



MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

THIRD YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)

SIT 307: INFORMATION SYSTEMS MANAGEMENT

DATE: 24/3/2021

TIME: 8.30-10.30 AM

INSTRUCTION:

Answer Question ONE and any other TWO Question

QUESTION ONE (30 MARKS)

Case Study

TITLE: ROYAL HOTEL'S ESPRESSO! RAPID RESPONSE SOLUTION

The Royal Hotel in New York City, NY was a luxury all-suite hotel primarily serving an executive clientele visiting Manhattan on business. These guests were busy and demanding as they used their suite not only as a place to sleep but also as a temporary office. The general manager stressed the importance of the high quality of service due to the high percentage of repeat guests. "Our guests are extremely discerning, it is completely unacceptable to have a light bulb out in the bathroom when the guest checks in, particularly if she is a returning guest," the general manager said.

To ensure the extremely high quality of service, the general manager decided to purchase and install M-Tech's Espresso! Rapid Response Solution. With this new technology, the housekeepers could report deficiencies directly to the computer, instead of verbally communicated to the maintenance department after they ended of their shift. The housekeepers just needed to dial a special code from the phone in the guest room and an automated attendant would walk them through the reporting process step by step in the language of their choice. Espresso! Then automatically generated, prioritized and dispatches a work order to a printer, fax, or alphanumeric pager. Therefore, the new system should be able to reduce the response time as the housekeepers did not have to wait until the end of the shift to tell the maintenance department, and sometimes they even forgot to tell the maintenance department. Also, Espresso! Had a reporting function so that the management team

could obtain information about most frequently occurring or recurring issues, top reporting and completing performers and so on. With this kind of information, the maintenance department could identify recurrent problems and stop them before they even occurred.

Upon installation, a week of on-site training was also offered. The installation and the training session seemed to run smoothly. Employees appeared eager to learn about the new system. However, soon after roll-out the GM discovered that the employees had reverted to the old manual system and had rapidly lost interest in Espresso.

Case questions

- a) Determine and explain the building blocks of the system in this case study. (8 marks)
- b) “However, soon after roll-out the GM discovered that the employees had reverted to the old manual system and had rapidly lost interest in Espresso”. This statement is a testimony that something went wrong with the project. Determine factors that led to this unfortunate ending. (8 marks)
- c) From the case study discuss FOUR strategic goals that the management intended to accomplish with information systems. (4 marks)
- d) Discuss TWO methods you would use to gather system requirement in the case. (4 marks)
- e) Evaluate the suitability of the TWO information requirement methodologies that are used to determine information system requirements. (6 marks)

QUESTION TWO (20 MARKS)

- a) An organization you are working for installed Information System to achieve various strategic goals. The management want to know whether the system has had any value to the company. Determine the analysis model to use and explain how the model can be used to address the management’s problem. (8 marks)
- b) Recently an organization that has been operating without information system installed an Information systems. Owing to the new system the organization employees has noted a significant change as well as effects to their jobs. Explain to the affected employees FOUR spectrums that are associated with such problem in information systems. (8 marks)
- c) Draw a distinction between general controls and application controls in information systems. (4 marks)

QUESTION THREE (20 MARKS)

- a) Propose FOUR pitfalls that an organization should avoid to enable successful implementation of information system. (8 marks)
- b) Discuss FOUR key features that inform the storage and retrieval of Information in Information Systems. (8 marks)
- c) With the help of a diagram illustrate FOUR functional uses of intranet in an organization. (4 marks)

QUESTION FOUR (20 MARKS)

- a) Information systems have enabled the development of many enterprises in Kenya based on various models. Analyze THREE online businesses in Kenya and discuss the business models applied in each business. (6 marks)
- b) A newly launched e-commerce platform was compromised by hackers and customer data was stolen as well as loss of business. Propose to the management FOUR measures to take to secure the e-commerce platform. (8 marks)
- c) An e-commerce system is required by an upcoming online shop. Propose the appropriate database model to be used for this system. (6 marks)

QUESTION FIVE (20 MARKS)

- a) Demonstrate the change effect an information system has to an organization. (8 marks)
- b) As an ICT manager of a given learning institution, you are requested to advise the institution on the best way forward to carry out an automation project of some of its processes. Develop a brief document on FOUR areas that needs to be considered for this project. (8 marks)
- c) As a system developer you should be concerned about the vulnerability of the system. Justify the main concerns that you should consider regarding the security of the system. (4 marks)