



**STRATHMORE INSTITUTE
DIPLOMA IN ENTREPRENEURSHIP
END OF SEMESTER EXAMINATION
DE 1105: CUSTOMER DISCOVERY AND BUSINESS PLANNING**

DATE: August 24th 2022

Time: 2 Hours

Instructions

1. This examination consists of **FIVE** questions.
2. Answer **Question ONE (COMPULSORY)** and any other **TWO** questions.
3. Do not write on the question paper.

QUESTION ONE (1) (30 MARKS)

There is a quote from Thomas Edison that goes “There’s a way to do it better – find it. That’s just what Ken did. Smart Tap provides a hand washing solution to high population density institutions. The mobile solution can be attached to existing plumbing systems or as a standalone solution complete with its own water and liquid soap supply. The Smart tap uses technology to dispense just the right amount of water and soap to the user. It can distinguish between an adult and child user and dispense just the right amount of soap and water. Its inbuilt water recycling system allows for the collection and treatment of wastewater as people wash their hands. This water can be recycled. By attaching an irrigation system or high-pressure cleaning system, the water can be used in the garden or for cleaning buildings or cars.

Ken the founder of Smart Tap acknowledges that his invention would not have seen the light of day were it not for good partnerships. It has taken ten times more money to bring the idea to market. When Ken started out, he was sure the 10 million grant funding from the Climate and Innovation Centre was going to be more than enough. He had grossly underestimated the cost associated with putting together a team that could build, test and rebuild the product.

Ken knew that children are mostly impacted by disease due to poor hand washing/lack of hand washing, he partnered with a school to help him develop his innovative product. Now with a finished product at hand, Ken is eager to find out how to best market his product. He also needs to raise additional funding. He searches online for “investors” and sees an online flier about an incubator at the Strathmore University. As he reads the flier, he decides, maybe, he should also join the incubator.

- a) Ken is using the Porter Five Forces tool to understand the Water and Sanitation industry that his business will be a part of. (I) Explain the effect of each force and (II) identify two indicators that the force is strong **(15 Marks)**

- b) Ken is considering raising money through crowd funding. Describe the fundraising method and identify 2 advantages and 2 disadvantages associated with this approach **(5 Marks)**
- c) What two benefits might Ken enjoy if he joins the incubator **(2 Marks)**?
- d) Ken is also considering selling equity to raise funds. Identify two disadvantages of this approach to raising funds. **(2 Marks)**
- e) Identify three advantages associated with having a business plan **(3 Marks)**
- f) Identify three reasons entrepreneurs might not want to write a business plan **(3 Marks)**

Question Two (15 Marks)

A report by the ministry of health shows that children are spending too much time on electronic gadgets and not enough time outdoors. This coupled with eating fast food has resulted in childhood obesity. Najma and Nalani are interested in helping the children get healthier. Nalani suggests that they should create an innovative product that combines gaming and physical activity for both boys and girls. She is sure that if they have a good product the parents will sign up their children. Najma suggests that they take a customer discovery approach in coming up with a product or service for the children.

- a) Using a drawing, explain the customer development model **(10 Marks)**
- b) Identify any five major flaws of the product development model Nalani is suggesting. **(5 Marks)**

Question Three (15 Marks)

- a) Using a drawing, explain the four stages of product development **(10 marks)**
- b) Earlyvangelists are a special breed of customers willing to take a risk on your startup's product or service because they can actually envision its potential to solve a critical and immediate problem— and they have the budget to purchase it. Identify five characteristics of Earlyvangelists **(5 Marks)**

Question Four (15 Marks)

- a) Explain the design thinking process **(10 Marks)**
- b) Identify any five barriers to creativity **(5 Marks)**

Question Five (15 Marks)

- a) Providing examples, discuss the four main ways in which an entrepreneur can segment their market **(8 Marks)**
- b) You have been hired by a company that sells peanut butter. The owner of the company needs help coming up with ideas to differentiate her product in the market. Explain how you can use the SCAMPER tool to help the owner **(7 Marks)**