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF BUSINESS
ADMINISTRATION**

BMS 841: MANAGEMENT INFORMATION SYSTEMS

DATE: Tuesday, 21st November 2017

TIME: 2.00p.m-5.00p.m

INSTRUCTIONS:

Answer question **ONE** and any other **THREE** questions.

QUESTION ONE

Study the case below and answer the questions that follow;

Sawa Kabisa (SK), the 163 year old consumer good giant, has traditionally aimed at doubling its sales every decade and has usually succeeded – until recently. During the last five years, annual sales growth has slowed down from 5% to 2.6%. Teja, SK's new CEO, is trying to revitalize the company to make faster and better decisions, cut red tape, wiring costs out of systems and procedures, and, fuel innovation. According to Gusa, the company's CIO, if SK doesn't change, "we won't be around in the next 160 years".

A key component in SK's ambitious change program is the use of internet and other technology to streamline its business processes and its supply chain. Taking a cue from Ukuta, one of its largest customers, SK built a system that uses data collected from point-of-sale terminals and have purchased and that need restocking. Sk also has electronic links to suppliers, so that it can order materials from them when its inventories are low. The system helps SK reduce its inventory by allowing the company to produce products as they are demanded by retailers.

To make better use of internet technology, SK started work on Kauli Kubwa system that would replace a private network with 400 electronic links to suppliers and retailers with a more cost-effective system using the web. The system would use internet technology to link retailers and suppliers to Sk's private corporate internet.

By making it easier-and-less expensive- for retailers and suppliers to integrate their systems with Sk's systems, SK hopes to reduce product cycle time by half, inventory costs by sh.28 billion, and systems costs by sh.35 billion. SK's volume of business with small and midsize retailers had not been large enough to justify the cost of linking these firms to SK's inventory replenishment system over a private network. These companies were still placing orders manually to SK. SK created a special Hesabu Kamili (HEKA) running on a PC orders to SK based on their customer demand from their point-of-sale or inventory systems to SK's billing system for both large and small retailers are more efficient than the systems they replaced because even the older networked systems often required some degree of manual work.

Retailers can use the new system to feed information about their category-management needs to SK. SK in return can feed information back to retailers about shopper purchases and market position. SK can analyze this information and then use it to help retailers figure out, for instance, the mix of various shampoos that sell best at a particular store location. The information could also be used to provide SK's suppliers with more precise information about what items and materials need replenishment.

- i. Explain three ways in which the web technology is useful to SK in creating its industrial networks (6 marks)
- ii. Describe five ways how SK can use the Web technology in its industrial network for strategic advantage. Briefly explain your answers in relation to Porter's Five Forces model (12 marks)
- iii. Discuss three problems are likely to be experienced by SK in using the web and how SK can get around it. (6 marks)

- iv. Key information system implemented by SK is supply chain management systems (SCM). Discuss five objectives of SCM and identify various areas that SCM systems can be used in business environment. **(10 Marks)**
- v. SK management was aware that being in a digital economy they had to turn their firm into digital firm. Explain three implications of SK turning to a digital firm **(6 marks)**

QUESTION TWO

- i. Physical facility controls are methods that protect organizational computing and network facilities and their content from loss or destruction. With reference to information systems security, describe three such controls showing how they enhance information security **(12 marks)**
- ii. Discuss four advantages and disadvantages of developing applications for projects/organizations with database management systems as compared to developing them with a conventional file based system **(8 Marks)**

QUESTION THREE

- i. Discuss four key management challenges involved in building and using information systems, highlighting the significance of the challenges. Illustrate your answer with valid examples. **(12 marks)**
- ii. Your firm wishes to develop a system that will process an application. The management in your information systems department advises that it be developed – in house. Your information systems consultants advise, however, that it be outsourced. Discuss the situation in your firm if it chooses to follow:
 - i. Management advise **(5 marks)**
 - ii. Consultant advise **(5 marks)**

QUESTION FOUR

- i. System conversion is a key stage in the implementation of a new information system. It can make or break a business. Discuss five factors that a firm should consider in choosing a system conversion approach in information systems development; highlight the significance of each factor **(10 marks)**

- ii. Information systems are used as a catalyst of fundamental changes in the structure, operations, and management of organizations. Discuss (10 marks)

QUESTION FIVE

- i. With reference to information processing, describe four key information technological trends that raise ethical issues, showing how they raise the issues. (12 marks)
- ii. Your organization is planning to upgrade its network architecture to leverage on the benefits of telecommunication and to assist in day to day operations of business. Advise the management of any four factors to consider in choosing a better network architecture (8 Marks)