BISM7202 Information Systems for Management
Semester 2, 2022
Sample Exam

Weighting	This assessment is weighted at 50% of your total mark for this course.
Permitted materials	This is a closed-book exam. Only non-marked dictionary is permitted.
Instructions	Answer all questions. The exam in total contains **100 points** (but **50% of total course marks**): It includes two parts: Part I: twelve Excel MCQs. 1 point per MCQ, a total of 12 MCQs, 12 points, equivalent to 6 marks. Part II: four problem-solving mini-cases (each with sub-questions) addressing each 'teaching block' of the course. A total of 88 points, equivalent to 44 marks. Word limit: As a practical matter you must restrict your answers to each individual sub-question to approximately 300-500 words. Aim to be concise and clear in your answers. There is no minimum requirement.

Part I: Excel
(12 MCQs, Total of 6 Marks)
You need to circle the best answer for each question.

(1)   A$1 is an example of:

  A   An absolute reference

  B   A mixed reference

  C   A relative reference

  D   A column reference

  E   An external reference

(2)   The reference of the cell in the 27th column and on the 42nd row is:

  A   AA42

  B   A27:A42

  C

  D

  E   Z27:Z42

(3)

...

(12)

Part II: Four Cases on Information Systems Management
(4 Cases, 11 Short Answer Questions, Total of 88 points equivalent to 44 Marks)

Case A: Amazon
Digital and Shared Economy
(TOTAL: 16 POINTS)

Read the following problem-solving mini-case for Amazon and answer the questions at the end.

Amazon is known for its disruption of well-established industries through technological innovation and mass scale. It is the world's largest online marketplace, AI assistant provider, live-streaming platform and cloud computing platform as measured by revenue and market capitalization. Amazon is the largest Internet company by revenue in the world. It is the second-largest private employer in the United States and one of the world's most valuable companies. As of 2020, Amazon has the highest global brand valuation.

Amazon Marketplace is an e-commerce platform owned and operated by Amazon that enables third-party sellers to sell new or used products on a fixed-price online marketplace alongside Amazon's regular offerings. Using Amazon Marketplace, third-party sellers gain access to Amazon's customer base, and Amazon expands the offerings on its site without having to invest in additional inventory.

In December 2016, Ama[...] grocery store in Seattle, Washington (USA) with t[...]n shop and then walk out with their products witho[...]on. [...] and the store is enabled with their "Jus[...]le technologies such as computer vision, sensor fusion and machine learning. The vi[...] tems and when leaving the store, the shopper's Amazon account will be cha[...]

Answer all the following THREE (2) questions.

1) Describe the key concepts of the digital marketplace and their impact on the digital marketplace. In doing so, consider how digital markets are different to real-world 'bricks and mortar' markets (6 points) and how digital goods are different to physical goods (4 points).

   (10 points)

2) List and Briefly discuss THREE (3) types of innovation at Amazon.

   (6 points)

Case B: Shepparton Canned Produce Company (SCP)
Business Process Management
(TOTAL: 24 POINTS)

Read the following problem-solving mini-case for Shepparton Canned Produce Company (SCP) and answer the questions at the end.

Jonno Markopoulos is the manager of a fruit canning factory in Shepparton, Victoria, called the Shepparton Canned Produce company (SCP). At SCP, local fruits such as peaches, apricots, plums and cherries are canned and exported overseas.

Fruit growers use the internet to submit their invoices for delivered goods online, and this information is maintained in spreadsheets that are printed and faxed to SCP, where Jonno's sister-in-law, Xiaoqi Markopolous, enters the information into MYOB.

The factory is very labour-intensive and it requires highly skilled workers to can these fruits. It is slow work as much of the equipment is old.

The goods produced have to meet stringent quality guidelines before they can be exported to other countries such as New Zealand, Indonesia, and Singapore. The international market for these commodity goods is also very competitive, and any breach of the quality guidelines is likely to cause significant harm to SCP's future prospects.

With Australia's high wag̲ ... knows that the factory has to be both efficient and ef ... ory is particularly dependent upon technology for its success, and is looking to ... s to how he can improve how the factory does things.

Answer all of the following THREE (3) questions:

1) In Lean management, there are seven types of waste that may be addressed to improve a company's business processes. List possible FOUR (4) types of waste that SCP may have in the current business process, and provide a brief discussion for each type of waste that you identify.

    (8 points)

2) Explain the three quality management approaches for process improvements discussed in seminars and in your readings to Jonno. In your explanation, be careful to define each approach (3 points) and compare and contrast each approach with the other two approaches (6 points). In your view, which approach is most suited to SCP's circumstances? Give reasons for your answer (3 points).

    (12 points)

3) Jonno has highlighted that efficiency and effectiveness are both critical. However, you are concerned that such terms are often used incorrectly. Write an email to Jonno that clearly explains the meaning of efficiency (2 points) and effectiveness (2 points) with examples of each. In this email, discuss which one, if any, is more important than the other in the context of SCP (1 point).

    (4 points)

Case C: Queensland Government Vaccination Program
Information Systems Development
(TOTAL: 24 POINTS)

Read the following problem-solving mini-case for the Queensland Government vaccination program and answer the questions at the end.

Since 2020, the whole world has been significantly impacted due to the impacts of COVID. One of the strategies being introduced by governments worldwide is to aim to vaccinate a large percentage of their population against COVID. The Australian government has adopted this approach. State governments are responsible for coordinating their citizens' vaccinations.

The Queensland Government has opened multiple state-run mass vaccination clinics such as the one located at the Exhibition Centre. The Queensland Government has introduced an online booking system which patients can use to make a booking when they are trying to receive their first of two vaccinations. As this is the first time all patients use use the system and make a booking, they must also register as a patient. Patients also have the option to make a second booking before they receive their first vaccination.

Answer all of the following THREE (3) questions

1) In seminars, we _____ ods. Provide a high-level overview of wate_____. In your view, which software develop_____ justifying your view (2 points).

    (10 points)

2) Provide a definition for both User Stories and a Use Case. Develop ONE(1) User Story and ONE (1) Use Cases from the mini-case (2 points). Discussion the relationship between User Stories and User Case (3 points).

    (5 points)

3) In your answer booklet, draw an appropriate USE CASE DIAGRAM reflecting the above statement.

    (9 points)

Case D: Mattress Review
Business Analytics
(TOTAL: 24 POINTS)

Read the following problem-solving mini-case for Mattress Review and answer the questions at the end.

Trond Nyland, Founder & CEO, Mattress Review set out to build strong SEO (*Search engine optimization)* for his website by getting lots of links from quality websites using traditional SEO techniques like guest posting and blogger outreach.

Nyland took a data-driven approach to target this outreach. "We used Ahrefs to get data on which high-quality websites give out lots of backlinks. We figured these websites would be most likely to link to us and specifically focused on targeting them," Nyland said.

His team focused 80% of its effort on these high-potential websites. After two months, they'd gotten about 170 links from the high-potential websites and just eight from all the other websites. That represents a more than 400% improvement in efficiency by targeting websites that, statistically, give out lots of links. "Long live data!" Nyland said.

The team was able to garner a Domain Rating of 51 in about four to five months using this targeted approach.

Answer all of the following

1) List and briefly discuss THREE (3) types of business analytics.

   (6 points)

2) In this mini-case, the marketers turned information into insight. In your view, is the use of Ahrefs data to inform the guest posting and blogger outreach strategy an application of Big Data (4 points)? What's the ethics of SEO optimisation in your opinion (5 points). Discuss why/why not.

   (9 points)

3) In your judgement, which of the data analytics as discussed in seminars did Nyland take in this case? Justify your answer in the context of this case.

   (9 points)

<The End>