MBAB 821 EXAMINATION WITH MARKING MEMORANDUM

Question 1:

Impact of technology:

a. Briefly describe 5 major technologies that will have an impact on the world in the next 5 to 10 years. (15 marks)

Answer:

There are numerous technologies that will have an impact on the world varying from big data, artificial intelligence (AI), virtual/ augmented reality (VR/AR), machine learning, intelligent automation (IA), space technologies, drones, farming, etc. The student can pick any technology and then provide a short reason why it will impact the world as it is today.

b. Given the South African context describe how these technologies will impact the workplace, i.e. the future of work. (10 marks)

Answer:

The student is required to think out of the box. It is important that the student puts forward an argument that takes into consideration the current South African context. An unemployment rate of approximately 50% or more, A very low CAGR, low productivity, a population of million 57, a poor educational system, strong union influence, etc. The student needs to show that exponential technologies as mentioned above, and more, can generate jobs. However, automation will also make jobs redundant. Issues such as better education, reskilling, a different way of skilling people, etc., must be taken into consideration.

c. In the same context how will these technologies impact the healthcare environment. (10 marks)

Answer:

For this question students will have to demonstrate some insight into the technologies that will affect healthcare, e.g. nanobots, genomics, possibly the impact of 3-D printers, performing operations remotely, etc. This again has to be done in the context of the country and needs to take into consideration the national health plan, the shortage of qualified medical personnel, access to health care, etc.

d. What role can the government play to help use technology to the benefit of the country. (5 marks)

Answer:

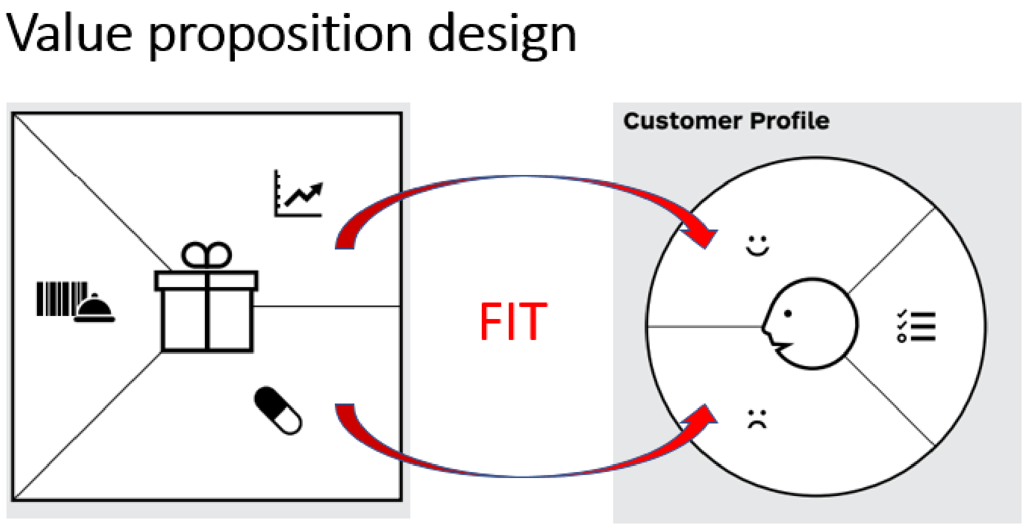
This is an open-ended question and requires students to think outside of the box. Typical issues could include the national health plan, unions, the national development plan and others.

Question 2:

How does "value proposition design" align with the business model canvas? Briefly describe the value proposition design. (10 marks)

Answer:

Students must identify the link to the business model canvas. Furthermore, they must identify the products and services an organisation provides, what alleviates customer pains and what facilitates gains. On the customer side they also must identify customer jobs, etc.



Osterwalder A, Pigneur Y, Bernarda G, and Smith A 2015. Value Proposition Design: How to create products and services customers want. From: https://strategyzer.com/books/value-proposition-design (accessed on 30/5/2018)

Question 3:

In your own words describe what a blockchain is? (10 marks)

Answer:

"A **blockchain** is a growing list of records, called *blocks*, that are linked using cryptography. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data. By design, a blockchain is resistant to modification of the data. It is "an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way".For use as a distributed ledger, a blockchain is typically managed by a peer-to-peer network collectively adhering to a protocol for inter-node communication and validating new blocks. Once recorded, the data in any given block cannot be altered retroactively without alteration of all subsequent blocks, which requires consensus of the network majority. Although blockchain records are not unalterable, blockchains may be considered secure by design .

Blockchain was invented by a person (or group of people) using the name Satoshi Nakamoto in 2008 to serve as the public transaction ledger of the cryptocurrency bitcoin. The identity of Satoshi Nakamoto is unknown. The invention of the blockchain for bitcoin made it the first digital currency to solve the double-spending problem without the need of a trusted authority or central server."

(Wikipedia. Blockchain. From: https://en.wikipedia.org/wiki/Blockchain (accessed on 27 September 2019))

Question 4:

Describe the internal attributes of Amazon that makes it an exponential organisation. (20 marks)

Answer:

Students need to need to use the attributes listed and apply it to Amazon.

Internal attributes:

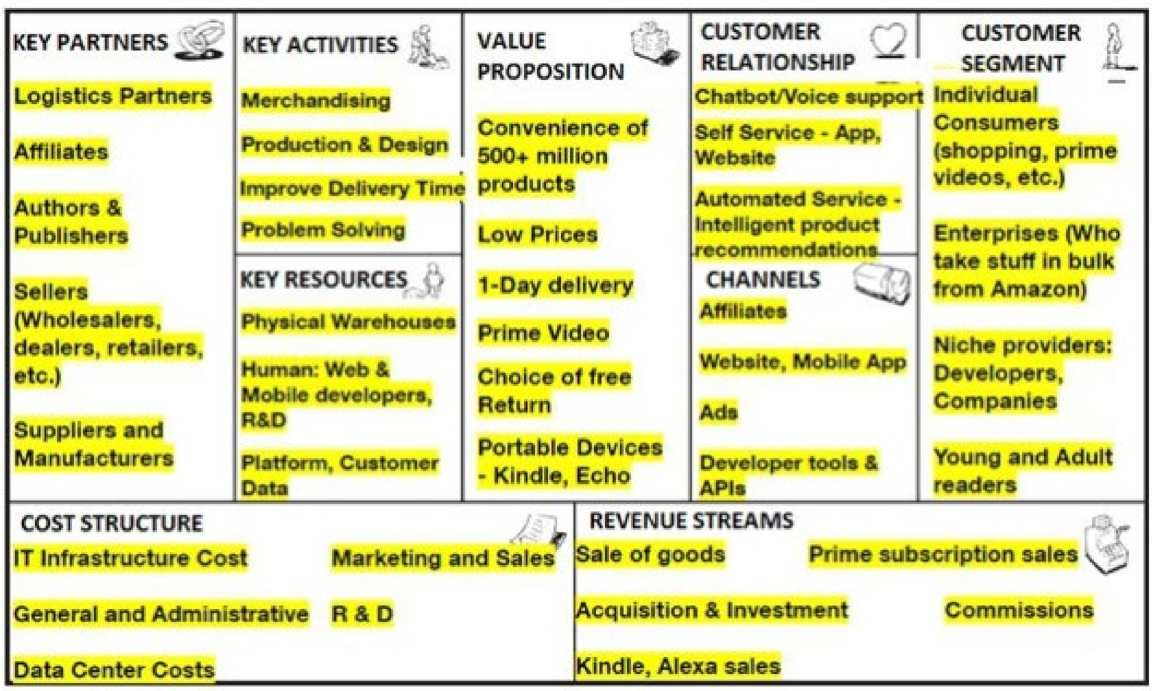
- Interfaces - Interfaces are algorithms and automated workflows that route the SCALE outputs as efficiently as possible to the right people within the organization
- Dashboards - To track and monitor performance, all members of an organization can access real-time metrics via a dashboard
- Experimentation - Experimentation - ExOs use methods facilitating rapid experimentation and process improvement through fast feedback loops
- Autonomy - ExOs have flat hierarchies to promote agility and accelerate learning and reaction times.
- Social technologies - Social Technologies - Social technologies drive real-time, zero-latency conversations across the organization.

(Dormakaba. Innovation at Dormakaba. From: https://www.dormakaba.com/innovation/11-characteristics-of-exponential-organizations (accessed on 23 September 2019)

Question 5:

Draw the business model canvas for Amazon. (20 marks)

Answer:



Amazon Business Model – Business Model Canvas

(Digital Slipper. The Ultimate Guide to Prepare a Business Model Canvas in 30 Minutes. From: https://www.digitalsipper.com/guide-to-prepare-a-business-model-canvas/ (accessed on 23 September 2019))

TOTAL/TOTAAL: 100