



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2021/2022**

COURSE NAME : TECHNOLOGY STRATEGY AND
BUSINESS PLANNING

COURSE CODE : MPE 10103

PROGRAMME CODE : MPE

EXAMINATION DATE : JANUARY 2022

DURATION : 3 HOURS

INSTRUCTION :
1. ANSWER ALL QUESTIONS
2. THIS FINAL EXAMINATION
IS AN ONLINE ASSESSMENT
AND CONDUCTED VIA OPEN
BOOK

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

Q1 Business models are necessary features of market economies where there is consumer choice, transaction costs, and heterogeneity amongst consumers and producers, and competition. Profit-seeking firms in competitive environments will endeavour to meet variegated consumer wants through the constant invention and presentation to the consumer of new value propositions.

Additionally, technological innovation often necessitates business models, which creates both the need to bring discoveries to market and the opportunity to satisfy unrequited customer needs. At the same time, new business models can themselves represent a form of innovation. There are a plethora of business model possibilities: some will be much better adapted to customer needs and business environments than others. Despite that, selecting, adjusting and/or improving business models is a complex art. Good designs are likely to be highly situational, and the design process is expected to involve iterative processes.

Developing a successful business model (no matter how novel) is insufficient in and of itself to assure competitive advantage. Once implemented, the gross elements of business models are often quite transparent and (in principle) easy to imitate. Indeed, it is usually just a matter of a few years, if not months, before a successful new business model elicits imitative efforts. In practice, successful business models very often become, to some degree, “shared” by multiple competitors.

Source: Teece, D.J. (2010). Business models, business strategy and innovation. Long Range Planning, 43 (2), 172-194. DOI:10.1016/j.lrp.2009.07.003

- (a) Demonstrate **THREE (3)** stages of the Teece Model. (9 marks)
- (b) Analyze **FOUR (4)** stages of resource-based approach to strategic analysis. (16 marks)

Q2 Polarify is a joint venture of Sumitomo Mitsui Financial Group/Sumitomo Mitsui Banking Corporation (SMFG/SMBC), Daon and NTT Data. Available as an API, App or Software Development Kit that enables real-time, cross channel biometric authentication and onboarding, Polarify offers an efficient way for banks and other service providers in Japan to replace existing customer authentication methods with secure and convenient biometric authentication and adopt a paperless Know Your Customer (KYC) process for streamlined digital onboarding.

“We searched the market and examined a number of technology providers,” said Tomohiro Wada, CEO of Polarify. “Several offered strong biometric engines that would run on the customers’ end devices, as well as a solution that would plug into other vendors’ biometric engines. But only Daon offered what we considered most important: an ongoing assessment process of biometric technology, which requires a very high level of expertise. We have the peace of mind of knowing that Daon’s experts are continuously assessing biometric technology as it develops—and if it passes Daon’s assessment, we know we can rely on it. The team is collaborative and supportive, but their skills and technical expertise are just world-class. The most difficult aspect of biometric authentication is that the technology of biometric engines changes so quickly. As a company, we need to have the best, but we can’t continually research and investigate that ourselves. We know we can totally rely on Daon’s support. We don’t have

to worry about the biometric engine itself; we can just focus on our service, for our market.”

Source: Daon (2019). How sumitomo mitsui, ntt, and daon partner to bring passwordless authentication and e-kyc to japan. <https://sf.tradepub.com/>

- (a) Outline **FOUR (4)** advantages of joint ventures. (12 marks)
- (b) Conclude **FIVE (5)** risks that likely to arise if the companies joint ventures. (15 marks)

Q3 Xerox established its Palo Alto Research Center (PARC) in California in 1970. PARC was responsible for a large number of technological innovations in semiconductor lasers, laser printing, Ethernet networking technology and web indexing and searching technologies. Still, it is generally acknowledged that many of its most significant innovations resulted from individuals who left the company and firms which spun off from PARC rather than developed via Xerox itself. For example, many of the user-interface development at Apple originated at Xerox, as did the basis of Microsoft’s Word package. By 1998, Xerox PARC had spun out 24 firms, including ten that went public such as 3Com, Adobe, Documentum and SynOptics. By 2001, the value of the spin-off companies was more than twice that of Xerox itself.

A debate continues to the reasons for this, most attributing the failure to retain the technologies in-house to corporate ignorance and internal politics. However, most technologies did not simply “leak out” but instead were granted permission by Xerox, which often provided non-exclusive licenses and an equity stake in the spin-off firms. This suggests that Xerox’s research and business managers saw little potential for exploiting these technologies in its own businesses. One of the reasons for the failure to commercialize these technologies in-house was that Xerox had been highly successful with its integrated product-focused strategy, which made it challenging to recognize and exploit potential new businesses.

Source: Chesbrough, H. (2003). Open innovation: the new imperative for creating and profiting from technology. Harvard Business School Press, Boston, MA.

- (a) Elaborate **FIVE (5)** reasons for companies’ spin-offs with a relevant example for each one. (15 marks)
- (b) Propose **FIVE (5)** motives for establishing corporate ventures. (15 marks)

Q4 Airbnb, the peer-to-peer accommodation rental platform, is a name that emerged over the past few years due to the advancement of technology that transformed the traditional way of people looking for accommodations. Due to its positive reputation worldwide, Airbnb is the most successful peer to peer model for the hospitality industry. It managed to pull a lot of attention from both academics and practitioners as a sharing platform network in the hospitality industry that was able to attract a large number of participants on both sides of its two-sided platform. Airbnb describes itself as a “trusted community marketplace for people to list, discover and book unique accommodation worldwide”.

However, the COVID-19 pandemic that appeared at the end of 2019 had a devastating effect on almost all aspects of social and economic life, including Airbnb. Airbnb guests cancelled their reservations or did not make new ones after the pandemic had started to spread. As a result, occupancy rates stagnated or decreased.

Source: Boros, L, Dudas, G., & Kovalcsik, T. (2020). The effects of COVID-19 on airbnb. Hungarian Geographical Bulletin 69(4):363-381. DOI:10.15201/hungeobull.69.4.3

- (a) Develop a new Business Model Canvas (BMC) for Airbnb considering the dynamic changes in the business environment due to the pandemic crisis.

(18 marks)

- END OF QUESTIONS -