



## INTELLECTUAL PROPERTY MANAGEMENT: CASE STUDIES OF VIETNAMESE SMES

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### ABSTRACT

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Intellectual property is increasingly recognized as key contributor to business success. Meanwhile, in Vietnam, there exists a lack of evidence on how firms are managing their intellectual property strategically. With that being said, this paper aims to provide a systematic analysis of successful intellectual property management practices of Vietnamese small and medium-sized enterprises (SMEs). The authors redesign Intellectual Creation Cycle by Japan Patent Office, taking into account the unique management scenario among Vietnamese businesses. Then, we demonstrate patent and trademark management of six representative SMEs each in four steps: Creation, Registration, Utilisation and Protection. Data collection is based on in-depth interviews with directors of the selected companies. One of the most important findings is that it highlights collaboration between universities/public research institutions and businesses in an effort to develop high value-added products. Also, from the policy-making perspective, a number of lessons have also been drawn out: first, universities and public research institutions should be promoted to commercialise their research outputs; second, enhancement of finance scheme by the industry plays an important role in the IP commercialisation process. This paper thus provides strategic guidelines for Vietnamese SMEs in corporate IP management. It also proposes some practical insights for policy makers with respect to the promotion of IP among businesses, in particular SMEs for the purpose of economic growth.

**Contribution/Originality:** While existing studies related to intellectual property in Vietnam focus on the legal perspective, this is the first to explore and provide primary data regarding how successful firms manage intellectual properties as their strategic assets. Also, the management practices are comprehensively demonstrated based on the life cycle of intellectual properties.

## 1. INTRODUCTION

In the knowledge economy, intangible assets are increasingly recognised as the main contributor to value creation, earning power and profitability of businesses (King, 2002). Even more importantly, it is how to efficiently integrate these assets into business strategy, which normally requires considerable expertise and cautious resource planning (Silviana, 2019). Intellectual property (IP) management is considered as a core competency for managers of successful enterprises in the modern business era (Rivera & Kline, 2000). It is the efficient management of IP, rather than IP rights establishment solely, that creates wealth for businesses and the society (Bismuth & Tojo, 2008; Gargate & Momaya, 2018).

Throughout the previous years, Vietnam has demonstrated strong effort in a well construed IP system which is needed to stimulate creativity and economic growth. In 2007, Vietnam became a member of World Trade Organisation (WTO) and a signatory to Trade-Related Aspects of Intellectual Property Rights (TRIPs) Agreement. To comply with the international standards, Vietnam established its Law on IP in 2005, amended in 2009, which in essence corresponds to the international benchmark. Since then, Vietnam has witnessed a steady increase in the number of applications for IP rights, especially patent applications (IPVN, 2022). However, the general public awareness of IP is low (Payumo & Grimes, 2011). Many Vietnamese firms fail to make full use of their IP due to lack of an appropriate IP management strategy. This calls for the show-case of exemplar Vietnamese businesses which have established well-structured IP management processes and successfully integrated IP into their overall corporate strategy.

Though there is extant literature on IP management framework (Payumo & Grimes, 2011; Reiffenstein & Nguyen, 2011), no research has explored how firms manage their IP rights strategically or to what extent IP rights can contribute to the competitiveness of firms with a focus on Vietnam. This study aims to address the gap by examining six case studies from Vietnam. Our findings are expected to serve as a reference for Vietnamese firms and policy makers in the pathway of integrating IP into corporate management strategy and promoting IP management for the purpose of enhancing firm competitiveness.

This paper is structured as follows: 'Literature review' synthesises existing literature on IP management models; 'Methodology and data' presents the adopted IP management model in this study; 'Results and discussion' illustrates our main findings based on in-depth interviews with selected Vietnamese firms; 'Conclusion' summarises our research results and addresses some limitations and suggestions for future studies.

## 2. LITERATURE REVIEW

Intellectual Property Management (IPM) is defined as an important set of concepts, methods and processes created to fit IP of the firm with the defined objectives and business strategy (Cela & Cela, 2013). Different scholars have built various IPM models which serve as a guiding tool for managers to self-assess their existing IP strategies, classified into three groups: (1) Progressive; (2) Typology; (3) Maturity (Gibb & Blili, 2017).

Progressive model accords IPM strategy to specific stages of a firm's development. Goldrian (2012) proposed a three-level model with the aim to link proactive IPM with the degree of Research and Development (R&D) in a business. Advantageously, this model is simple, patent-focused and unbiased either on the behavior of managers or firm's emerging need to manage IP. On the other hand, Harrison and Sullivan (2011) concentrated on behavioral aspects and redesigned the Value Hierarchy with five levels of IPM, from the primary need to protect a concept to a more sophisticated exploitation of IP in order to shape the future of the business. Harrison and Sullivan's model took account of technology changes and opportunities embedded therein but was based on large firms' frameworks, thus it would arguably fail to operate in small-and-medium sized enterprises (SMEs). Chesbrough (2006) proposed a six-stage model which links business model, open innovation and IP for an increasingly sophisticated approach. However, a clear business model is a prerequisite to apply this IPM model, which is incompatible with start-ups.

Typology model aims at differentiating various venues firms choose to manage their intellectual assets, through formal or non-formal regimes. Typology model is often used to design IPM strategy of SMEs. Kitching and Blackburn (1998) set out a continuum of IP protection practices at four levels with an increasing legal formality, in details: (1) Do nothing (no strategy to protect IP); (2) Informal protection; (3) Unregistrable legal rights; (4) Registrable IP rights. The study was conducted on SMEs of only four sectors (computer software, design, electronics and mechanical engineering) and did not clearly describe the action of IP right holders.

Brant and Lohse (2013) presented three categories of IPM strategies deployed by innovative SMEs: (1) formal appropriability regime (through registered IP rights); (2) complementary method (such as secrecy); (3) hybrid

strategy that incorporates both methods. Meanwhile, Friesike et al. (2009) and Fisher and Oberholzer-Gee (2013) addressed only formal protection, just disregarding a constitution of non-registered IP.

Maturity model may present the best option compared with progressive and typology models as it can either be staged or continuous (Jokela, Siponen, Hirasawa, & Earthy, 2006). Kern and Van Reekum (2012) described strategic patent management in four stages among selected biopharmaceutical SMEs. As the research was limited to patents in biopharmaceutical industry, it is doubtful whether the model could be applied to other IP rights in other sectors.

Moehrle, Walter, and Wustmans (2017) identified five core dimensions (portfolio, generation, intelligence, exploitation, and enforcement) and two supporting dimensions (Organisation and culture – contextual elements that underpin core dimensions). These core and supporting dimensions altogether formed the 7D Patent Management Maturity Model, which presented an ideal solution to firms or research institutes in technology-based industries. However, its focus on the management of patent was again too narrow and insufficient to envisage its compatibility in a wide spectrum of IP rights.

In an attempt to turn Japan into an intellectual property-based nation, the Japanese Strategic Council on IP introduced the IP Policy Outline in July 2002, which clearly specifies Japan's approach to achieving a dynamic economy and vigorous society through a so-called Intellectual Creation Cycle (Japan Strategic Council on Intellectual Property, 2002). This cycle serves as a framework for developing and implementing IP strategy with a special focus on IP rights generated from both private and public sectors. The cycle comprises three strategies on IPM: creation, protection and utilisation Figure 1.



Figure 1. Japanese intellectual creation cycle.  
Source: Japan Strategic Council on Intellectual Property (2002).

In Vietnam, studies on IPM theories and practices remain insufficient and there is not yet a national initiative to promote and guide Vietnamese firms in managing their intellectual assets. Most studies targeted governmental agencies, universities or research institutes rather than firms (Pham & Nguyen, 2018; Vu, Bui, & Chu, 2018).

### 3. RESEARCH DESIGN

#### 3.1. Research Framework

Japan has been among top foreign investors in Vietnam since 1993 (JICA, 2013) and second largest investor in Vietnam in the first 8 months of 2021 (MPI, 2022). Not only through finance, Japan also took an integrated approach to support Vietnam's transition towards the market economy, especially regarding IP system development and administration for businesses (JICA, 2013). With the view to become an intellectual property-based nation, in the early 2000s, Japan introduced its national Intellectual Property Strategic Program (or the IP Policy Outline), which reflected Japan's determination to concentrate its resources to promote the creation of intellectual assets (Arai, 2005). At the core of this strategic program lies Intellectual Creation Cycle, which lays the

foundation for a proper framework for Japanese businesses to fully exploit IP as a driving force for firm competitiveness.

The IP Policy Outline has proved outstanding impacts on the intellectual property industry of Japan. First, it has created room for new technologies to be invented. Academic institutions and corporations have worked closely together to create intellectual property that is directly aimed at a product that is patentable. Secondly, the government was planning to establish a Patent Court the goal of which is to decrease, or even eliminate, the waiting time of decisions, so that intellectual property owners can benefit from their inventions more quickly (Wada, 2005).

The framework used in this study is called 'IP Management Cycle' (also the Adopted Cycle) the essence of which is the same as that of Japanese Intellectual Creation Cycle. In addition, we added IP Management as the outer layer of the cycle to evaluate the capability of companies in managing the intellectual assets to enhance their competitiveness from a strategic perspective.

We also made two *de facto* adjustments to ensure the model is best fit to the Vietnamese business context. First, the original Protection stage is divided into Registration and Protection steps in the Adopted Cycle. This is under the assumption that a large number of Vietnamese companies do not manage to register for IP legal protection. This observation particularly holds true in the domain of patents, most of which are not brought to commercialisation according to our survey results. Consequently, surveyed Vietnamese companies do not place much importance on applying for patent protection for their inventions. Therefore, Registration step has been taken into consideration to gain an insight into the practice of some successful companies in the registration step. Second, in the Adopted Cycle, the Utilisation step is put before the Protection step because in Vietnam in most cases, companies use the IP rights on their own and do not grant licenses to third parties. The IP Management Cycle is demonstrated in Figure 2.

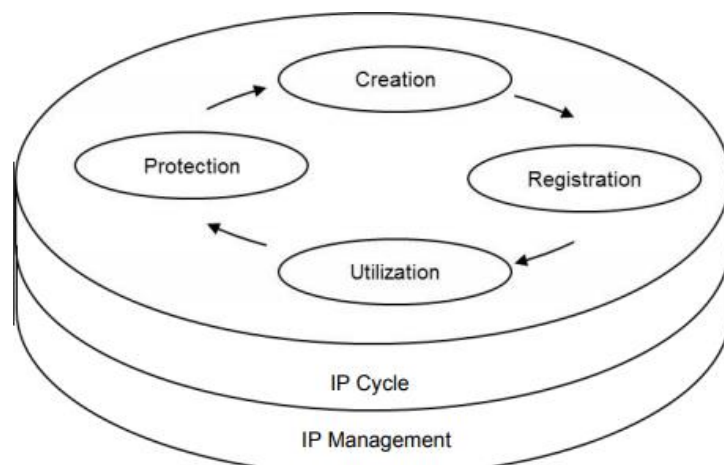


Figure 2. IP management cycle.

Components of the cycle to be investigated during the interviews are as follows.

(1) Creation: Prior to IP registration which may include R&D, considering the design of product, logo and naming for design and trademark.

(2) Registration

- Applying for IP rights.
- Request for examination might be intentionally avoided for patents.
- Efforts to make IP rights stronger may be made with the support of patent attorney.

(3) Utilisation

- Sales of products and services utilising IP rights, licensing, IP rights obtained by Mergers and Acquisitions (M&A), purchasing, etc.
- Licensing out IP and cross licensing.
- Selling business including IP as part of intangible asset.
- Trying to utilise sleeping IP.
- Succeeding in disturbing competitor's business by IP.

## (4) Protection

- Taking action, including legal measures to protect profits when infringement or claim is aroused from competitors.
- Taking action to avoid infringement from competitors.

## (5) Management

- Formulating IP strategy and R&D strategy.
- Other activities such as decision making of disclosure or not.

### 3.2. Data Collection

The author obtained secondary data from companies' websites, relevant documents and reports. Primary data were gathered through deep interviews with open-ended questions which aim to acquire concrete facts and opinions of interviewees. Questions were sent out to respondents in advance of the interviews for the purpose of their better beforehand preparation.

### 3.3. Sample

First, to draw a practical picture of IPM among Vietnamese SMEs, we conducted deep interviews with six Vietnamese companies operating in different business lines, three of which are considered as representative case studies for trademark management and the others are exemplars of patent management. The reason for our selection of trademark and patent was that in Vietnam the majority of applications fell into these two IP domains [Table 1 \(IPVN, 2022\)](#). To ensure the good representativity of the selected companies, we examined whether those companies are IP rights holders in the leading industries in Vietnam with respect to the application of corresponding IP rights.

**Table 1. Percentage of IP applications by subject matters by Vietnamese applicants.**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Patent	9%	10%	9%	11%	11%	11%	11%	11%	11%	10%	10%
Utility Solutions	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Industrial Designs	6%	5%	6%	5%	5%	5%	6%	6%	5%	6%	5%
Trademarks	84%	84%	85%	83%	83%	83%	82%	82%	83%	83%	84%

Source: Annual Reports 2007-2017 (IPVN, 2022).

For trademarks, two selected companies operate in food processing industry while the other company specialises in textile/garment production [Table 2](#).

**Table 2. Three Vietnamese SMEs for trademark management analysis.**

Vietnamese SMEs for trademark management	Goods/services	Class of goods/services (under Nice Agreement)
TrungThanh Foods Company Limited (TrungThanh)	Food processing/condiment	29.30
HongLam Joint Stock Company (HongLam)	Food processing	29.30
VAG International Joint Stock Company (VAG)	Textile/garment	25

The products of TrungThanh and HongLam for the protection of trademarks fall into classes 29 and 30 while the products of VAG were registered under class 25 according to Nice Agreement. Statistics obtained from the repository of the Vietnam's National Office of IP shows that the total number of trademark applications for the class of goods/services number 25, 29 and 30 was among the top ten registered classes during the period 2000-2017 [Table 3](#). Therefore, we believe that the industries where our interviewed companies are operating are leading industries in Vietnam when it comes to trademark applications. Given that, examining the trademark cycle in TrungThanh, HongLam and VAG would give us an overall understanding of trademark cycle of SMEs in Vietnam.

For patents, three companies under our interview: (1) VITEC Joint Stock Company (VITEC) in civil engineering; (2) Anabio R&D Joint Stock Company (Anabio) in pharmaceutical, and (3) Golden Harvet Fertiliser Joint Stock Company (Golden Harvet) in fertilizer industry.

**Table 3.** Top ten classes of goods/services for trademark applications in Vietnam (2000-2017).

Class of goods/services	Total number of trademark applications (2000-2017)
5	99259
35	74070
30	30376
3	26062
9	24733
43	23110
25	22224
41	19026
29	18584
11	15816

## 4. RESULTS AND DISCUSSION

### 4.1. Vietnamese SMEs as Exemplars of Trademark Management

#### 4.1.1. TrungThanh Foods Company Limited

##### 4.1.1.1. General Introduction of the Company

TrungThanh Foods was established in 1995 and has been operating in the field of food production and trading. TrungThanh Foods has gained its reputation for quality processed condiments with a variety of over 200 products falling into 7 main lines: (1) shrimp paste, (2) fish sauce, (3) chili sauce, (4) soy sauce, (5) vinegar, (6) salt and (7) canned vegetables. Notably, the foodstuff products of the company always rank top in terms of quality, hygiene and safety assurance with a central corporate motto 'Good for all'. In Vietnam, TrungThanh Foods has established a network of distributors in 60/63 provinces and cities and signed contracts with more than 400 distributors, distribution centers, supermarkets, megamarkets and restaurants. In addition, the company has exported its products to over 50 countries and territories, mainly in South Korea, Russia, Germany, Poland, China, Japan, France, South Africa and Canada.

##### 4.1.1.2. Trademark Management Strategies

###### (1) Creation

Product design, product development, manufacturing, marketing, sales and logistics are designed in an integrative manner so that the substance of business matches the brand concept, the core of which is safety. It means all the products of TrungThanh Foods have been developed in line with the brand concept, especially when brand extension was implemented. It is considered that product development and investment in IP have been internally funded through enhancing the profitability and growth of the business as follows.

Within the organisation of TrungThanh Foods, divisions related to IP such as product design, sales and legal department are all engaged into decision-making process. If consensus is not obtained, the general director makes final decision.

### *(2) Registration*

One year upon establishment, the company registered its trademark (in 1996) and has ever since carried out advertising campaigns to appeal difference to the market and gain brand value. TrungThanh Foods has opted for registering trademarks by itself with respect to domestic market in Vietnam. Trademark registration in foreign markets was assigned to its local representatives or agents. In fact, TrungThanh Foods once relied upon outsourcing registration but it encountered some problems such as disregard of trademark renewals and conflicts on the substance of trademark application, which led TrungThanh Foods to register the trademark by itself. The company has been registering defensive trademarks to prevent misleading trademarks to be registered by others.

### *(3) Utilisation*

In order to maintain and reinforce the competitive advantage inherent to the business from its start-up, which is corporate image of loyalty and safety, TrungThanh Foods has invested in advertising and reinforcing its sales personnel. Therefore, its brand concept has been diffused in the market. Furthermore, the company makes constant efforts to improve existing products and develop new ones by expanding its production capacity. Given its evolution of business as above, TrungThanh Foods has been stably growing without getting caught up in a price competition and it has been able to secure adequate fund for investment. Exploitation of registered trademarks consequently plays an important role for the business to grow in a virtuous cycle.

Interestingly, the company is looking into opportunities to license its trademarks to a third party. However, according to its representative, licensing has not been realised yet possibly because of constraints on licensing fee and risks of harming its trademark value.

### *(4) Protection*

When it comes to actual infringement, TrungThanh Foods would first send out a warning to the alleged infringer. If no response is given, the company will lodge its complaint to the Market Management Office, which has statutory competence to impose administrative sanctions on trademark infringements. The company is well aware that taking legal action is another alternative, which would yet take more time to tackle the problem, thus being its last resort. Even though administrative cost actually accrues for the company, the Market Management Office could efficiently help TrungThanh Foods to obtain equitable damages.

In respect of its prevention of trademark infringement, the company has established a mechanism for sales staff who visit retail shops on a daily basis to frequently collect and report information on suspected counterfeits by means of monitoring the shops and taking photographs on the spot. Notably, the legal department which is responsible for IPM actually provides a basic training for the sales staff to recognise and give a preliminary evaluation on whether the mark at issue is an infringing one. Good relationship is ordinarily maintained with the media that the company would count on if a problem takes place.

According to the representative of TrungThanh Foods, IP audit is one of the problems currently facing the company. Therefore, government's support and guidance in IP audit for Vietnamese businesses should be promoted.

#### *4.1.2. HongLam Joint Stock Company*

##### *4.1.2.1. General Introduction of the Company*

Established in August 2006, HongLam has become the Vietnamese leading producer preserved sweetened or salted fruits ('ô mai' in Vietnamese) which are considered as one of characteristic snacks for Vietnamese people. Inspired by the traditional treat with preserved fruits in Vietnamese homes, HongLam has developed a fruitfully wide portfolio of this product category with a total of 63 products. Besides, HongLam has developed other product lines including tea products, confectionery, HongLam fruit beverages and New Year's dried candied fruits.

##### *4.1.2.2. Trademark Management Strategies*

###### *(1) Creation*

With respect to the history of developing a differentiation strategy of the company, although HongLam has grown to achieve a business scale of more than 500 employees during more than 20 years, it still faces strong competition from small household producers, who traditionally prepare and process 'ô mai' at their own home location. The company's differentiation has historically changed in accordance with the life cycle of its business as well as in the need to surpass its competitors.

At the beginning, differentiation was imbedded into (1) physical aspects of its products (taste, texture and appearance), (2) convenience as life-long food and (3) reasonable pricing. Those elements are attributes to the development of sourcing channel of raw materials and development of manufacturing process including packaging technology.

Subsequently, HongLam has recognised additional decisive factors of its corporate differentiation, which include: (1) confidence in the safety of the products, (2) comfort of being connected with the tradition of Vietnam, (3) communication tools to construct customer relationship, (4) extensive product portfolio and (5) convenience and ubiquity of sales points. According to its CEO, HongLam is offering the value beyond industrial products. Confidence in the safety of the products is ascribed to continuous improvement of manufacturing and logistic process. Comfort based on the tradition of 'gifting' as part of Vietnamese culture is promoted through advertising tools. Good customer experience has been created at shops through communication with sales staff and sophisticated product design based on company's insight into the daily life of Vietnamese people. An extensive product portfolio is among fruitful results of the company's constant efforts in product design and development. Convenience and ubiquity of sales points are attributable to the company's deployment of shops and delivery system to supermarkets, megamarkets and also e-commerce platforms. On top of this, relentless analysis of consumer needs and cost reduction by technological innovations are critical determinants of HongLam's differentiation strategy.

To fund IP activities, HongLam mainly relied upon its cash flow and capital of the company. With respect to trademark design and registration, the management board of the company was proactively involved in the decisions on category and contents of its IP rights.

###### *(2) Registration*

HongLam has registered its trademark in 27 countries. Other IP of the company includes packaging design and copyright on music. The manufacturing process is protected as a trade secret. Currently, HongLam is considering registration of a new trademark, which will be a sub-brand of its existing trademark. In addition, the company has an intention to apply for a US patent on the mixing method before exporting its products to the USA. The company relies on a lawyer for every IP procedure.

Trademark is communicated to the market along with other tools such as logo, slogan, photos and music. As HongLam aims to establish a brand identity in which trademark plays a key role, the company has a dynamic approach to trademark registration.



*(3) Utilisation*

Registered trademark of HongLam has truly leveraged its competitive edge. The company has used registered trademark on its products to distinguish its unique goods from those of other undertakings. Also, trademark has contributed to raising awareness of corporate brand and business concepts among consumers, thus establishing the company's top position in consumers' mind.

*(4) Protection*

HongLam has faced with several infringements upon its trademark, brand and design. In those circumstances, the company has made an attempt to communicate directly with the alleged infringers, who upon receipt of HongLam's message would agree to stop their infringements. Those infringers are mostly small shops or household producers who have taken unfair advantage of HongLam's reputation to gain commercial benefits.

As part of its defensive strategy against counterfeits, the company changes the labels of its products once every two or three years. Advertising is also a frequently used tool to inform and imprint the product image into consumer's mind.

In general, the value of HongLam brand is the result of accumulated investment on trademark. HongLam also raised its concern and recommendations for the government to provide support for businesses with respect to IPM. First, system to protect and enforce patents should be improved to encourage businesses to obtain patent rights; second government support for a large amount of purchase of the fruit from the northern mountainous region should be provided; last, abolition of commission fee of fruit transport is needed.

*4.1.3. VAG International Joint Stock Company*

*4.1.3.1. General Introduction of the Company*

VAG International Joint Stock Company was established in December 2011 and specialises in developing Fast Moving Consumer Goods (FMCG). Its focus lies in solutions for product quality which affects human health and solutions for improving environment.

*4.1.3.2. Trademark Management Strategies*

*(1) Creation*

The ultimate goal of the company is to commercialise unused patents possessed by the chairman, who is a textile engineer and who has registered patents in Taiwan. Therefore, the differentiation of the company stems from both the development of original function featured in its patents prior to the establishment of the company and subsequent product development based on the market needs obtained by VAG. Taking the color of the product for example, the way to decide the color was considered, the way of coloring was designed and the coloring was conducted to complete product development.

Fund needed to conduct IP activities has been financed by the cash flow and capital of the company. At outset of VAG, the chairman was highly aware of IP. The company raised various ideas from external resources such as consulting firms supporting oversea business development for developing countries, specialist on fashion color and painter. The company created its trademark with the support of external advisers.

*(2) Registration*

Several product categories which are irrelevant to each other are named carefully to accord market situation of each. For example, the meaning and the sound of the word, existing trademark in target countries are investigated. The company relies on external lawyer for the registration of its trademark.

*(3) Utilisation*

Trademark has been playing an important role to distinguish its differentiated products from that of competitors and convey the product concept with advertisement. However, VAG has an experience in the early stage of the company that it had to accept to be an Original Equipment Manufacturer (OEM for) overseas market, which turned out to be an unwise decision.

*(4) Protection*

According to the representative of VAG, there was a company which sold product whose trademark resembled that of VAG. However, VAG did not take any counter-measures, because customers were able to differentiate it.

With respect to relevant management, VAG has been offered to become an OEM for other businesses. But the company persists in its own brand. Exception was the time when the company needed cash at the early stage of the business. VAG still receives request of OEM supply to the store brand from leading supermarkets, but the company has not agreed to the requests.

The company has been continuously improving product. For example, it has added fashionable colors and developed the use of products (from cloth for fried pan to cloth for microwave oven). The company has a strong focus on its overseas market with 40% of the revenue coming from its foreign market.

VAG has deployed a variety of marketing channels, including international exhibitions, internet markets, YouTube videos, direct mails to the net forum participants and the demonstration on places where industry officials gather. The ultimate goal is to create and reinforce its brand in consumer's mind.

The chairman of VAG has particularly high awareness of IP. The company was actively involved in a student contest titled IP Challenge at Foreign Trade University (Vietnam) as a co-founder. Via a series of consultancy and problem-based learning activities, the awareness of the leader board of the company on IP has been greatly improved. In-house training regarding IP has also been conducted.

*4.1.4. Lessons Drawn out for Trademark Management*

The success stories of our representative firms have indicated some certain features which may serve as reference for other businesses in Vietnam and developing countries to fully exploit their trademarks.

Regarding the generation stage, TrungThanh, HongLam, and VAG are all well aware about the importance of trademark and consider trademark management as a strategic component of their business plans. The key point highlighted by the three firms is that trademark management should be linked to clear and wise differentiation strategy which may be changed over time to fit the market scenerio. The core value of TrungThanh is safety. For HongLam, their brand identification which once lied upon elements related to raw materials and manufacturing processes have been switched into safety, cultural values, customer relationship, and product portfilio which are far beyond industrial products. Meanwhile, the unique selling points of VAG stems from their market-oriented product development. That image then should be integrated into every single dimension of the business including, amongst others, sales, package design with the aim to convey a consistent message to customers. To that end, all the related department should be involved in the decision-making process. When implementing trademark management activities, the companies not only depend on their own cash flow and capital but also seek for external resources such as consultancy.

In the registration stage, all studying firms opt for early trademark registration which is carried out by either their own internal legal divisions or external agents. However, firms should bear in mind some possible problems related to outsourcing registration such as renewals and conflicts on the substance of application. Noticeably, making trademark registered in foreign countries rather than focusing solely on domestic market is worth considering. This is of paramount importance if a company has the intention to penetrate into a new market.

Utilisation refers to companies exploiting their registered trademarks for commercial returns and business growth. At this point, the common goal is diffusion which means making the trademark familiar and aware, thus improve or reinforce the firm position in the market. This can be gained through a number of channels namely, advertising and sales. At the same time, product development activities need to be continued, and production capacity needs to be enhanced to assure adequate fund for investment in trademark management. Besides, licensing trademark is an alternative option, yet firms should put into account the licensing fee and trademark value maintenance.

The three firms reveal a number of strategies to protect their trademark and tackle infringements. When dealing with a trademark violence, the common norm is companies usually prioritise communication and negotiation over legal actions supposing these actions are complicated and serve as the last resort. However, no defensive measure is needed if the company has established a so stable position in the market that customers themselves can differentiate between original and pirated products. In respect of prevention, what TrungThanh does is having their sales staff to carry out daily observation and report at retail stores to discover any suspected counterfeits. Meanwhile, HongLam defends their brand by changing their labels every two or three years together with informing their customers through advertising. Equally important, employees, especially sales staff who are likely to encounter and recognise infringing products should be trained about trademark and IP in general. Besides, it is a good preparation to maintain good relationship with the media because the company can count on them if any infringement happens in the foreseeable future. Indispensably, each firm has to take full advantages of marketing channels to educate customers and reinforce its brand image. Finally, the companies are calling for governmental support and guidance in IPM and IP audit.

#### *4.2. Vietnamese SMEs as Exemplars of Patent Management*

##### *4.2.1. Golden Harvet Fertiliser Joint Stock Company*

###### *4.2.1.1. General Introduction of the Company*

Golden Harvet Fertiliser is a pioneering company in producing compound fertilisers in Vietnam. Established in 2013, Golden Harvet Fertiliser was a spin-out company of Academy of Agriculture with a view to providing solutions to enhance efficiency of using fertiliser in Vietnam and to protect the environment against the harm of disused fertiliser.<sup>1</sup> The company has built up a popular brand among customers due to its wide range of innovative products. Golden Harvet Fertiliser has received many awards and certifications such as 'Certificate of high-quality products and services for abundant harvest.

###### *4.2.1.2. Patent Management Strategies*

###### *(1) Creation*

In Vietnam, 60% to 70% of the fertiliser used is carried away by the water and wasted without effect. If the situation were improved, the load of the farmers would be reduced, the production would gain, the economic loss would be saved, and the negative impact on the environment also would be reduced. To solve this problem, the company has developed and commercialised slow-release fertiliser of pressed pellet type. Compared with the conventional products, this product requires less fertilisation frequency, the same fertiliser cost per farmland area, and the yield increases. Currently, the market area of this product is increasing nationwide. The company plans to export the product to neighboring countries such as Laos, Cambodia and China.

The company, established in 2013, is a spin-out venture business by three people from Academy of Agriculture of Vietnam. The management, granted Ph.D., had being engaged in academic research at the Academy. He conducted studies on how to solve the problems regarding fertiliser in Vietnam until he established the company.

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<sup>1</sup>Available: <<http://vualuoi.com/>> (Accessed 22 July 2022).

Even after the company was established, he has been moving on with the same research making use of available facilities at the Academy and at home. Up to now, his fertiliser has been continuously improved over the years. The company was established when the seventh-generation product was developed (F7 fertiliser) for which the company later on obtained a patent. The name of products in the seventh generation is 'sloth fertiliser'. Currently, the company is tackling with the product development of the ninth generation.

Prior to the establishment of the company, it was provided by the university with various resources, such as research funds allocated to university researchers, research facilities and students. The company has been able to use the same facilities after the company was established. partners provided funds in return to becoming a co-right holder of the patent.

In order to fund its IP activities, the company collected the payment from the farmers in short period by discounting. The accumulated cash that the management earned from other business in the period 1997 to 1998 also contributed to funds.

### *(2) Registration*

The company holds one patent and one utility model in Vietnamese market. The contents of the rights are the method and the composition of mixed ingredients, the procedure of its manufacture, the shape of the product and the method for production. When the management was a researcher in university, patent was not applied for because the possibility to commercialise the result of the research was insufficient.

At the time of application, the company obtained advice from an expert in the field of science and technology at the National Office of IP (NOIP) as there is a specific department at NOIP to provide support for universities and research institutes.

### *(3) Utilisation*

The patent and the utility model served as reinforcement tools to promote the advertising of the product with the market penetration and partners. However, what was more important was the research result itself. Securing experimental field and obtaining effective data there played far most important role to earn confidence from the market. Supplying fertiliser with slow-release technique was not familiar with the farmers who were used to traditional compound fertiliser. The company conducted explanation to the agricultural association to persuade farmers, which resulted in securing the experimental field at agricultural promotion center.

The management itself has won a lot of awards and gained popularity. That was also effective in terms of obtaining credibility.

### *(4) Protection*

In 2014, some competitors began to sell the product with the same kind of shape and similar fertilisation method. Sales volume of these products reached approximately several thousand ton. However, the products required more than one kind of fertilisation and at least 2 to 3 times repetition. All of these shortcomings faced by farmers led them to switch to another brand of fertiliser which is more reliable and efficient. As a result, those competitors of Golden Harvet Fertiliser became bankrupt.

At that time, since the sloth fertiliser product was under examination for patent to be granted, the company could not explicitly specify that the products of competitors were infringing goods.

Overall, by continuous product improvement and making performance records, Golden Harvet Fertiliser has been increasing the value of its patent. Patent also has a positive effect on performance track records. In other words, there is a mutual effect between patent and performance records of the company. Thus, R&D of continual product improvement and efforts to reduce cost and develop market with a variety of means were essential.

As the elements such as fertilisation method and frequency are core competencies of Golden Harvet Fertiliser's sloth fertiliser, the company managed to speed its propagation and training for farmers on the advantages of its products.

#### 4.2.2. Anabio R&D Joint Stock Company

##### 4.2.2.1. General Introduction of the Company

Anabio is a Vietnamese leading probiotic supplement manufacturer who offers unique, non-competing and most effective probiotic supplement to improve digestive system.<sup>2</sup> The company was inaugurated in 2010 by scientists with background in microbiology, biochemistry, molecular biology, biophysics, immunology and cell biology. Anabio's areas of interest include: (1) production of *Bacillus* spores for probiotics; (2) production of immunological sugars for functional foods; (3) development of diagnostic kits based on fluorescent probes and nanoparticles.

##### 4.2.2.2. Patent Management Strategies

###### (1) Creation

In the case of Anabio, the company is not the patent holder *per se*. The managing director, who is the founder of the company, was a researcher in a university majoring in biotechnology and spun-out to establish Anabio. Upon the establishment of the company, he has continued his research in order to strengthen product improvement and product competitiveness using university facilities, conducting joint research with the university. Thus, the research results in the past and the subsequent insight into market needs through business experience constitute the source of ideas on product development.

Various resources were provided by the university before the company was established, i.e. research funds allocated to university researchers, research facilities and students. As the university was the owner of research results, the managing board of the company offered to purchase the research results of the university. Method of payment was proposed by the managing board and both parties ultimately came to an agreement to pay one-time lump sum plus royalties in proportion to future sales. According to the managing director, the negotiation was not tough. After the company was established, the same research environment has been secured subject to a joint research agreement with the university. While the proprietorship over the research results was shared between the university and Anabio, the priority right to purchase the holdings of the university belongs to Anabio. The managing board holds that it was not a huge economic burden to purchase the research results from the university.

###### (2) Registration

Anabio has not applied for patents on its proprietary research results in the fear of competitors imitation of its products through disclosure of formulas or process/method in patent applications. Because the products are sold as a functional food, they can be sold in private material unit. Manufacturing process is also kept as a trade secret.

###### (3) Utilisation

Because patents are not registered, strengthening of competitiveness and of growth leveraging IP rights has not been made.

If there is no risk of being imitated, the potential return by patent registration will be increase of sales through the enhancement of advertising effect. However, advertising effect can also be realised by developing clinical experimental.

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<sup>2</sup> More information about Anabio is available: < <http://anabio.com.vn/> > (Accessed 22 July 2022).

#### *(4) Protection*

As the company does not hold patent right, it has never encountered any infringement. However, it suffered from indirect harm from counterfeit products. Here, indirect damage means the deprivation of potential sales and the reputational damage that Anabio's product is similar to counterfeit.

According to the managing director, the company has kept track of a number of infringing acts on the reputation of Anabio. A microorganism-containing functional food of liquid type for intestines was sold by a competitor. The price was lower and the shape and trademark were different though the effect was inferior to that of Anabio's product. The actual ingredients of this infringing product were different from the ingredients that had been submitted by the alleged infringer to the authorities to obtain a license. Apart from that, another competitor sold a product of the same component with Anabio for which Anabio does not hold patent rights.

As Anabio does not own any patent, it has not established a defensive strategy to prevent infringement.

Overall, one notable point of Anabio as a top probiotic supplement producer is that its manufacturing process is made secret as know-how. Its method of building trade secrets and operating a sound mechanism to protect them are featured by disaggregating the process and assigning each individual component thereof to one employee. The managing board would gather all components into one single full-fledged process which would be under close supervision and high confidentiality. However, there is no non-disclosure clause in the contract concluded with the company's employees.

The rationale behind the company's decision to refrain from applying for a patent for its inventions was the weak enforcement capability of competent authorities which might be detrimental to its reasonable benefits. The managing director admitted that the company would need to greatly improve its advertising function and sales function. The counterfeit product was sold by rivals with strong sales power.

#### *4.2.3. VITEC Joint Stock Company*

##### *4.2.3.1. General Introduction of the Company*

VITEC was established in January 2002 by experienced researchers and lecturers of National University of Civil Engineering (NUCE).<sup>3</sup> During the past 20 years, with the support of NUCE, VITEC has managed to produce positive research results and successfully applied many world state-of-the-art civil engineering technologies in Vietnam. Being one of the first science and technology enterprises in Hanoi (Vietnam), VITEC's focus of activities includes R&D and exploitation of modern technologies in Vietnam with a view to reducing cost, enhancing construction speed and maintaining the quality.

##### *4.2.3.2. Patent Management Strategies*

###### *(1) Creation*

The themes of R&D have been identified since the inauguration of the company because the members of management team are the former lecturers of a university. What to develop has been determined based on their knowledge acquired at the university.

Consequently, patents and the competencies to introduce technologies in the field of cost reduction and eco-friendliness are the strengths of the company. R&D has been implemented internally which lays strong foundation for patenting activity.

The company has been able to rely on highly educated human resources at a cost-effective manner for R&D because the general director has also been a lecturer at NUCE and he also gains support from students at the university. Many of the patents registered are based on improved invention which was originally made in developed

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<sup>3</sup> More information is available: < <https://vitec.net.vn/>> (Accessed 22 July 2022).

countries. Thus, it is considered that invention was made by the company more efficiently than making it from the scratch even though the effort to understand prior invention and adding new ideas must have required much efforts.

*(2) Registration*

When applying for patent, external representatives or agents are hired but essential parts are internally made. In other words, drafting patent application is a joint effort of internal personnel of VITEC and external representatives/agents. Thus, important part of the application document, such as ideas and figures, are elaborated by the company itself and at the same time the attorney's expertise in legal viewpoints has been added in the application document.

*(3) Utilisation*

By utilising external resource except for the core business process related to patent, capital needed has been suppressed to conduct EPC (engineering, procurement and construction, which are commonly the full business scope of engineering company). Engineering (or designing) is made by VITEC itself and by companies which VITEC provides training and accredits certification for designing. Procurement (or manufacturing) of core components is made by VITEC itself and by joint companies between VITEC and the third parties. Construction is made by the third parties under the administration of VITEC. VITEC performs designing and manufacturing by itself if the location of construction is close to the headquarters office of VITEC otherwise by third party or joint company which are licensed by VITEC.

Confusion of marketing channel is avoided by selecting one company per area for engineering, or design, in rural area. Third party construction licensees include companies managed by the former students. It is considered that contract for licensing is precisely documented to manage risk properly such as range of use, prohibited matter, so that the licensees cannot use patents unfairly.

*(4) Protection*

If infringement is discovered, the first step is to send out warning to the alleged infringer. The next step would be to negotiate license fee or to request the infringer to stop violation. Litigation is rarely a preferred choice even though the company once took legal action at court.

Enforcement taken against infringement is determined on a case-by-case basis. If the infringed design of construction is considered to be appropriate, VITEC may still allow the alleged infringer to continue his/her operation on the condition that licensing is settled. The reason for this case is because it may turn out to be an advertisement for VITEC's technology. However, if the infringed design of construction is considered to be inappropriate and detrimental to VITEC's normal business, a warning would be made and VITEC would explicitly request the alleged infringer to cease his/her act of violation. In general, in case of VITEC, foreign companies are easier to obtain consensus than domestic companies.

Special measures are not taken to prevent infringement because it is easy to obtain the information if it happens via acquaintances within the industry such as licensees.

In general, one of the competitive advantages of the company is its ability to deliver total solution, covering all of engineering, procurement and construction, to the customers. It is considered that the company has accelerated its achievement making, which is very important especially in this industry, by licensing and utilising third party's resources. Technologies have been made open as much as possible for this reason as well as for gaining credibility by potential customers.

Accordingly, the technologies of the company have achieved the level equivalent to those of advanced countries by focusing resources on fundamental research of a certain field. As a consequence, the company has been able to

obtain patents, and therefore it became able to expand its market to the foreign countries. The company opted for deactivate sleeping patents instead of continued renewal due to some cost constraints.

#### *4.2.4 Lessons Drawn out for Patent Management*

There are a few scenarios in respect of patent creation. First, a company can either produce new inventions or improve the existing ones and make them patented. To this end, they need to invest in their own innovation capacity and human resources which stem from R&D activities. Otherwise, the proprietorship over research results can be purchased from universities and research institutes. Companies finance their IP activities mainly by their returns.

Moving to the application process, enterprises are encouraged to refer to relevant experts for advice and consultancy but try not to depend too much on them. For instance, although companies may hire external agents to conduct the patent application, essential parts of drafts such as ideas and figures should be internally elaborated. On the other hand, registration is not always the optimal strategy because disclosing formulas, processes, or methods may make way for alleged infringement, especially in a legal environment where enforcement is weak. Instead, they can be secured as trade secrets.

Once a patent has been granted, it should be treated as a reinforcement tool to advertise products, educate customers, gain credibility, and secure experimental fields, especially when the company introduces new products or implement a market penetration strategy. In the case of Golden Harvet Fertiliser, when the company supplies slow-release fertilisers which are totally new to the market, their strategy to earn market confidence is to persuade customers via agricultural associations. Besides, companies are advised to take control of the core processes and activities related to patent. This means companies conduct the activities by themselves or assign to trustworthy external agents under strict administration; for instance, licensees, joint companies, or other parties that has been trained by the company.

In respect of protection activities, the ultimate defensive strategy is continual product development. This helps the original products to stand out in the market and distinguish themselves from the infringing ones. At the same time, they need to strengthen the connection between customers and the companies through various channels such as providing technical training and consultancy to targeted customers. If companies decide to protect their inventions under the umbrella of trade secrets instead of patents, the method is breaking the process down and assigning each component to a different employee. The full process then would be controlled by the managing board under strict supervision. When it comes to infringement, patent owners and trademark owners have almost the same preferences and defensive process. They often prefer negotiation prior to any legal action at court. It is of paramount importance that infringement is dealt with on a case-by-case basis. If the infringement is acceptable, it's better to settle a license fee because licensee is considered as a marketing channel that reinforces the brand image. Otherwise, the infringer would be ceased immediately.

## **5. CONCLUSION**

This research provides insights into the theories on IPM at micro-economic level with a particular focus on relevant existing literature in Vietnam. Based on Japanese Intellectual Creation Cycle, this research redesigns the cycle with four distinct steps of IPM: (1) Creation, (2) Registration, (3) Utilisation, (4) Protection. For the purpose of illustrating good practices in IPM of SMEs based on the adopted model, the authors conducted six case studies on trademark and patent management of typical Vietnamese SMEs.

Accordingly, this research highlights some important findings. First, it illustrates the importance of inclusive engagement of different divisions of a business for the sake of proper and adequate creation of IP, in particular trademarks. However, to sustain and prosper over time, Vietnamese businesses need to create an outlook for brand strategy, which aims to strengthen the different functions of trademarks. Second, with respect to patent



management, the current study emphasises the exploitation of research results from universities and research institutes, which host to an abundant number of inventions of commercial value to businesses. To that end, Vietnamese government needs to provide constant support in financial and policy terms to facilitate collaboration between these universities/research institutes and (spin-off) companies.

This research does not come out without limitations. First, notwithstanding the adaptation on an existing model to analyse IPM, different businesses may evolve and have different business strategies which would determine the customised role of their IP. Therefore, the Adopted Cycle that we framed in this research may not be a one-size-fits-all model for analysis of IPM among Vietnamese businesses. Second, the size of our samples is small and the interviewed companies are located only in the North of Vietnam, where the contextual scenario might be different from that of the South. Thereby, future studies may continue to investigate other appropriate models to evaluate the status of IPM in Vietnam. Larger sample size should be taken into account to gain a deeper insight into the whole picture of IPM activities.

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