

Empowering Malaysian SMEs through Intellectual Property Management

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Abstract

Small and medium enterprises (SMEs) are the prime movers of the economy in most countries. In Malaysia, SMEs generate 99.2% of the total income for the country and contribute 40% - 50% of the gross domestic product (GDP) for the country. As the world is now moving towards globalization, small and medium enterprises not only face competition among domestic market, but also from competitors abroad. With the rapid change of globalization Malaysian SMEs need a coherent business strategy to survive and compete in the global market. On the other hand, intellectual assets which comes in the form of intellectual properties (patents, industrial designs, copyrights, trademarks, geographical indications and many others) offers a great amount of benefits to those who care to protect their right and these IPR not only protect the right of the holder but may also generate more income to the enterprise by the way of commercialization. Therefore it is important for all SMEs to know how to protect, exploit and more importantly manage their IPR so as to benefit from it. Besides, support from other bodies including government authorities are very much required in assisting Malaysian SMEs in well-utilizing their IPR.

Keywords: Entrepreneurship, SMEs, Intellectual property management.

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1. Introduction

Developing a group of diverse and competitive small and medium enterprises (SMEs) is a central theme towards achieving sustainable economic growth. SMEs are crucial to the economic growth process and play an important role in the country's overall production network.

Some advanced economies have succeeded because SMEs form a fundamental part of the economy, comprising over 98% of total establishments and contributing to over 65% of employment as well as over 50% of the gross domestic product. Although the numbers might be lower in Malaysia, SMEs have the potential to contribute substantially to the economy and can provide a strong foundation for the growth of new industries as well as strengthening existing ones, for Malaysia's future development.

On the other hand, Intellectual property can be defined as those legal rights, existing under national and international law, assertible in respect of the products of the human intellect and creativity (Blackburn, 2003). According to World Intellectual Property Organization (WIPO) *intellectual property refers to creations of the mind i.e inventions, literary and artistic works, symbols, names, images, and designs used in commerce*. The law offers protection from the wilful misuse of intellectual property whether in the form of theft, imitation or modification; copyright law also protects the right of the author of a work to be identified as such. Intellectual property rights refer to the ability to own and protect the products of human intellect and these intellectual property rights can be protected, exploited, modified and transferred through contract.

Despite the benefits that intellectual property is offering, they are still under utilized by the Malaysian SMEs. According to the Minister of Domestic Trade Datuk Seri Ismail Sabri Yaakob, there are large percentage of SMEs that are unaware the importance of protecting their intellectual property either in terms of patent, trade mark, copyright as well as geographical indication (Jalil, 2010). Sadly, the number of patent application from Malaysian SMEs are very low i.e based on the statistic made in 2007 only 3% of Malaysian SMEs patented their inventions as was said by the Deputy Director of Malaysian Intellectual Property Corporation (MyIPO) Assoc. Prof Rohazarwati Zullcoblely (BERNAMA, 2007). More so, Intellectual Property management which comprise of three value chain i.e IP creation, IP protection and IP exploitation is not being practised by the Malaysian SMEs.

Thus, this paper aims to address the current scenario in Malaysia with regard to the benefit of Intellectual Property and its application among SMEs as well as proposing the IAM model to be practised by Malaysian SMEs. This paper will be divided into three parts. Part one will be discussing about the IP landscape and challenges faced by Malaysian SMEs. Part two comprise of benefit of IPR as well as management of IP or known as AIM which consist of the three value chain as has been mentioned before. Part three will highlight the government initiatives in assisting Malaysian SMEs in empowering IP among SMEs.

2. Literature Review & Method of Analysis

Ali Salman Saleh and Nelson Oly Ndubisi (2006) in their article; *An Evaluation of SME Development in Malaysia* had examined that Malaysian SMEs still face many domestic and global challenges in achieving economies of scale and competing internationally. Among the challenges are the low level of technology capabilities and limited skilled human capital resources, a low level of technology and ICT penetration, low levels of research and development (R&D), a substantial orientation towards domestic markets, a higher level of international competition e.g from China and India. These character suggest that government

programs and incentives are either insufficient or not delivered effectively enough to overcome these problems.

Issue relating to Intellectual Property Rights (IPR) has been highlighted by Darrell A. Posey and Graham Dutfield (1996) in their book. They stated that IPR law exists in most countries of the world and Western concepts of IPR usually prevail in national laws. They further assert that these concepts are based on the idea that innovation is the product of the genius of the individuals. Such people, by sharing the fruits of their genius with society, are deemed to be deserving of economic rights granted by the state on behalf of the society and these economic rights are collectively known as collectively known as IPR.

John Kitching and Robert Blackburn (1998) in their article entitled *Intellectual property management in the small and medium enterprise (SME)* observed that it is possible to protect some intellectual capital for SMEs as property through formal legal rights such as patents or copyright or through contractual agreements. On the other hand they can also use informal methods such as keeping information confidential as “trade secrets”. In their research they had found out that overall, small business owners placed most emphasis on informal methods to protect intellectual property. These methods were more familiar, cheaper, less time-consuming and frequently considered as effective as more formal rights. Under most circumstances, SME owners considered formal registerable rights such as patents less important. Even where business owners adopted formal rights, they were generally reluctant to bring a legal action to obtain redress where they believed that infringements had taken place.

Robert Huggins and Maria Weir (2008) in their article *Intellectual Assets and public policy* opined that without adequate management intellectual assets much in the same as their tangible counterparts cannot be fully exploited. Intellectual asset management (IAM) provides means to generate, distribute and use knowledge in ways that add value to the firm and provide new opportunities to exploit.

According to Dr Lindsay Moore and Lesley Craig (2008) in their book *entitled Intellectual Capital in Enterprise Success*; Intellectual Asset Management consists of three important aspects that are management in asset creation, management in asset maintenance and management in asset leveraging. These tasks involve very wide scope, i.e Intellectual asset management (IAM), encompasses all decisions as to which Intellectual Assets (IA) to have, to hold, and to use or whether to have them at all. Within IAM are many of the day to day activities of knowledge workers, right down to the details of organization, budget, time - lines, and action plans’. Thus, IAM includes every day activities that SMEs indulge in carrying out their business.

Based on the various existing writings and discussion on this area i.e SMEs and Intellectual Property it shows that the proper management of IPR among the SMEs places an extensive benefits to the SMEs themselves. The writer believes that research should be done in creating the awareness as well as finding the ways to manage the IPR properly.

Since this study is conceptual and theoretical in nature, it applies the inductive, analytical and critical methods through deep and intense readings and understandings of the literatures related to the topic. The sources are secondary data available in the literature related to the management of IPR particularly IAM. The literature comprise of books, journal articles, online databases, newspaper reports as well as periodicals.

3. Current scenarios

3.1 IP landscape in Malaysia

The primary creators of IP in Malaysia today as in most countries are:

- (1) Private companies such as those in software, manufacturing, telecommunication, services, advertising and creative services;

- (2) R&D institutions including both government-funded institutions as well as private sector research organisations and companies;
- (3) The Malaysian government as owners, eg of software programs developed for the e-Government projects; and
- (4) Inventors and researchers working in their personal capacity (Hamzah, 2006).

With regard to IP management in Malaysia particularly Intellectual Asset Management (IAM) there is no such IAM being practised formally in Malaysia especially among SMEs according to John Chong and undoubtedly due to the fact that IAM is considered new and just been introduced in Malaysia (Chong:2001).

3.2 Challenges in the IP sector in Malaysia

Based on the research made by Malaysia Intellectual Property Corporation (MyIPO), during 2003-2009 MyIPO has received 101,225 patent applications which comprise of 93% of foreign application and balance of 7% from local application and amount of patent granted to local application only 4% i.e 1484 as compared to foreign application that has been granted i.e 39,293. This figures shows very low productivity in terms of innovation as well as IP protection in Malaysia.

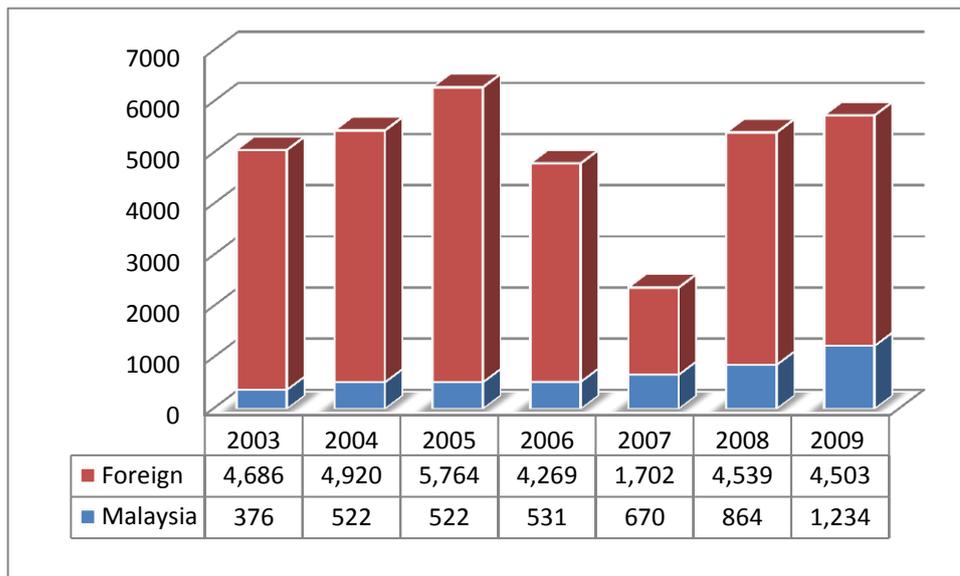


Figure 1: Patent application

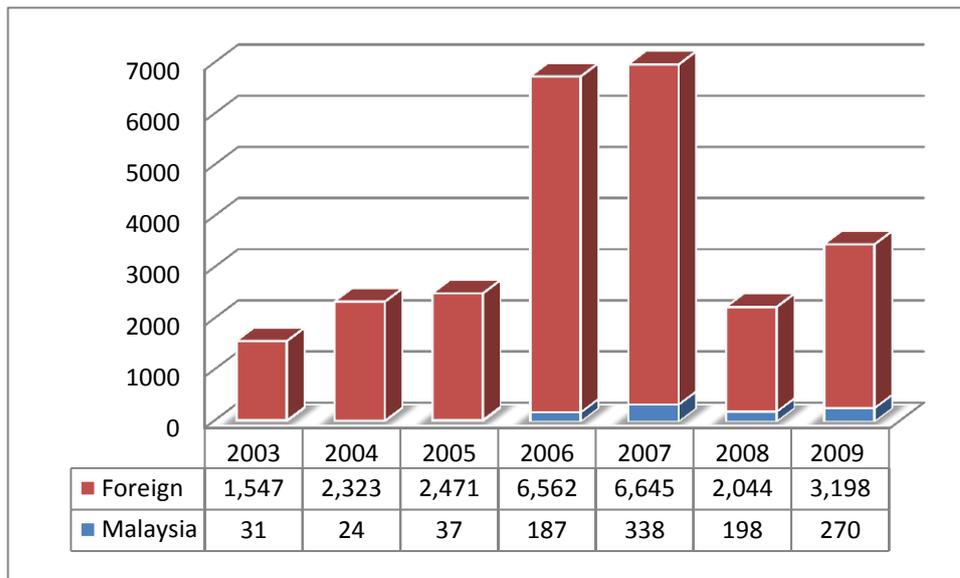


Figure 2: Patent granted

Like many other emerging markets and other newly industrialising market, Malaysia faces a number of problems relating to IP creation, protection, management and exploitation. Among them is the perception that the innovation in Malaysia is still low and that Malaysia is therefore not generating a lot of IP as compared to foreign-owned (Hamzah, 2006). There is still lack of awareness of the importance of respecting IPRs among the Malaysian public as seen in the purchases of pirated softwares by member of the public. The level of awareness and understanding of what is IP all about is still low and Malaysia is not yet an IP conscious society (Azizi: 2010)

4. Benefit of IPR for SMEs

4.1 Types of IPRs

Intellectual property rights (IPRs) – the right to use and sell knowledge and inventions – are one category of intangible assets that may be owned by a firm, some others being customer goodwill, human skills embodied in their workers and good management practice. IPRs are seen by the economists as a policy tool to ensure adequate private returns to innovation and creative activities. Once some product or process innovations have been made, firms can often use IPRs to protect their profits from being depleted by imitation (Greenhalgh & Rogers, 2007).

Formally, there are four main types of intellectual property right and these will now be explained briefly. Patents cover inventions of both new and improved product and processes. They are probably the most publicized and conventional form of protection. Patents are granted to cover new products and processes and in Malaysia last for up to 20 years. In order to be patentable an invention must meet various criteria relating to its novelty, inventiveness and industrial applicability. A patent gives the inventor the monopoly right for a limited period to stop others from making, using or selling an invention without the permission of the inventor. In return, the inventor discloses the technical details of the patent to the Patent Office which can be examined by others in society through patent searches. Patenting systems vary throughout the world and their jurisdiction is territorial and Malaysia adopts the first to file patent system. It is therefore advisable to file patent application as soon as possible.

Trademarks and service marks indicate the origin of goods and services one trader from others. They are for brand identity, giving the holder exclusive right to market goods and

services under that mark. A trademark aims to protect the reputation and goodwill of a trader. Registration of a trademark requires a sign to be represented graphically in words or pictures. The sign includes words, logos, colours, scents. Slogans and shapes and may include sounds and gestures. Registration grants statutory rights, subject to certain conditions, to prevent others from using a trademark without the registered proprietors permission. The initial period of registration is for 10 years although this can be renewed for ever provided renewal fees are paid. If an unauthorised use of a trademark is proven then the owner may be able to sue for passing off.

The commercial value of a registered trademark can be considerable, and when a product becomes dominant, consumers use the trademark generically – as in thermos, cellophane and Colgate. Non-registration of a trademark does not guarantee protection from infringement although this may be pursued through common law. Registered trademarks are shown by the symbol ® whereas the symbol TM indicates that the word/logo referred to is not necessarily registered.

Copyright provides protection for the creators of original material, including literature, art, music, sound recordings, film and broadcasts. Computer programs and databases also come within the scope of copyright. Copyright confers two basic rights: a moral right by which the authors or copyright owners are entitled to ensure that any use of their work is faithful to the original and an economic right for their effort to make sure they are paid for the use of their work. Copyright protection is automatic as soon as there is a record in any fixed form and exists for the author's lifetime. Copyright has received increased attention, particularly as a result of its relevance to newer industries including computer software programs and internet-based media, particularly music.

Industrial design refers to the features of shapes, configuration, pattern or ornamental aspect of an article that may be reproduced by industrial means. If this aspect is missing, the creation may come under the category of artistic work whose protection is assured by copyright laws. A registered industrial design is given an initial period of 5 years from the date of filing and is renewable for a further two consecutive terms of 5 years each.

Firms can also use other methods to protect their knowledge such as trade secrets, including making confidentiality agreements with their employees and other firms which they trade. A trade secret is a formula, practice, instrument or a compilation of information used in business to obtain an advantage over competitors. In Malaysia, it is protected under the law of confidential information. Understanding the importance of trade secrets and taking measures to protect the company's information can serve as an alternative protection and more importantly it can be managed internally without incurring substantial costs.

4.2 How exactly do SMEs benefit from IPRs?

In the new digital or high tech environment, IP awareness and actual use of IP assets as an integral part of business strategy in achieving competitiveness has become an absolute necessity. Even as passive player in the marketplace, an SME has to make sure that it does not inadvertently infringe the IP rights of others, as innocent mistakes are generally no excuse in the court of law. On the other hand, as an active player, an SME has to seek opportunities and to exploit the environment to remain and grow in business ("The Importance", 2002).

A new product can be protected using different mechanisms provided in the IP system, for example, the new product or new process used to produce the new product can be protected under a patent. As the new product be introduced into the market, wouldn't it be great if it is accompanied with a brand name which is unique such that customers can recognize the said product and that brand name can be protected under a trademark. Further, the packaging on the other hand can be protected under the law of passing off. If an SME wants to protect the appearance of the new product, industrial design may offer such protection. The drawing in which the design lies can also be protected as an artistic work

under a copyright. Additionally, SME may also seek protection of information on the ingredients of its new product and the marketing strategies via the law of confidential information or trade secret. Hence, IP confers a bundle of rights to the owner. It is therefore important for SMEs to realize that their intellectual effort can be protected in various ways under the IP system (www.smeinfo.com.my).

When IP is legally protected and there is demand for the IP-protected products in the marketplace, IP can be valuable business asset. IP may generate an income for SME through the licensing, sale or commercialization of the IP-protected products or services that may significantly improve an enterprise's market share or raise its profits margins. As for example in Malaysia, Les Copaque production which was known through its animation series "Upin and Ipin" has proven that protecting their IPR is central towards the success of their business. As being said by its Managing Director Tuan Hj Burhanuddin Md Radzi, they are making the most income out of Upin & Ipin popularity. 30% of their incomes are from films and tv series whereas 70% are from licensing, royalties and merchandising. They have expanded their business via licensing the animation series to Indonesia as well as Disney Channel Asia and now are undergone dubbing work in India. Other than that they also merchandised the character of Upin & Ipin which were protected as their trademark to various products such as T-shirt, key chains, mug and etc.

On the other hand IP is important for marketing the products and services of SMEs as for most SMEs marketing is a major challenge. A marketing strategy should establish a clear link between the products or services and the SME as the producer or provider of such products or services. That is to say, customers should be able to distinguish at a glance between this product and others. Thus the protection of trademark and industrial design are important as been discussed above. Customers nowadays inclined towards products that have trademark or brand and thus SMEs must not take for granted the importance of trademark towards their business ("The importance", 2002).

IP may also act as an investment for SMEs. Investing in equipment, property, product development, marketing and research can strongly enhance company's financial situation by expanding its asset base and increasing future productivity. Acquiring IP may have a similar effect as markets will value the company on the basis of its assets, its current business operations and expectations of future profits. Expectations for future profit may be considerably affected by acquisition of key patents. Similarly, a good trademark with a good reputation among consumers may also enhance a company's current value and may decisively attractive to consumers. Investment in developing a good IP portfolio is therefore much more than a defensive act against potential competitors.

5. IP Management

The strategic utilization of IP assets can enhance the competitiveness of SMEs. Like physical assets, IP assets must be acquired and maintained, accounted for, valued, monitored closely and managed carefully in order to extract their full value. This is because when IP is legally protected IP can become a valuable business asset (WIPO, nd).

IP management is a crucial task especially in an innovative SME. This task is very important for firms that really concern about the importance of IP to their company. Moore and Craig (2008) elaborates that this strategic approach is known as Intellectual Asset Management (IAM), and involves the integration of business, legal and technological expertise to leverage an organisation's IP to increase profitability and maintain a competitive advantage. When utilised strategically, IP can contribute to the competitive edge of a company such as erecting high barriers to entry and providing a unique value proposition as well as market differentiation. IAM comprise of three value chain i.e IP creation, IP protection and IP commercialization.

5.1 IP Creation

Creation of IP is the most fundamental step. It should be part of the corporate vision and be supported by the commitment of corporate time, manpower and resources towards the creative function. It involves idea management, which includes generation of ideas, evaluation of the ideas, development of the ideas and implementation of the ideas (Hamzah, 2006). Cooperation from various aspects is needed in performing this task and the strength of the human resource is critical, each division should be staffed with the right talent - researchers for product development, designers for product aesthetics, marketers for product branding and the like. Each of these divisions generates their own IP and contributes towards the overall IP portfolio of the company (Chong, 2001).

There are few factors that could act as incentives for employees to display their creative and innovative talents to the fullest. Matthews, Pickering and Kirkland (2003) state that these include the role of senior management in designing a conducive environment for innovative practices at both the corporate and employee level. A reasonable budget should be provided for the development of IP. Many times research, development, and marketing efforts are hampered when not enough funds are allocated. More importantly, management must give the creative team the latitude and flexibility to work and also be prepared to review their efforts with an open mind - too many times a good idea is defeated by a conservative management. The term 'think outside the box' should be as important to the management as it is to the creative team. Not to forget, there is need to design a reward and recognition system for employees who are innovative. Training must be conducted for employees such that they see innovation as being embedded in their day to day work (Hamzah, 2006:). Lastly, it must be remembered that innovating and creating is an ongoing concern. The best companies sustain their research and development year after year; constantly pushing the envelope and staying ahead of the competition.

5.2 IP Protection

Valuable IP must be protected against infringement otherwise its worth will be diluted. IP management with regards to IP protection refers to the activities of determining what are the type of protection is suitable and where to file it as well as the filing process and the scope of protection (Moore & Craig, 2008). Generally, for innovation based SMEs patent protection is important in protecting the firms' innovation. Whereas for manufacturing based SMEs especially food manufacturing the proper protection are trademark and trade secret. Other than that there are also other consideration to be made in determining the right protection i.e by referring to its value and enforceability (Xu, 2004).

As been discussed earlier, protection for IP rights is governed by legislation in Malaysia and the four main rights - trademarks, copyright, patents and industrial designs - are recognized in this country. In order to qualify for protection, the IP has to be capable of being 'pigeon-holed' under one of the four main rights mentioned above. It should be noted that there are peculiar exceptions under each piece of legislation and not everything can be protected. For example: colours per se cannot be registered as a trade mark, copyright will not cover ideas, and a patent cannot be granted for rules or methods for doing business. There are many more exceptions and professional advice should be obtained when in doubt.

To obtain the protection itself the IP rights must be registered except for copyright, which accrues automatically. Registration is a process that takes time (usually measured in years) so it is prudent to make the application as soon as possible. It is worth mentioning that IP protection is a matter of sovereign national legislation. Hence, registration in one country only protects you in that country. There is no such thing yet as an international registration that gives you worldwide coverage. However, there are certain protocols and treaties that aim to provide a common filing system that helps cut down the paperwork for registration in multiple member countries (Chong, 2001).

Other than that, IP protection involves observation of registered IP. Like any other corporate asset, IP needs to be managed. Management involves keeping a diary system for rights like patents, trademarks and industrial designs because they need to be periodically renewed. It also involves keeping track of how the rights are used and presented and monitoring the marketplace for competition or infringers. Scrupulous records should be kept for the IP, including any licenses, agreements, or legal documents that are relevant. Even press clippings, advertisements, articles or write ups about the your products and services should be filed as they can serve as supporting documents when there are disputes or litigation; this is especially true of cases involving trade marks and branding (Moore & Craig, 2008)

IP protection not only limited to the registration of IP but also refers to the firm's ability to enforce their IP rights. This is because the real value of IP is the firm's ability to take action to those infringers. In many respects, the value of owning IP assets is directly related to the ability of the owner to enforce the property rights attached to such IP assets, i.e. the ability to take action against the infringer. IP rights that are blatantly infringed and cannot be enforced are worthless. Therefore, it is far more important for a business to prevent or limit the incidence of infringement than seek to deal with it later on when it becomes more complex and costly, and the outcome of the enforcement efforts become more uncertain. The ability to prevent and deal consistently with infringement of IP rights should be an important element of the IP strategy of an enterprise. If an enterprise is not prepared to devote attention and resources to prevent or deal with infringement, then it may be leaving too much to chance and good luck (WIPO Magazine, 2004).

5.3 IP Exploitation

Beyond management is aspect of exploiting IP, putting it to work to generate income for the company. Think of the business and revenue model - will the product be manufactured in house or licensed out to others, perhaps domestic production can be supplemented by contract manufacturing abroad. Different considerations apply to different goods and services and each of the various IP can be leveraged and applied differently. Managing and exploiting IP in the right manner ensures maximum returns.

The primary benefit of IP protection is the market power it conveys when it is exploited. This is reflected in sales volume (for product patent) or in higher levels of productivity (in the case of process patents). Licensing out patents to other firms would be one viable option. However, for most companies generating revenue through licensing was generally a second objective pursued only when the opportunity happened to arise. It did not normally form part of the overall strategy when a patent application was being made.

One approach open to a company is to patent defensively. Once a promising technology has been disclosed through a patent application, the company will patent around the new invention. The company establishes a portfolio of patents with numerous variation of its invention. Large firms often develop patent portfolios as part of their overall intellectual property strategy, increasing the overall protection that a single patent accords by fencing or creating a maze of patents that will make it more difficult for competitors to patent a rival invention without breach of existing rights (Blackburn, 2003)

6. Government support for Malaysian SMEs

Malaysia has intensified measures to promote its IP industry. As a reflection of the Malaysian government commitment to promote IP, 26th April has been declared as the annual IP Day of Malaysia. With the motto 'IP as a current economic spinner,' Malaysia has embarked on several major initiatives to transform its economy into a knowledge-based economy and to accelerate plans to achieve the objective of 2020 (Hamzah, 2006). Year 2010 has been declared as Innovation year which will increased Malaysia competitiveness as well

as creating job opportunities as been said by the Prime Minister Datuk Seri Najib Tun Razak (Khan, 2009). With the innovation year, the importance of IP can not be neglected by the government as IP and innovation cannot be separated.

Other than that, Malaysian Intellectual property Corporation (MyIPO) has been established in March 2003 to regulate matters relating to IP. These include dissemination of information relating to IP, training, will act as advisory body for Malaysia relating to IP matters in any International Convention which has been participated by our country. MyIPO has created an online registration to ease IP registration process. IP courts has also been established and until September 2009, almost 260 cases relating to IP has been solved and this shows that almost 50% of the cases filed has been solved in 3 years (Azizi: 2010).

National Intellectual Property Policy (DHIN) has been introduced by the government and the main purpose of the National Intellectual Property Policy (DHIN) is to leverage intellectual property (IP) as a new growth engine to improve the economic and social prosperity. DHIN focus on maximizing the contribution of HI in the accelerated socio-economic development and technology by creating an environment that encourages continuous production of IP, to provide high standards of protection IP system, as well as IP potential development of commercial exploitation.

Various support schemes for SMEs has been prepared by the government in promoting IP among SMEs. Among them includes financial grants by Multimedia Super Corridor (MSC) Malaysia which consist of financial assistance as well as IP consultancy with the trained consultants from MSC. Perbadanan Nasional Berhad (PNS) which facilitates Bumiputera entrepreneurs has been established to offer financial assistance in starting and expanding their business. PNS also provide training for franchising which is very beneficial for SMEs.

7. Conclusion and Recommendations

Intellectual Property management offers great benefit and protection for SMEs and it depends on the entrepreneur themselves to make use of the advantage. However, it should be noted that the successful use of intellectual property depends on many other factors such as the existence of an effective intellectual system in a country, the level of IP awareness of the business community and the society as a whole, the existence of SMEs support institutions and infrastructure and some other factors which is not mentioned here The authors propose that more research should be done with regards to the IPR management and IAM in Malaysia as to whether it has been implemented among the big firms and its implication. The authors also suggest that this IPR management approach should be practised among the SMEs since the potential of this approach is very viable theoretically.

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