



“Investing in Africa’s Future”

COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

PIP 504 – TECHNOLOGY TRANSFER, IP ASSET MANAGEMENT AND SMEs

NOV 2019

LECTURER: Prof C. Ncube, Dr M. Sibanda and Prof Mafoti

DURATION: 3 HRS

INSTRUCTIONS

1. Answer **ONE** question in **Section A**, **ALL** question in **Section B** and **TWO** questions in **Section C**
2. Use only the Examination Answer Book provided. Obtain a Continuation Answer Book if necessary.
3. Write legibly and concisely
4. You are expected to give a critical analysis of each question.
5. If you cite the works of any author, make sure you give credit and acknowledgement to that author.

6. Provide the following information on the cover page of the Examination Answer Book.
 - 6.1 Write your University I.D. number clearly in the space provided. Do not write your name on the Answer Book.
 - 6.2 Write the Course Code & Course Title indicated above in the space provided.
 - 6.3 For College write 'CBPLG'
 - 6.4 For Programme write 'MIP'
 - 5.5 For Academic Year write 2018/19
 - 5.6 For Semester Number write 'Residential Phase'

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO

SECTION A ((Answer ONE question in this Section))

1 Accentuate the importance of IP policy for both National and Research and Development centers. **[20 Marks]**

2 How can Africa grow industrially taking advantage of innovations and the dictates of IP rights. **[20 Marks]**

3 Discuss the importance of IP evaluations and audits as it pertains to revenue generation of organizations **[20 Marks]**

SECTION B (Answer All questions in this Section)

1. Provide a definition of innovation. Is there a difference between an invention and innovation, if so, provide an explanation **(2 Marks)**
2. In less than one page, please provide an analysis of the importance of proprietary technology and/or intellectual property for building a successful business. **(5 Mark)**
3. Summarise Austrian Economist Joseph Schumpeter's definition of an entrepreneur. **(3 Marks)**
4. Describe a business model according to Osterwalder. **(3 Marks)**
5. The Business Model Canvas had nine (9) elements. Draw the BMC listing the nine elements in each part of the BMC. Also identify which ones are referred to as the Back-end, Front-End and Bottom Line. **(4 Marks)**
6. Founded in August 2008, Airbnb is described as an online marketplace and hospitality service that enables people to lease or rent short-term lodging. These include vacation rentals, apartment rentals, homestays, hostel beds, or hotel rooms. The company does not own any lodging but acts as a broker between people with rooms or lodgings that they wish to rent out for extra cash. For every booking that is made through its platform, it receives percentage service fees from both guests and hosts. According to the company public records, it now has over 3,000,000 lodging listings in 65,000 cities and 191 countries. The cost of the lodging is set by the host; however the company provides a standards framework to guide this. Users access its services either via a website or an app on their phones.

- a. Using the information you have been provided, prepare a Business Model Canvas (BMC) for Airbnb **(9 Marks)**
 - b. What are Airbnb's key intellectual property assets **(1 Mark)**
7. What are the four (4) components of the Lean Business Methodology according to Eric Ries? What do you need to do in order to start the process of learning? **(3 Marks)**

SECTION C (Answer TWO questions in this Section)

Question 1

“Fundamental shifts in the supply and demand of intellectual property (IP) have dramatically altered the way leading companies are thinking about IP strategy. A decade ago, companies wielded IP primarily as a weapon to exclude rivals from a domain or to generate royalties. But today, the best IP strategy is often to “make love, not war”—to collaborate rather than confront.”

Wendi Backler , Tatu Heikkilä , and Derek Kennedy (2018)

Discuss, with reference to the options available and the considerations that must be factored into deciding on an IP strategy by an SME in a developing country. **[20 marks]**

Question 2

- a) Discuss the main challenges faced by innovative SMEs in a developing African country in using the Intellectual Property System to obtain, and grow, income from their innovations. **[10 marks]**
- b) How can policy makers and legislators adapt the IP system to reduce or eliminate these challenges? **[10 marks]**

Question 3

You work for the Department of Small Business Affairs in a developing country and have been asked to advise department because AfricaPesaNow (APN) a large financial investor is considering investing in one of the four SMEs described below. You have been instructed to conduct a thorough due diligence investigation of the intellectual property assets of these SMEs. The results of your investigation will determine whether or not the Department would recommend the funding for the SME.

- (a) List ten specific questions or requests that you would ask of the SMEs you are investigating. The descriptions below should give you ideas of some important issues that may exist with these SMEs, but do not rely exclusively on the descriptions when formulating your list of questions. That is, there may be general questions that are critical, but which are not directly suggested by the descriptions (e.g., How many patents does your company own?) **[10 marks]**
- (b) State, with reasons, which of these SMEs you rank first for financial investment. (Select one of the four SMEs which you consider to be most suitable for funding) **[5 marks]**
- (c) Advise the SME you selected in (b) above on the main IP-related provisions it should ask for in the investment agreement it will conclude with APN **[5 marks]**

SMEs

1. GyroScopic – a manufacturer of mid-market telecommunications satellites (the AW-GZ). Customers are primarily governments in developing countries and small telecom operators.
 - GyroScopic was spun off from Franconia Technologie, a large but financially-troubled defense contractor, three years ago.
 - Ten years ago, Franconia’s R&D group received an African Union innovation grant to fund the development of electronics systems for an African manned space vehicle.
 - The basic telemetry system used in the AW-GZ satellite is also used in Franconia’s F-123 fighter jet and a torpedo line that Franconia sold to NemoTech last year.
 - GyroScopic is currently defending litigation in which its chief competitor, Solar Systems, has alleged that the AW-GZ heat shield infringes two of Solar’s patents; the litigation is currently in the discovery stage.
 - The chief engineer of GyroScopic, an inventor on 14 of the SME’s patents, recently resigned for unspecified reasons. He now runs a bakery in a suburb of Paris.
2. ScholarWare – a vendor of accounting software systems for colleges and universities. It sells three basic packages: Fish, Soph and Grad, in increasing order of cost.
 - Fish, a low-end product aimed at schools with the smallest enrollment, was acquired in a bankruptcy sale from the now-defunct Bustopher Systems.
 - Soph grew out of a custom development project that ScholarWare conducted for the West Akron Vocational Institute (WAVI).
 - The high-end Grad product was coded primarily by an Eastern African software development shop called BulgarTech who are known primarily for their leadership of the “exposE” open source project.
 - ScholarWare’s leading sales manager recently defected to BigSoft, a software vendor who has just announced the pending release of FratSys, a product that sounds suspiciously like ScholarWare’s Soph system.

3. Cordelia Therapeutics – a venture-backed biotech company co-founded by Nobel-winning biochemist Rutger Stanford from the University of West Africa (UWA) and Takeda Sankyo the former Chief Scientist at South African pharmaceutical giant KSG.

- Dr. Stanford's research at UWA is funded by NIH and the private Lostand Foundation. Cordelia does not have a product on the market yet, but is working on a novel flu vaccine made with THX-1139, a compound recently discovered by Dr. Sankyo's lab in the larvae of a Guatemalan moth.

- Dr. Stanford was recently involved in a messy and highly-publicized divorce from his wife and former graduate student, Dr. Elizabeth Coli. She is now the Chief Science Officer of Vaxhall, a Kenyan vaccine developer that has achieved some commercial success with a bovine influenza vaccine.

- To fund initial animal trials of its vaccine, Cordelia received a capital investment from KSG and a secured loan from Sand Valley Bank (SVB).

4. Bake Lite – the manufacturer of a successful line of low-fat food products including Cheeze-lite, Baco-lite, Lite-dogs and the market-leading Choco-lite (a zero calorie chocolate substitute). Bake Lite sells its products throughout the world, directly and through major food distributors and grocery chains.

- Bake Lite recently sold its Fruitiola division (artificial fruit flavoring) to General Dietetic, a multinational concern. Fruitiola is famous for its uniquely fizzy aftertaste, a sensation that is also produced by other Bake Lite products.

- The "Lite" brand and fanciful "Slim Jim" cowboy character are well-known throughout the world and numerous knock-offs appear regularly on the market. The most notorious of these is the Lyte-dogg, a product whose actual ingredients are unknown but which has appeared in markets throughout Southeast Asia and is promoted by a suntanned westerner that bears a striking resemblance to Jim.

- Bake Lite recently terminated its agreement with PostreSud, a large Botswana based baked goods distributor, and has announced plans to distribute its Choco-lite products directly in Southern Africa.

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