UNIVERSITY OF ESWATINI

FACULTY OF COMMERCE
DEPARTMENT OF BUSINESS ADMINISTRATION

MAIN EXAMINATION – DECEMBER 2018

COURSE TITLE   : MANAGEMENT INFORMATION SYSTEMS I

COURSE CODE   : BUS211/ BA215

PROGRAMME   : BACHELOR OF COMMERCE – (FULL TIME & IDE)

TIME ALLOWED   : THREE (3) HOURS

INSTRUCTIONS:

1. THIS PAPER CONSISTS OF SECTION (A) AND (B)

2. SECTION (A) IS COMPULSORY.   TOTAL MARKS **50**

3. ANSWER ANY TWO **(2)** QUESTIONS FROM SECTION B.

                                                                            TOTAL MARKS **50**

4. THE TOTAL NUMBER OF QUESTIONS IN THIS PAPER IS FIVE (5)

5. THE TOTAL NUMBER OF PAGES IS SEVEN (7).

<u>NOTE:</u> MARKS AWARDED WILL ALSO BE INFLUENCED BY GOOD COMMUNICATION IN ENGLISH AS WELL AS ORDERLY PRESENTATION, ESPECIALLY WHERE STATED.

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

SECTION A. - COMPULSORY

Vodafone Egypt has been consistently progressing since its establishment in 1998 until it ranked the first mobile provider in Egypt in May 2012. Yet, it is difficult to always maintain the company's position in the Egyptian market where competition – with the two other mobile operators in Egypt (Mobinil and Etisalat) – is fierce, and customers are continuously having higher expectations. It is becoming more challenging to provide a premium service to an increasing number of consumers. The company faced additional pressure in 2012 with the initiative of launching a fourth mobile operator. The Egyptian Telecom Company (ETC) – the government-owned company that has a monopoly over landlines – decided to be a mobile virtual network operator (MVNO). As such, ETC is supposed to purchase minutes from the three mobile operators in Egypt and sell them to consumers. At the same time, Vodafone Egypt has been growing very fast and so has the number of its employees. The need for smoothing and streamlining processes within and among different departments became evident, but without compromising on the control functions.

How can ICT assist in sustaining Vodafone's edge at this critical stage?

Company background

Vodafone is a telecommunications company that offers mobile services, solutions and products. Internationally, Vodafone is one of the leading communication companies with headquarters located in London, United Kingdom. Vodafone first started operating in Egypt in 1998, providing the consumers with great variety of technological solutions for both businesses and consumers. The key of its success lies in its customer-driven strategy that focuses on understanding customers' needs and thriving continuously to satisfy them. Their consumer-focused perspective has entitled them to remain on the top of technological advancement, being able to cope with the extremely rapid technological innovation. Moreover, they adopt the latest information technology tools and concepts in their different operations.

Vodafone is the number one network in Egypt, with a primary target to permanently be the best mobile operator. Vodafone has the highest market share at 41.5 per cent (around 40 million subscribers), followed by Mobinil (33.6 million subscribers), and then Etisalat (22.6 million subscribers). The company's ideology is adapting to continuous change. Therefore, their work place theme is dynamic and innovative for achieving this aim. Employees at Vodafone constitute a team of professionals who work incessantly to develop and enhance Vodafone Egypt's voice, data, transport and fixed networks. Customers are provided high-end, efficient and excellent enterprise services through a dedicated team of over 6,500 employees working in different activities.

Types of services

Vodafone Egypt provides a variety of services to its customers:

- Voice: Vodafone Egypt is the largest carrier of mobile voice services, providing domestic, international and roaming voice services to more than 370 million customers worldwide.

-Messaging: Vodafone Egypt's network received and sent over 292 billion text, picture, music and video in 2011.

-Data: More than 75 million customers bought Vodafone Egypt's mobile data services that allow access to the internet, emails and other applications on their phones, tablets or any other device.

- Fixed line: Vodafone Egypt provides fixed line services to all its customers worldwide. They provide wholesale carrier services to over 40 African countries.

Other: Other revenue generating services include secure remote network access and revenue from MVNOs generated from selling access to Vodafone Egypt's network at the wholesale level.

Market position

The company leads its competitors in driving their customers to migrate to smart phones and data packages. Vodafone continues to capitalize on its main key growth areas of data, enterprise and emerging markets, while maintaining investment in improving its network quality and in developing new services.

With IT being the core of the company, Vodafone has to ensure that the software they depend on is efficient and up to date. Technology used in the operations is classified into two main categories: networking and billing.

The Networking part is the core IT system of the company, where one can check the coverage of the data and its quality (2G, 3G or 3.5G). The system also enables the gathering of statistics that pinpoint the defected areas.

As for the billing system, it is divided into six main software applications:

1. Ericson billing system: Responsible for recording voice call information (duration of the call, call per minute, total cost, etc.). Moreover, it is the main database of all Vodafone customers (30 million). It is always up-to-date, as Vodafone checks continuously with its customers for any updated information. In case of any missing personal information, the account is considered illegal and cannot be activated until its correspondent customer completes her/his information. The system is therefore a very useful tool for eliminating all unregistered consumers.

2. S Bill: Concerned about consumer relationship management. It mainly supplies consumers with the usual "superior" customer services for Vodafone two main users' segments:

Regular customers – Retrieve all their personal and usage pattern information from their phone number or from the serial code at the back of the phone's SIM card.

Premium customers – Provide a variety of offers such as giving free minutes, text messages, free points, etc. "Premium Vodafone Consumers" are detected by the system based on their usage capacity, pattern, and type of service.

3. Business intelligence (BI) system: Used by sales/marketing teams. It solely gives information and statistics for promotional campaign purposes without interfering with each customer's personal account. Output of this system constitutes a competitive edge for Vodafone Egypt due to the valuable information obtained from sophisticated data analysis. The BI system has solutions for almost anything in the company starting with the IT department and ending with the Supply Chain. It deals with a large amount of information – about almost everything; hence, Vodafone Egypt is 100 per cent dependent on it for daily business processes. The system also provides information about promotional offers and incentives provided by the competitors for their loyal customers. Reliable and up-to-date information in this regard serves the company in responding efficiently to competitors' initiatives.

4. Point of sales system (POS): A basic inventory system for Vodafone Egypt official stores that keeps track of every product's stock. As soon as a product reaches a minimum level set by the staff, it sends an order to the main inventory system of Vodafone Egypt, which orders automatically this missing product without any human intervention.

5. External system: Basically for non-Vodafone retailers to keep track of their performance and their relationship with customers (outside the company retailers' network).

6. Internal system: The primary financial management system that covers human resources, warehouses and contactors' management, integrating both networking and billing systems serves in providing superior customer service.

The change

Enter Project Evo, Vodafone Egypt's migration to SAP ERP. This project was part of a project that covers Vodafone companies worldwide. The company's Evo ERP project (Evo is short for "Evolution") was its "largest ever business transformation" that covers finance, human resources and supply chain. Vodafone's head of ERP, Marcus Cotes declares that "it's not an IT programme for the sake of Technology; It's a case of IT delivering a major strategic transformation".

He confirms also "the project was vital because it enabled Vodafone to operate on a global basis with common processes and systems". Evo system would help in reducing transaction costs, increasing back office efficiency and facilitating global procurement.

At Vodafone Egypt, the implementation project of Evo programme started in 2007 and was completed in 2011. The first project's stage was in 2008; SAP modules were implemented in a Shared Services centre, a Procurement centre and the Hungarian and German markets. A year later, Portugal and The Netherlands went live. In 2010, Vodafone transferred to SAP in its other functions in its London headquarters, Spain and Africa. By 2011, the system was expected to cover the remaining company branches: Italy, Greece, Turkey, New Zealand, Egypt and Czech Republic.

Besides its alignment with Vodafone international, the new Evo system helped Vodafone Egypt in linking the three departments – Human Resources, Supply Chain and Finance – which provided better control over the joint processes between them. The communication process is nearly eliminated, as the

system allowed for immediate access to information among the three departments. The overall supply chain became more efficient, as information arrives complete, accurate and instantly to the Supply Chain department from HR, thus allowing for quick actions.

The IT systems adopted by Vodafone Egypt in 2011 helped the company in solving many problems, especially with the growing volume of the company, the increasing customer demands, competition of the other two players in the market, and the planned launch of a fourth operator. How can Vodafone Egypt maintain its position in this turbulent atmosphere? What could be the role of IT in assisting the company – as always – in functioning successfully despite all these concerning occurrences?

Case Study Questions

1. Discuss Porter's Competitive Forces as they relate to Vodafone Egypt. Specifically discuss how each force is challenging Vodafone Egypt. Also provide a brief working solution on how IT can be used to reduce the impact of these forces. Use the following tabular layout to present your work.   **(30 marks)**

Competitive force (1 mark)	How the competitive force has challenged Vodafone Egypt (3 marks)	How I.T can be used to reduce the impact of this challenge presented by this competitive force (2 marks)
1.		
2.		
3.		

2. Based on the case, which are the two most serious competitive forces to Vodafone Egypt? *Use headings* to separate your two paragraphs   **(6 marks)**

3. Which of Porter's Generic strategies would be ideal for Vodafone Egypt? Identify only two [2]. How would IT be used to make the identified strategy more effective? *Use the following tabular layout to layout your work.*   **(14 marks)**

Strategy (1 mark)	Why it would be ideal for Vodafone Egypt (3 marks)	How IT can be used to support this strategy (3 marks each)
1.		
2.		

SECTION B – ANSWER ANY TWO QUESTIONS FROM THIS SECTION

Question 2

Using the following tabular layout, list the expected outcome of the following elements in an IT project, highlighting only two (2) outcomes that can be expected from each element.   **(25 marks)**

Project Element	Expected Outcome (3 marks each)
1. Management	1. 2.
2. Organisation	
3. Information System	
4. Business Solution	

Question 3

Identify and explain five (5) business models that organisations pursuing an E-Comm strategy may choose to adopt. For each business model provide an example of an organisation already pursuing that E-Comm strategy. Use the suggested answer layout to present your work.   **(25 marks)**

Model (1 mark)	Explanation of that model (3 marks)	Company using this model (1 mark)
1.		
2.		

Question 4

Explain fully the concept of Business Planning Processing and its role in determining information needs for an organization.   Use the following answer layout.   **(25 marks)**

What Business Systems Planning is (4 marks)	
Its role in determining info needs (3 marks)	
Benefits of BSP (3 marks each)	1. 2. 3.

Limitations of BSP (3 marks each)	1.
	2.
	3.

Question 5

Refer to the case in Section A. What are significant benefits to the organisation for implementing an ERP system? *__Using the following tabular layout__*, address only five [5].　　　**(25 marks)**

Significant benefit (1 mark)	How it will help Vodafone Egypt (4 marks)
1.	
2.	