

INTELLECTUAL PROPERTY (IP) MANAGEMENT AMONG SMALL MEDIUM  
ENTERPRISE (SME) IN MELAKA

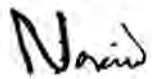
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“Saya akui laporan ini adalah hasil kerja saya sendiri kecuali ringkasan dan petikan yang tiap-tiap satunya saya telah jelaskan sumbernya”

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## ABSTRAK

Harta intelek juga dikenali sebagai IP dan salah satu tajuk utama yang menjadi buah mulut dalam perniagaan kini, tetapi dari segi kefahaman ia sangat kurang di kalangan usahawan. Dalam bahasa yang mudah, harta intelek mengandungi idea atau buah fikiran dan kreativiti manusia yang di lindungi oleh undang-undang. Ia tidak boleh di sentuh, di rasa, di bau atau berwarna. Walau bagaimanapun, harta intelek mempunyai nilai ekonomi yang tinggi tetapi nilai-nilai ini tidak di dimanfaatkan sepenuhnya oleh usahawan. Kajian ini di jalankan supaya cara peengurusan harta intelek di kalangan SME dapat di ketahui. Kebanyakan SME mempunyai harta intelek tetapi tidak tahu bagaimana menguruskan harta intelek ini. Berdasarkan hasil kajian yang di jalankan, beberapa masalah dapat di kenali pasti dalam menguruskan dan mengetahui strategi harta intelek dalam kalangan SME. Kajian ini menggunakan kualitatif dan temuduga dalam mendapatkan data untuk mencapai objektif kajian. Daripada kajian yang dibuat, penyelidik mendapati SME masih lagi kekurangan pengetahuan tentang pengurusan harta intelek tetapi mereka sedar akan kepentingan harta intelek. Selain itu, terdapat empat jenis halangan yang dikenalpasti dalam menguruskan harta intelek dan penyelidik juga mencadangkan penggunaan strategi pengurusan harta intelek untuk membantu SME menyusun strategi dalam perniagaan mereka. Untuk membantu mereka menjadi lebih Berjaya dalam mengadaptasikan penggunaan harta intelek dan menguruskannya, penelidik menyarankan kerajaan untuk membuat bengkel tentang harta intelek, meningkatkan SME dalam mendapatkan dana dan mendorong kerajaan melaksanakan strategi pengurusan harta intelek di Malaysia.

## ABSTRACT

Intellectual property also known as IP has become one of popular topic in business today, yet it is still one of the least understood. Simply viewed, intellectual property consists of products of the human mind and creativity that are protected by law. It is an intangible, and it has neither length nor width nor height. It is colorless, odorless and tasteless. However, intellectual property does have economic value, great economic value- although this value is often overlooked, underestimated and underreported. This topic come out because of SME already have their IP but they do not know how to manage it. Based on this problem, the result for the role of managing IP in SME, examine strategic approach in managing IP and examine difficulties in managing IP strategically was achieved by conducted the interview with SMEs' owner. This research conducted by using the qualitative method and semi-structured interview in order to collect the data on understanding of the research question and objectives. From the finding, the researcher found that all the SMEs still lacking in their IP management but they realized the importance of IP. Besides that, there are four barriers that have been recognized in order to manage IP among them and the researcher also suggest an IP management strategy to the SMEs to help them strategize their IP in the business. In order to help SMEs more successful in using the IP and manage it, the researcher recommended that government have to organize workshop about IP, enhancing the accessibility in getting funding and encourage the implementation IP management strategy in Malaysia.

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## LIST OF ABBREVIATION

EC	-European Commission
GDP	- Gross Domestic Product
ICC	-International Chamber of Commerce
IP	- Intellectual Property
IPM	- Intellectual Property Management
IPR	- Intellectual Property Right
MRS	-Manufacturing-Related Services
MyIPO	- Intellectual Property Corporation of Malaysia
NSDC	-National SME Development Council
SME	-Small and Medium Enterprise
SME Corp	-Small and Medium Enterprise Corporation
WIPO	-World Intellectual Property Organization

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## **CHAPTER 1**

### **INTRODUCTION**

Managing an enterprise's Intellectual property (IP) is more than just acquiring the formal IP rights through the national IP office. Patent or trademark rights are not worth much unless they are adequately exploited. Moreover, part of a company's valuable IP may not require formal registration but may call for other measures of protection (e.g. confidentiality agreements). Enterprises willing to extract full value from their know-how and creativity should take adequate steps to develop an IP strategy for their business and seek to integrate it within their overall business strategy and also a growing body of popular management literature with IP as its focus. The subject of Intellectual Property Rights (IPRs) extends from purely legal aspects to formal economic models. Somehow, IP protection and management are determined by the legal context, and the conceptual framework underlying empirical studies is often based on insights from theoretical models. Small Medium Enterprise (SME) has been defined in many different ways in which they are defined, their different types, and the economic segments where they operate (Bryer et al., 2011). This project will help SME managing their IP with using the IP management strategy and make them easy to manage.

## **1.1 BACKGROUND OF STUDY**

In this research, the topic covered the researcher research in IP, managing IP strategically, SME and important of managing IP. As globalization and technological development and exchange advance worldwide, the importance of IPR systems that value the fruits of technical development is increasing. These systems contribute to ensure return on investment and create development incentives. The Government through Intellectual Property Corporation of Malaysia (MyIPO) has trained seven professionals from the financial, technical and law fields to become IP Values for SMEs to evaluate their virtual IP. That show the IP management needed in the SME operation. So this topic discuss the way SME managing their IP currently, the difficulties SME faced in managing IP strategically, and the strategy approach SME used in managing IP. The approach SME used in managing IP is the strategy used in order to manage IP in their firm.

## **1.2 PROBLEM STATEMENT**

In the newly developing or newly industrialized countries, SME generally will apply for IP. This is because IP becomes the essential role to the enterprise to protect, commercial, and value it. In order to become the competitiveness the SME have to identify and manage the IP strategically. The role of IP management is important to SME in order to improve their competitiveness and strategic advantage. However, some problems have been recognized in order to manage IP strategically in SME. It was emphasized by WIPO that in the European Business IP management is not making use and it is due to the insufficient knowledge on how to manage the IP properly so even the international country is still lacking in IP management, and what could be more on SME in Malaysia. For instance, the others difficulties that have been recognize is due to inappropriate or non-strategic management, so that the SME may be unaware of its IP, its value or benefits that maybe expose itself to unnecessary risks. From these problems, the study aimed to

identify the role of managing IP in SME and the SME will be exposed to the importance of managing IP in the organization.

### **1.3 RESEARCH QUESTION**

This study attempts to answer the following questions:-

1.3.1 What is the role of managing IP in SME?

1.3.2 What are the difficulties SME faced in managing IP?

1.3.3 What is the strategic approach use to manage IP in SME?

### **1.4 RESEARCH OBJECTIVE**

1.4.1 Identify the role of IP managing in SME

1.4.2 Examine difficulties in managing IP strategically.

1.4.3 Examine strategic approach of managing IP in SME

### **1.5 SCOPE AND LIMITATION**

In this research topic, the scope is located at Malacca. The SMEs choose were from the technology-based business, both from food industry and manufacturing business. The SMEs that had been chosen is having applied the IP in order to conduct this research topic. The overall

interviewees that had been interviewed are five people. They were from the top management, management staffs or staff that are dealing with IP in the firm. The details will be explained in the chapter 3.

The limitations of this study are time constraints, and limited or scarce sources. The limitation of time constraints means the time to complete and conduct research is about ten weeks and that only short time so it is not enough to conduct everything in very details. The data and information may not be interpreted and conducted like expert researchers. Scarcity of sources means the sources to explore for the data collection is limited in term of IP management in Malaysia but the data found still connecting with the main research topic.

## **1.6 SIGNIFICANCE OF STUDY**

The significance of the study is categorized in two scopes:

### **1.6.1 Researcher**

In term of researcher study, the importance of this topic is to examine how the SMEs make use of IP and how far they realized the importance of IP in their business. By conducting this research, SMEs may get the exposure in using the IP and its management and help them to become more successful.

### **1.6.2 Organization**

In organization contexts, the importance of this research is to examine the proper ways to manage IP strategically in SME so if the SME is not managing their IP strategically they still do not realize that their IP can be used and value to get the profit. So with this research the SME will be exposed to the strategic approach in managing IP. This study will be helpful to SME to adapt and learn how to manage IP strategically.

## **1.7 SUMMARY**

In this chapter, the IP and its management have been explained and why the topic have been choose. IP management have many justification but in this research the IP management focus on how SME manage and make used of their IP for business. By the problem that have been recognize it show that the others country still not making use of IP and lack of knowledge to manage IP. So the researcher interest to make a research about this topic in Malaysia context.



## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

In the new technology economy, intellectual property (IP) has to be managed strategically. People still think that “managing IP strategically” means having an IP strategy rather than managing IP according to business strategy. The management of IP on the whole has changed and recognition in industry has risen that there is a need to integrate IP into strategic management. Companies have started to manage their knowledge and IP assets more carefully and “patenting and licensing have become more strategically managed”. Today, many companies understand IP management as part of their business strategy and started to generate revenues throughout licensing, franchising, and merchandising (Gabor). The role of IP management is essential for SME and it is necessary to build IP strategies in order to manage SME’s assets. Moreover, Malaysia’s industrial landscape is still in its adolescent stage and SME dominate about 90% of Malaysian companies are classified as SMEs that contribute 31% of Gross Domestic Profit (GDP).

In this research the researcher treat aspects concerning the IP management and issues related to define the role of managing IP in SME.

The aim is to present concluding ideas regarding to manage IP and examine the suitable strategic approach adapt by SME.

## **2.2 SMALL MEDIUM ENTERPRISE (SME)**

Businesses in Malaysia not only can be categorized in terms of types but in sizes as well. In 2005, the National SME Development Council (NSDC) approved the use of common definitions for SMEs in categories of sectors; Manufacturing (including agro-based), Manufacturing-Related Services (MRS), Primary Agriculture, Services (including Information and Communication Technology). These definitions are set by all Government Ministries and Agencies involved in SME development, as well as by the financial institutions (Bank Negara Malaysia, 2007). Malaysian SMEs can be grouped into three categories; Micro, Small, or Medium. Since there is other source which is according to Hashim (2007) have other defined of SME. In general, however, small and medium sized enterprises in Malaysia have commonly been classified using fixed quantitative criteria such as the number of employees, amount of capital, amount of assets and sales turnover.

OECD (2010) identified the SMEs as non-subsiary, independent firms which employ less than a given number of employees. This number varies across countries. The most frequent upper limit designating an SME is 250 employees, as in European Union. However, some countries set the limit at 200 employees, while United States considers SMEs to include firms with fewer than 500 employees. Small firms are generally considered those with fewer than 50 employees and micro firms have at most 10 employees. Financial information on turnover or balance sheets can also be used to define SMEs.

The significant role of SME in the national economy in terms of their sizeable contribution to Gross Domestic Profit (GDP), employment generation, export performance, and achieving sustainable national economic

development, most governments have placed increasing emphasis on facilitating the creation and development of the national SME sector (Burrone, 2004).

According to Small and Medium Enterprise Corporation (SME Corp), an enterprise is considered as an SME in each of the representative sectors based on the annual sales turnover or number of full time employees. SMEs are divided into two sectors; manufacturing, manufacturing related services and agriculture industries, and services (including ICT) and primary agriculture (Muhammad et al., 2010).

The term “small and medium-sized enterprises” (SMEs) consists of two components: The first component “small and medium-sized” relates to the size of an entity while the second component “enterprise” relates to the economic nature of that entity. An enterprise, as defined by the European Commission (EC) in Article one of its recommendation on “definition of micro, small and medium-sized enterprises”, may be understood as “any entity engaged in economic activity, irrespective of its legal form” (Tiwari and Buse, 2007).

### **2.3 INTELLECTUAL PROPERTY**

Intellectual Property (IP) is a generic term that probably came into regular use during the twentieth century. The key areas include: patents, trademarks, designs and copyrighted material. Because IP is labeled as property it means that it can be stolen. If someone dishonestly takes it without the owner consent, with the intent of depriving the owner of it a permanent basis they will be charged as the criminal offence of theft (Doherty, 2006).

The word “property” is used to describe this value, because the term applies only to inventions, works and names for which a person or group of persons claim ownership. Ownership is important because experience has

shown that potential economic gain provides a powerful incentive to innovate (WIPO, 2012).

According to Gallart and Tang (2008), IP can be expressed in many different forms like books, blueprints and technical manuals for instance. Because it can be expressed, IP can be made available to other parties, although some may be difficult to replicate. The term IP describes products of the mind, such as inventions and other creations that can be protected under IP law. There are four primary types of IP: copyrights, trademarks, patents, and trade secrets. Taken as a whole, federal, state, and common law provide IP owners with an extensive legal tool bag to protect their property interests in the work they create (California State Auditor, 2011).

IP has become the most important driver of economic development. The integration of IP and human capital is a potent economic force in today's knowledge-based economy. IP in its broadest form is the manifestation of ideas, creativity and invention in a tangible form. Many researchers make the assumption that IP means primarily patents and therefore it is of no direct relevance to them. There is a need to distinguish between IP as described above and intellectual property rights (IPRs) which are legal forms of protection for IP.

The system of IPR creates a mechanism to resolve the „appropriability“ problem of knowledge, by creating property rights over knowledge. IPR may be defined as exclusive rights granted by the State giving the owner the right to exclude all others from the commercial exploitation of a given invention, new original design, trademark, literary and artistic work and or new variety of plant (WIPO, 2003).

IPR have emerged as key tools for managing innovation and resolving some of the “market failures” faced by innovating firms. It is, therefore, increasingly important for entrepreneurs, inventors, researchers, SMEs and business consultants to have a good understanding of the IP system in order manage effectively a firm's intellectual assets (OECD, 2004).

### 2.3.1 COPYRIGHT

Copyright is defined once any original piece of work or IP is created and presented in tangible or material form such as written document, a drawing or a tape recording. On the other hand, there are certain items that are not entitled to copyright protection which are concepts or ideas, procedures and methods, and titles and names (Kee and Hoon, 2009).

Poltorak and Lerner (2002), identified a copyright is the right to prevent others from unauthorized reproduction, dissemination, or modification of a work of authorship. Unlike patents, copyrights do not protect against independent recreation. Although, copyright is considered with respect to music, literature, and work of art, copyright now finds broad application with respect to the protection of computer software.

### 2.3.2 PATENTS

According to Poltorak and Lerner (2002) a patent transfers to its owner the right to prevent others from making, using, selling, offering for sale, or importing the patented invention. Patents are national in nature, having consequences only within the territory of the issuing country.

In order to be patentable, an invention must be novel, nonobvious, and useful. If an invention would be obvious to one of ordinary skill in the art seeking to solve the problem addressed by the inventor, that invention is not patentable.

In overview, WIPO states the patent is an exclusive right granted for an invention, which is a product or a process that provides a new way of doing something, or offers a new technical solution to a problem. A patent provides protection for the invention to the owner of the patent for a limited period, generally 20 years.

### 2.3.3 TRADEMARK

A trademark is a sign capable of distinguishing goods or services produced or provided by a specific person or enterprise. Almost all countries in the world register and protect trademarks. The sign of trademark may be one or a combination of words, letters and numerals. It may consist of drawings, symbols and three dimensional signs such as the shape and packaging of goods, audible sign such as music or vocal sounds, fragrances, or colors used as distinguishing features. The effects of such a registration are, however, limited to the country (in the case of a regional registration) countries concerned. To the manufacturers or providers, it is a warning that the mark has been registered and can be used only by the owner. (WIPO)

Previous researcher on management of IPR identified trademark is collective marks are owned by an association whose members use them to identify them with a level of quality. Certification marks are given for compliance with defined standards. A trademark provides to the owner of the mark by ensuring the exclusive right to use it to identify goods or services, or to authorized others to use it in return for some consideration (payment). Well-known trademark means a mark which has become so to the substantial segment of the public which uses such goods or receives such services that the use of such mark in relation to other goods or services would be likely to be taken.

## 2.4 MANAGING INTELLECTUAL PROPERTY

The United State (U.S.) based National Knowledge and IP Task Force stated in the knowledge age, a company's value is largely determined by its ability to convert individual and organization knowledge into Net Worth in time to seize a new market opportunity. Robbins and Coulter (2009), described the meaning of "management" as coordination and oversight of the work activities of others so that their activities are completed efficiently and

effectively. Generally, management consists of four functions which are planning, organizing, leading and controlling. The strategic management of IP assets can give a company a proprietary market advantage, improve its financial performance, and enhance its competitive advantage. Therefore, that important to SMEs have a proactive approach to stimulate the creation and wise management of their IP assets.

IP Management is a series of processes that help to identify, organize and enrich the understanding in managing IP strategically. It is a process that addresses the explosive growth of intangible assets and their impact on the company's strategic market position and shareholder value. IP management approach is needed in SMEs to help them manage IP strategically. There are factors for managing IP strategically: Identification of IP properly, knows how to protect and functions IP and important of IP for organization. That why the IP valuation and IP audit will be explain a little bit in this research topic.

IP is an economic asset, so for this reason many countries are seeking practical information on how IP can be used to promote economic growth. Like other types of property, it can be developed, owned and managed so that it creates an economic return. So as to implement effective IP management, the organization must be clear about what IP seek to protect, how to protect it and the corresponding risks in the absence of effectual IP management. The rights management function managed by a director and staff knowledgeable about IP rights management, publishing and licensing. According to IPO good IP management practices are based on experience and the implementation of consistent policies and practices so that why to manage IP the knowledge about IP is important.

In International Chamber of Commerce (ICC) (2013), it state IP management is important because it can help innovative SMEs achieve a range of objectives, including securing investment, identifying and attracting potential partner or buyers, deriving value from collaborations, and managing litigation risks.

IP are a useful tool for managing innovation. Unfortunately, IP especially patent is under-utilized by SMEs. Furthermore, the management of IP in SMEs is weak, compared to large companies. For this reason, SMEs and venture companies miss out opportunities to strengthen their competitive edge (Sathirakul, 2006).

In Japanese economy in order to revive their economy to regain its former brilliance, it is absolutely necessary for Japanese companies, especially the SMEs and venture companies that sustain our industrial structure, to establish and implement their own advanced intellectual property strategies adapted to their own management strategy, from a global market perspective (Intellectual Property Strategy Headquarters, 2013).

It is now more important than ever for University leaders to think strategically about how to best to protect and effectively use their IP. This information will help institutions seize the opportunity to use their IP to secure maximum benefit for the economy and society (intellectual property office, 2011).

Gallart and Tang (2004) found that managing IP can be difficult as a result of its intangible nature. Senior management often focuses on more easily identifiable tangible assets and tends to pay relatively less attention to IP management.

#### 2.4.1 IP VALUATION

WIPO describe IP valuation as the monetary value of an IP asset or portfolio of assets. It is vital for business planning and joint ventures and is important for licensing, acquisitions, mergers, investments, joint ventures and loans. IP is like any other asset. Ultimately its value is what people are