

THE FORMATION OF SPINOFF COMPANY IN MTUN UNIVERSITY

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The thesis is submitted in partial fulfilment of the requirement for the award of bachelor's degree of Technology Management (Innovation) with Honours.



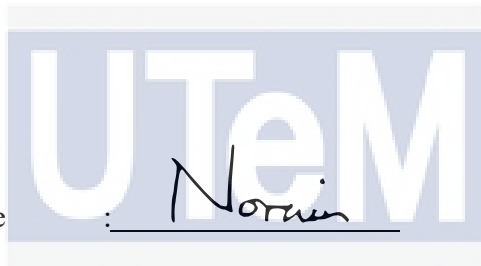
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DEDICATION

I dedicate every tear of sweat in completing this research to Allah S.W.T,

To my family who have been my source of will,

Last but not least my supervisor leads me on every path throughout the research.



ACKNOWLEDGEMENT

First, I would like to express my gratitude to Allah SWT that given me strength and ability to complete this final year project successfully. Not to forget my supervisor ASSOC. PROF. DR. NORAIN BINTI ISMAIL who have accepting me to be part of the team. Her guidance and advice for completing the research always led me to the right path.

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Abstract

The aim of this research is to understand on the formation of spinoff company in MTUN university in Malaysia. The topics on spinoff company is not widely research in Malaysia. Hence the researcher decided to do the research. Spinoff company can be regarded as a business venture. Spinoff company can be from academic and from corporate. For this particular research, exploratory research design and qualitative research method was being chose due to the ability to help the researcher to develop a better comprehension towards the topic. This research is beneficial for those academicians and university management in order to develop more academic spinoff within university.



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CHAPTER 1

INTRODUCTION

This chapter will discuss the background of the research regarding to the formation of spin off company in university in Malaysia. There is problem statement which explains the problem that require to be solved. Then followed by the research question and research objectives. Next, scope of the study refers to the aspects of this study being investigated. Limitation in the meantime will also be discussed about the boundaries and constraints faced. Next, significant of study will be conducted to explain on the timeline and implications. Summary will be explored this chapter where it summarizes the results and the findings.

1.1 BACKGROUND OF STUDY

What is a spin off? According to Amy Fontinelle in 2019, spinoff company founded likely when a firm decided to create a new independent company by trading or administering supplementary parts to existing business. University spin-offs (USOs) are considered economically significant firms and an important mechanism for transferring new technology to industry (Bathelt et al., 2010; Meoli et al., 2013; Rasmussen et al., 2006; Walter et al., 2006). A corporation creates a spinoff in the hopes of increasing its value as a separate entity. Spinoff corporation can be called a starburst or a spinout. Spinoff occur for a lot of cause. A firm may determine to spin off a section so they can concentrate on assets and managing the division with the better future potential. Spinoffs are perhaps the most important and profitable vehicles for commercialization, contributing millions to university budgets (Pitsakis et al., 2015).

University spinoffs have significantly improved the relationship among academia and industry. The amount of university-based technology patents as well as spinoffs does have a substantial impact on area economic and social growth. Academic entrepreneurship is getting popular, and universities are gradually getting recognised as more than just a source for the formation of high-tech businesses. (Pinaki and Satyendra, 2014). Universities increasingly shifting beyond their conventional duties like research, educating, and sharing of knowledge towards a more sophisticated function of developing spinoffs and supporting academic entrepreneurial, while greater exposure is concentrated somewhat on connection across science, technology, and university spinoffs. (Lerner,2004). University spinoffs is important for economic development (Lowe,2002). At the same time university spinoffs have been helping commercializing university technologies (Etzkowitz,2003). The existence of university spinoffs has change people opinion on university that university is just a place for them to study and get their degree.

An entrepreneur is a person who starts a new firm and bears the most of the risks while reaping the majority of the benefits. Entrepreneurship refers to the process of starting a business. The entrepreneur is frequently portrayed as a creator of new ideas, products, services, and, business or operations(Adam Hayes,2021). Entrepreneurs are critical to any economy because they have the ability and initiative to anticipate requirements and bring new ideas to market. Entrepreneurship that succeeds in taking on the risks of starting a business is rewarded with revenues, fame, and chances for continued expansion. Failure of an entrepreneur leads in losses and diminished market presence for individuals involved.

Ministry of Higher Education (MoHE) Malaysia recently in 2021 has issued a press statement regarding (Higher Education Institutions (IPT) Entrepreneurship Action Plan 2021-2025 New Narrative of Entrepreneurship Development Program in IPT). Based on the statement, they has launched the Higher Education Institutions Entrepreneurship Action Plan (PTK IPT) 2021–2025 and the IPT Integrated Entrepreneurship Education Guide or MOHE Guide to Integrated Entrepreneurship Education (EIE) to support the sustainability of the entrepreneurship agenda in

Higher Education Institutions (IPT) and produce more entrepreneurs among students and graduates of IPT. The HEI Entrepreneurship Action Plan 2021 - 2025 aims to transform the entrepreneurial landscape in HEIs from need -based to opportunity - based entrepreneurship.

Ministry of Higher Education (MOHE) realize that university can be a great place to start a business. Rather be from the student itself or even from the inside universities. Policymakers worldwide are continually looking for effective mechanisms to stimulate their economies (Autio et al., 2014). In this sense, university being chose to be the focus point. University can operate as catalysts of innovation across their territories by stimulating the generation and dissemination of new information (knowledge transfer). (Nicolaou and Birley, 2003; Wright,2014). As a result, universities are adopting more entrepreneurial and innovative strategic profiles in order to give more social and economic advantages to their communities. (Siegel and Wright,2015).

Advancing countries like the United Kingdom is the big player in creating spin-off companies. According to the official website of the University of Oxford, until 22 October 2020, they are able to create their 200th spinout company called PhishAR. PhishAR, a cybersecurity firm, has been the University's 200th spinout, and its companies have raised more than \$1 billion in the last year. The creation of the company is through their research commercialisation arm Oxford University Innovation. The PhishAR company was build based on the work of professor who works at Oxford's Department of Computer Science which are Dr Ivo Sluganovic and Professor Ivan Martinovic. Their academic research is mainly about the ability to crack down "phishing" an online scamming technique that causing people to be fooled and handing over their private information such as digital security credentials and other precious information like credit card details and personal data.

In Malaysia, we do have a spin-off company but the numbers are not big if being compared to advancing countries like the United Kingdom. Based on the

official website of Universiti Malaysia Pahang, until today the spin-off company that has been established at Universiti Malaysia Pahang are around 6 companies only. One of the companies called UMP EcoPest has been focusing on producing insect and pest control products. Not only producing products, but the company also provides insect and pest control treatment. Looking at the other side, other old university like Universiti Malaya also play their parts in spinoff company. Through Universiti Malaya official website, they have around nine spinoff company.

Spin-off company that being formed in university plays an important role in helping transfer technology from university to community. As entrepreneurs, we look for innovative ways to engage with the community in order to generate value, and this value creation within a local community defines the university as an anchor institution. (Kingma, 2014) Technology Transfer helps turn early-stage intellectual assets onto resources for academics to utilise directly into the building blocks of existing systems, products, or functions which will be made accessible to the general public. Successful collaborations being made between researchers from various universities and industries to increase knowledge in a specific a subject or even to advance a technology. (Agnes Lenagh , 2012)

1.2 PROBLEM STATEMENT

This research needs to be done because the topic of a spin-off company in Malaysia is not widely researched. Gaining data would not be an easy thing since a company that is set up based on the spin-off is not much. Thus by doing qualitative research base on the available company is a possible thing to do. When comparing Malaysia and other advancing countries like United Kingdom, we be able to see the number of spinoff company that available between the two countries are not balance. Hence it is important to understand on why spin off company in Malaysia is not many as other advancing country.

The first problem would be lack of approaching skill. To setting up a company, skills approach will be needed. Able to approach investor would help company to sustain and managing all the cost. Researchers and policymakers are increasingly interested in university spin-off companies. University spinoff represent the only path of technology transfer rather than commercialization as well as their huge influence on jobs growth is typically slight, are viewed as crucially significant stakeholders due to their favorable effect on regional economic facilities and services, their own casual methods of technology diffusion, and with their massive effect upon that university's image and credibility. (Shane, 2004; Locket et al., 2005; Mustar et al., 2008; Sternberg, 2014).

Secondly, lack of expertise. Academic founders have been playing important part along with resources to the venture of their connections and experiences, university spinoffs. (Knockaert et al., 2011; Mosey and Wright, 2007; Shane and Stuart, 2002). Developing entrepreneurial teams with commercial experience remains a fundamental problem for academic spin-offs. (Ensley and Hmieleski, 2005). Due to a lack of expertiveness and commercial experience, university spin-off enterprises are having difficulty breaking into the market to survive and develop. (Hayter, 2013). Hence, having a commercial team with experience is important due to the product need to reach community. Unable to commercialize the product will only make the product stuck and did not reach company sales target.

Thirdly, the problem would be regarding business related skill. Researcher tend to be good at research and lack in business related skill area. We need to understand that business related skill is important to maintaining organisation. These abilities aid professionals in grasping all inside and outside elements which effect a company's success, including the practices involved in achieving business objectives. i(Michele Reynolds, 2019).

1.3 RESEARCH QUESTION

To achieve the objectives of the study, this research will provide an explanation as to why these assessment problems occur by addressing the following the research questions:

RQ1 What are the importance of spinoff company in MTUN university?

RQ2 How the factors affecting the formation of the spinoff company in the MTUN university?

RQ3 Why spinoff company getting challenges to establish in the MTUN university?

1.4 RESEARCH OBJECTIVE

The study is carried out the factors of establishing spinoff company within university. The following are the research objectives that trying to achieve it:

RO1 To study the importance of spinoff company in MTUN university.

RO2 To examine factors of the spinoff company in MTUN university.

RO3 To analyze challenges of establishing spinoff company in MTUN university.

1.5 SCOPE OF STUDY

This study being conduct to identify the university that are having spinoff company within the MTUN universites. The respondent for this research would be the spinoff company that available within MTUN university.

1.6 SIGNIFICANCE OF STUDY

Spinoff company situation in Malaysia is not the same as it is when being compared to other advancing country. By doing this research, hopefully people will start realizing that university also be able to do their business. With the facilities and student that available around university, university can work together to create wealth that will bring benefit for all the people within the university. Due to the availability of expertise and researcher that are around the university, the integration between researchers and industry will increase have led to the term “entrepreneurial university”.

1.7 SUMMARY

In this chapter, researcher will be explaining the background research and the problem statement of the research. Spinoff company can be seen as an opportunity for university to create an entrepreneur environment within university. Furthermore, this chapter also covered the research question, research objective, scope of study and signifance of study.

CHAPTER 2

LITERATURE REVIEW

In this chapter, we will describe deeper on what is spinoff company as well as the literature review that was conducted. The literature study is essential to the development of a successful business organisation since it assists in the identification of problems that have happened in previously developed systems. In addition to that, it assists in determining the most effective strategy to use in order to accomplish the objective of the project based on the research. The past research that has been existing may help researcher to understand more on the formation of spinoff company in public university.

2.0 SPINOFF TYPE OF BUSINESS

Before starting up a spinoff company, we need to understand what business means. Business refers A business is a group of people or an enterprise that engages in entrepreneurial, industry, or working life. Businesses may be for-profit or non-profit groups that wish to support a charitable cause or other social good. Businesses range in size and complexity between sole proprietorships to global corporations. Businesses are indeed known as continued efforts and deeds to sell and deliver goods and services for profit. (Adam Hayes,2021). A company's business is frequently defined by the industry in which it works. For instance, the real estate, advertising, and mattress manufacturing sectors are all types of industries. The term "business" is frequently used to refer to transactions involving associated goods or services. According to the UTeM spinoff company guidelines, there are three types of businesses that can be registered to be spinoff companies under university which are:

2.0.1 PRIVATE LIMITED (SENDIRIAN BERHAD)

In Malaysia, a private limited company is the most common form of business entity in Malaysia. A private limited company is a legal entity with its own legal personality. It enjoys continuous perpetuity until the directors and shareholders elect to liquidate the company. It could really obtain assets, get in to the debt, make contracts, sue or be sued within the name, nor sue or be sued with its name. This company's stock cannot be sold to the general public. The goal of forming a private limited corporation was to make money. This company's owner must be more than one person, or at least two persons. The company's founder money comes from the company's owner.

Shares or shares owned by multiple individuals are also common in private limited companies. These individuals are referred to as the Board of Directors, the Company's Board of Directors, or the company's shareholders. The company can be controlled by the company's largest shareholder. Furthermore, every asset in the company is completely owned by the corporation. There is no asset ownership word named after a specific person or name. All troubles and debts incurred by the firm are also the responsibility of the company. The status of this private limited company is easy to determine because the business's name must end in SDN. BHD. For instance, Luqi Sdn Bhd.

For a private limited company, the biggest shareholder can choose to be involved or not regarding the company's matter. Every decision for the company must be approved and agreed upon by every board of directors. The CEO (Chief Executive Officer) or the Managing Director is a company's top executive. This role can be held by either shareholders or non-shareholders of the company. It is also contingent on the company's regulations or requirements for appointing the CEO. The CEO is solely accountable for the company's business operations and management. In concerns of company operations, the Company Secretary must help the management of a private limited company. At least one secretary must be

appointed by each company. The company secretary serves as a company officer and advisor to the Board of Directors of the corporation. Private limited businesses can also engage in business activities such as purchasing, renting, entering into contracts, and owning real estate. All of these transactions can only be completed under the company's name. The owner's name will not be mentioned in the transaction. If the corporation makes a mistake, it can also make a loan, sue, or be sued.

The advantage of private limited company:

- Business liabilities are limited to capital contributions only.
- The Company will not be dissolved or affected by the death of a shareholder or owner of the company.
- The process in terms of conversion of ownership will be much easier.
- Shareholders will be protected by legislation.
- The private limited type company has great potential in developing and expanding the business extensively.

There are several weaknesses and shortcomings of this private limited company, namely:

- Quite complicated and difficult to manage. This is because, private limited companies have many employees and staff.
- The corporate income tax levied is quite high.
- Shares of the Company may not be sold and bought through the Stock Market.
- Company shares also cannot be sold to the public.
- Each sale of shares must be approved by the other shareholders.

Finally, each type or entity of a business has its own set of advantages and disadvantages that must be considered. Private Limited Companies and Enterprise Businesses are not the same. The private limited corporation will persist regardless of its owner's circumstances. Until an order to the contrary or a closure is given, the lifespan of this status company is likewise longer. As a result, it's critical to understand a few key points before embarking on the process of forming a private limited company.

2.0.2 LIMITED LIABILITY PARTNERSHIP (LLP)

Limited liability partnerships are somewhat typical, either people recognize them or not. After a comprehensive guide, professional solicitor or accountant have often used the acronym LLP, just like in "Adam,Smith & Rowe LLP." LLPs are a legal and tax structure that allows partners to profit from economies of scale by working together while also limiting their liability for the conduct of other partners. Before getting too excited, examine the laws of the country (and the state) as individuals would with just about any legal entity. In a nutshell, consult a lawyer first. They almost certainly have firsthand knowledge with an LLP. (Andrew Beattie, 2021). According to official website of Companies Commission of Malaysia, The LLP approach will indeed help start-ups, small and medium-sized firms (SMEs), and other small businesses develop their business without having to deal with personal obligations, assets, or rigorous compliance requirements.

Professionals who use LLPs cherish their reputation highly. The majority of LLPs are created and run by a team of professionals with lots of clients and experience. By pooling their resources, the partners lower operating expenses while improving the LLP's capacity for growth. They might pool their resources, including staff and office space. Most crucially, cost-cutting enables the partners to make more money from their combined efforts than they otherwise might. In an LLP, the companions may still employ a number of junior partners with the goal of having people advance to equal participants in the future. Although they receive a salary, these junior associates have little to no participation or responsibility in the company.

The main thing to remember is that they are designated specialists who are qualified to complete the service that the partners provide. This is the reason why LLP is normal to be use at law firm.

Advantages of limited liability partnership would be :

- The LLP does not pay taxes on its own. The individual's personal situation determines whether or not each partner is taxed at whatever rate.
- An LLP is a separate legal body that can directly engage and hire employees by itself.
- The name is legally protected, preventing a competitor from using a similar name.
- A limited liability partnership (LLP) has no limits about how it allocates revenues towards its members. It could still make loans to them and repay cash to them after minimum red tape, but a limited business must have revenues available prior declaring a dividend.
- An LLP can keep the details of its organisational structure and revenue-sharing policies confidential since it is not compelled to disclose its charter. The procedures for joining and leaving, as well as the way the firm does business, would be more flexible because it is not obligated to file information about its duties with Shareholders.

Disadvantages of limited liability partnership are:

- An LLP's profits cannot be retained by the business, and if they do, they are immediately taxed. Instead of paying dividends to shareholders, who can be subject to taxes at rates greater than the corporation tax rate, limited liability companies can preserve their profits for investments and cash reserves.
- Will be more difficult for a limited liability partnership to obtain funds. Despite the fact that the Company is permitted to open a corporate bank

account in its own name, most bankers are still wary of such businesses, so loan packages are limited.

- To form a Limited Liability Partnership at first might be simple, but as the company grows, more partners may be involved in decision-making. This could cause issues when it comes to making a choice, especially if there is a disagreement among the partners.
- Since Limited Liability Partnerships do not have stock options, there is no method for the company to offer its stock to the market as a way to earn money.

So, it is encouraging to see the CCM fighting aggressively for the LLP model to be implemented. Apart from the planned LLP Act, which will incorporate most of the aforementioned aspects, legislation such as the Income Tax Act and other acts governing professional bodies, such as the Legal Profession Act, will also need to be revised. It may be unrealistic to expect the complete structure to be operational by 2009, but that is the current target date. This new LLP entity will help small and medium-sized firms, as well as professionals, conduct their businesses more efficiently. The CCM has already been aware that the benefits gained by LLP partners must always be balanced against the protection of the general public dealing with LLPs. (Lee Shih, 2008).

2.0.3 SOLE PROPRIETORSHIP (ENTERPRISE)

The Registration of Businesses Act 1956 governs sole proprietorships in Malaysia. A sole proprietorship, unlike a corporation, is not a separate legal entity from its owner. To put it another way, individuals are the business, and the business is individuals. Individuals, as the business owner, are inextricably linked to it. As a result, whatever individuals earn from the firm is directly attributed to their personal income. Furthermore, because there is no segregation here between owner and the firm, like all the owner's personal assets, or the items individuals possess (including such their house or car), are responsible for the consequences of any taxes that are due. (Mica Lee,2020)

Advantages of sole proprietorship are:

- Sole proprietorships are simple to set up.

Sole proprietorships are a low-cost and simple way to start your own business. No need to legally register your firm or inform federal or provincial agencies as long as the owner are in charge of operations. Only the costs of registering business name and obtaining the necessary licences and permissions are involved. The licences that will be needed depend on industry and operations; for example, specific licences are required to handle food and alcohol, open a storefront and post a sign, or run a business from home.

- No limit of numbers in hiring employees

In terms of hiring people, sole proprietor giving freedom on how many employees the business owner needed. This allow the business to grow without taking a big leap to formally incorporating the business.

- Full control for the owner

Sole proprietorships are instantly linked to the owner, giving owner the entire control over the business and its direction. There is no need to make judgments based on shareholder desires or legal partner obligations. Business owner can change plan as needed and grow the business in any direction.

Disadvantages of sole proprietorship are:

- Personal liability

In the same way that sole proprietorships provide individuals the flexibility to run the business as individuals see appropriate, complying only to licencing rules and operating without the need for registration or shareholders, this independence comes with a price. Individuals are personally responsibility for paying contractors, honouring obligations, paying the necessary taxes and insurance for your staff, and any legal contingencies as a sole proprietor.

- Hard to raise capital

Because a lone proprietor's personal obligation poses a risk, banks may be hesitant to lend money or extend credit under this business form. It's also more difficult to get investors to buy into a sole proprietorship because the company isn't formally registered and doesn't have shareholders. At the outset, think about alternate financing sources like bootstrapping and crowdfunding. Instead of relying on outside investors, a business that is bootstrapped relies on personal savings or company sales for finance.

- Right business structure needed for a growing business

With so much to think about when starting a business, such as developing a business plan, raising funding, keeping motivated, and determining when to commit full-time to one's startup ambition, the simplicity of sole proprietorship can feel like a breath of fresh air. Individuals can start working right away without registering, and acquiring the business name and the necessary licences will only cost you a few.

2.1 UNIVERSITY ROLES

Universities, as creators of knowledge and publishers, play a larger role in industrial innovation as knowledge becomes a more significant element of innovation. In today's world of global rivalry, the generation of innovation is more sophisticated than any one company or set of companies, and no single researcher or group of scientists can manage it alone. To put it another way, the generation of innovation necessitates a system of nationalism and pragmatism in which, in addition to businesses, other social organisations such as higher education institutions play an important role. (Jami & ismail Gokdeniz, 2019).

Because of the significance and role of entrepreneurship and entrepreneurs in national development processes, universities in developing and developed countries have implemented a variety of training and research programmes for the education and training of entrepreneurs based on their needs and facilities over the last decade (Pihie, 2009). In other words, as a country's economy, its laws and regulations, and

the requirements of the labour market change, higher education systems aim to adjust as well. Because the purpose of executing an entrepreneurial plan is to educate students who, after graduation, may generate new jobs with invention and initiative, they do this in their programmes to coordinate themselves with the economic development of the labour market (Acs, 2006).

2.1.1 ENTREPRENEURIAL UNIVERSITIES

The entrepreneurial university is not a recent notion. It does, however, contain a wide range of meanings and identities, including concepts like entrepreneurship, innovation, commercialization, new venture creation, employability, and so on. It can also reflect the leadership and governance systems of an organisation. It can be viewed as a company's response to external pressures and problems (Gibb and Hannon, 2006).

The activities of entrepreneurial universities might range from licencing and patenting agreements to the formation of new businesses endogenous growth models make the implicit assumption that investments in new knowledge, whether made by businesses or institutions, will naturally flow over into commercialization, leading to innovative activity and, eventually, economic growth. However, this assumption hasn't always proven to be accurate. New knowledge investments need to get through what has been nicknamed "the knowledge filter" in order to promote innovation, competitiveness, and ultimately economic growth." (Audretsch et al. 2006; Acs et al. 2010).

In addition to suggesting that colleges must establish settings that foster entrepreneurial mindsets and behaviours, it is also critical that universities think and act in a more entrepreneurial strategic manner in order to meet the numerous challenges they confront (Gibb et al., 2012). The needs for entrepreneurial university are:

- Governments demand more for less; they want immediate solutions to current economic difficulties; they want new sources of employment to