



Sharing The Experience Of Real Estate Industry In Valuing Intellectual Property

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Abstract: The real estate industry has long established methods to assess the value of property. However those methods are only known amongst the real estate community. Attaching a financial value to intellectual property for commercial purposes is a new trend in Malaysia. There is yet known or standardized valuation methods for intellectual property. In fact there is no specific professional body in Malaysia officially responsible in appraising and valuates intellectual property. So far, the task is mostly undertaken either by patent attorney or representative from the finance or banking sectors. They could be an accountant, auditor or finance officer. In conducting their work, the valuer normally uses accounting theories and methods. Apart from that they rely heavily on personal experience, observations as well as adopt trial and error approach. It is highly timely for those who are involved in appraising intellectual property to finally have and use a proper method in valuing intellectual property. The article proposes the use of real estate methods in valuing intellectual property since there are several common features between real estate and intellectual property.

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1. Introduction

Property is a legal concept encompassing all interests, rights, and benefits related to ownership (MVS, 2011). There are two types of property, namely tangible and intangible assets. Tangible assets are physical assets that can be owned such as real estate and personal property. They may include land, houses, shops, and factories to name a few (Ling and Archer, 2009). On the other hand intangible assets are non-physical assets. They are inclusive of stocks, shares, bonds, ideas, and intellectual property (Sherman & Bently, 1999). In this context, the intellectual property could be classified into two categories. The first category refers to legal intellectual property. It consists of subject matters like patents, trademarks, copyrights and trade secrets. On the other hand, competitive intellectual property refers to proprietary know-how, collaboration activities, leverage activities (Sherman & Bently, 1999).

Intellectual property has become a major source of income globally (WTO, 2012). According to World Trade Organization Annual Report in 2011, more than ninety five percent of international trade are in the forms of intellectual property. This number is increasing every year in leaps and bounds (WTO, 2012). The above statistic and data are not a surprise, considering most countries nowadays are moving and transforming their economy from agriculture to

manufacturing and later on knowledge and innovation based economy (The Sun, 2012). Being the case, intellectual property is the backbone of knowledge and innovation based economy (August, 1998).

In line with the above movement, the Federal government supported by the Central Bank are very keen in firstly diversifying the sources of income and secondly ease the process of obtaining financial assistance for the business community. The government has decided to follow the same footsteps of some developed countries in including intellectual property as one of many types of property as acceptable collateral in securing financial assistance transaction. An official announcement was made on 1st March 2013 to this effect. As a start the said exercise shall begin with legal intellectual property first.

The shift is welcomed. It would add new and subsequently increase the number and types of acceptable collateral to the existing list. The same would directly remove some traditional obstacles commonly faced by business community. The same would be able to accommodate the new features of knowledge and innovation based economy for business community that lacks real estate or land property. For example, it is a mismatch of policy and approach when financial institution or bank kept on insisting knowledge and innovation based companies to provide

them with real estate or land property as collateral for return for financial loan.

For so long, the wealth and financial well being of individual, enterprise or corporate bodies have always been based on physical and tangible assets only. The scenario has changed drastically nowadays. The same theory may not work that well in knowledge and innovation based economy typically for intellectual property based companies. These companies may have plenty of valuable intellectual assets but lack the landed or valuable real estate property. Their intangible assets may have higher values than the tangibles. For example, the secret recipe of Coca Cola is far more valuable than the drink itself.

It is hoped that such movement would make it easier for technopreneurs, entrepreneurs, innovators, intellectual property rights holders and small, medium size enterprises to obtain the much needed financial assistance to either start up or expand their business. The willingness of the government together with banking and financial assistance to accept intangible assets as collateral would create the flexibility and better as well as conducive environment in doing business locally, leading to a more new and positive business opportunity for all.

1.2 Art of Valuation

Property valuation or appraisal is an interdisciplinary study. It combines the skill and knowledge in science and technology and the science humanities (Millington, 2000). Though the process of property valuation may revolve around financial and property theories and models, expert knowledge, skills and professional inputs from social scientist, lawyer, banker, financier, businessman, property analyst, or economist are all required in arriving at the most optimum if not best real realistic values for the asset. Even when the real estate, as a field of study has established well known property valuation methodologies over the years, knowledge about those methods are unfortunately still restricted and only known within the real estate valuer community. In brief their use is not common knowledge to the masses.

The intellectual property is often valued for various reasons. Generally it could be for the purpose (1) for regulatory compliance, such as in transfer pricing, (2) as collateral in financing or for intellectual property-backed securitization, (3) merger and acquisition exercise, (4) licensing negotiation or transaction, as part of a business transaction and (5) in the context of litigation wherein the merger or acquisition is subjudged or company has gone in for liquidation (Razqaitas, 2010).

Valuation of intellectual property is a very new trend in Malaysia. So far, the appraisal is done by patent attorney or accountant, auditor or financial officer

independently. In a rare occasion, these parties would assist or collaborate with each other when valuating intellectual property. In so doing, they usually adopt accounting methods, banking practices or use personal experience, observations and trial and error approach in so doing.

There is a real danger in adopting such practice. The practice is firstly too vulnerable to human subjectivity and discretion. It is unknown whether the officer in charge is familiar with the subject matter or has sound understanding of specific scientific theory or philosophical groundings behind the chosen method or models. Further the officer might disregard the special characteristics and requirements of intellectual property product. In any circumstances, context is all-important and must considerations for every valuer in assigning a realistic value to the property (Millington, 2000). The same could heavily influence the final financial value to be attached to the intangible assets.

There is a drastic need for correct valuation of intellectual properties so they could be properly and scientifically appraised for commercial purposes. Most importantly it is rash to adopt any form of valuation method in ignorance of the fundamental theoretical framework of valuation. The above effort should start at least with conducting research to establish proper valuation methodology for intellectual property. Malaysians are generally unfamiliar with intellectual property, the importance of intellectual property as well as lack of awareness on their proper values. In all, it is salient to properly appraise and value intellectual property so that the final value of the same is neither too low nor too high but appropriate.

2. Methods

The research is exploratory in nature. It adopts qualitative methodology, a suitable approach in exploring a new subject matter (Yin, 2010, Miles & Huberman, 1994). The primary data is collected through focus group discussions, interviews, observations. The secondary data are gathered from analysis of relevant statutory laws, policy documents and literature reviews. The objectives of this study are (i) to establish the similarities and compatibility between intellectual property and real estate property, (ii) to identify their common if not similar characteristics, (iii) to promote the possibility of adopting the real estate industry methodology of appraising and attaching a specific value to intellectual property so that they are less subjected to human subjectivity and become more objective and (iv) test the valuation methods developed for patents.

Hypothetically the established real estate valuation methodology can be adapted to suit valuation of intellectual property. Choices of questions for the focus group discussion were derived from a literature review

found in library and online databases. A series of focus group discussions were conducted with stakeholders ranging from decision makers, policy makers, patent attorney, patent examiners, professional real estate and property valuers, bankers, accountant, auditor, finance officer as well as officers from technology transfer office, mostly working in public or private higher learning institution or research centres. As a follow up, in depth interviews were also arranged with the same parties to verify some facts gathered during the focus group discussions.

3. Findings

Real estate property and intellectual property share some common if not similar characteristics or features. It is therefore possible for those involved in appraising and attaching values to intellectual property to borrow adopt and use the real estate property concept and methodology in valuing intellectual property assets.

As far as this writing and Malaysia are concerned, the literature reviews as well as findings from focus group discussions, interviews revealed that there is no known or standardized valuation method for intellectual property. There is no existing or clear guideline on how to value intellectual property either. Different types of intellectual property product may require different methods. Though patent attorney, accountant, auditor or financial officer seems to be the usual choice parties assigned with the responsibility to appraise and value intellectual property, there is no single or professional profession or professional body that is officially responsible in valuing intellectual property.

4. Discussions

Value is an economic concept which refers to the price most likely to be concluded by the buyers and sellers of good or service that is available for purchase. As usual, value always appears in form of money. Valuation on the other hand is essentially a process that brings together of the economic concept value and the legal concept of property.

In the context of real estate, value is actually a reflection of the market's view on the financial benefits of goods or services which the owner in question may accrue at the certain point of time, especially at time of valuation. (MVS, 2011). In the case of intellectual property, value is equally a monetary compensation that the owner or intellectual property right holder expected to receive from sale or other forms of commercial exploitation of his goods or services (Pitkethly, 1997).

As a general rule of thumb, the locality, legal and physical characteristics of land property may differ between types of property (Mani, 2006). To great extent, they are very influential and serve as the determining factors in arriving at final value of the same. Locality refers to the site or location where the

real estate or land property is located (Ling, & Archer, 2009). Information about the location of land property is useful as it informs the public or any interested party about accessibility, necessary and convenience for land planning in building schools, places of employment, shopping and healthcare (Ling, & Archer, 2009). For example, public usually prefers land that is located far from busy commercial areas but reasonably near to school or other public amenities for residential home purposes. Likewise for commercial purposes, a land that easily accessible by the public or located in the middle of city or town is usually visible thus highly preferred (Ling, & Archer, 2009). Nowadays, availability of reliable and fast communication infrastructure is increasing important for both residential and commercial properties. (Ling & Archer, 2009).

Legal characteristics refer to specific legal information about the land property (Khaw & Theo, 2000). It may include category of land, use of land, restrictions of interest, if any. For example, the existent of a registered caveat on a title deed is capable of bringing down the value of the land in question (section 5, National Land Code 1965). Caveat is a legal prohibition order which prohibits any kind of transaction involving the land until the dispute shrouding the land is legally resolved (section 302, National land Code 1965).

Physical characteristics include the size, shape, age, design, construction quality, and other natural features of the property. In this context, it may include improvements to the building erected on the land property of the land property itself. In all the instances discussed above, the value of those lands is expected to be higher than those that are not.

The same rule of thumb and theory are also applicable for intellectual property (Pitkethly, 1997). There are many forms of intellectual property (Sherman & Bently, 1999). Each form of intellectual property has individual specific or unique characteristics and for specific use (Sherman & Bently, 1999) and therefore might has different financial values. The scarcity or availability of alternative products, services or technology, brand name or reputation, quality products, services or technological input, initial investment cost, place of produce and difficulty to copy or imitate the same product, are some of the points that could influent and determine the financial value of intellectual property (Poltorak, 2011, Von Scheffer, & Zieger, 2005).

In appraising and making a valuation, a valuer should be able to differentiate personal and real property. He too must firstly know and understand the characteristics, nature, features and other information in relation to the property.

4.1 Common Characteristics Of Real Estate And Intellectual Property

By definition real estate and intellectual properties are two different types of property. Physically they are not the same. Each may look differently from each other. Yet in certain instances, both share some common if not identical characteristics and features. Both are valuable and heterogeneous. Tangible in form, real estate refers to physical land, affixed structural estate and its permanent improvements. Intellectual property refers to all kinds and forms of intangible property like patent, copyright, trademark, industrial design and so on. Likewise, though perfectly identical, no terrace house is technically the same. Each is built on different sites, regardless how minute the locational differences are. The intrinsic economic value of intellectual property is embedded in the technological ingenuity and creativity, whilst the economic values of real estate largely rest in the land, affixed structural improvements or utility.

Malaysia adopts and practises the Torrens system as part of her land law and land management system (Salleh Buang, 2007). Under the said system, an interest and legal rights in land is usually proven by ownership of a title deed (Section 340, National Land Code 1965) The title deed normally contains all detail information regarding the person who currently owns the land parcel, list of names of previous owners, if any as well as physical and legal description of the land parcel discussed earlier. Legally the National Land Code 1965 grants owner of real estate an indefeasible right to the title deed and exclusive possession over the land, registerable with Land Office. Only the land office where the land is located has the legal authority to issue the said title deed. As exclusive owner of the land, the owner could stop others from entering his land. Otherwise he could initiate a trespass to land suit.

In the case of intellectual property, the “ownership” of rights or interest comes in the form of certificate, normally issued by Trademark and Patent office (Torremans, 2010). The holder or owner of the intellectual property right legally obtains his rights from various intellectual property laws. He must either register or apply from Trademark and Patent Office before enjoying the rights.

In case of patent, the inventor has to file an application and go through some stages of rigorous examination before the Trademark and Patent Office would grant him the patent right over the claim technological invention (section 30, Patent Act 1983). However in the cases of other types of intellectual property, the owner, creator, designer or author of the subject matter merely need to make an application to register his rights. The process involved is less rigorous compared to patent. In all instances the Trademark and Patent office would grant the inventor, author, designer

or creator of intellectual property an exclusive right. Being the case, the intellectual property right holder could legally exclude any third parties from dealing with the protected products or services, unless by way of consent or payment. Since protection for intellectual property is independent and territorial in nature, the applicant has make an official application to register or obtain the intellectual property rights in every jurisdiction in which he intends to market his products or services.

Both comprise bundle of rights. Real estate owner has inherent right to use or benefit from the land like occupy, collect rents, harvest, lease, charge, develop, build, dispose or sell. Intellectual property owner can exclude others from commercially copying, real estate-selling, real estate-producing, manufacturing, storing, importing or exporting his products without consent or payment. He attains the rights until the duration of legal protection lapses or he sells, assigns or transfers his rights to others before al estate hand.

Both are sources of financial incomes and capital gains. Real estate gives the owner opportunity to derive income through capital appreciation when selling or disposing the property. In normal conditions the value of real estate appreciates with time. The owner can also access regular income from the property through rental and leases. Likewise, intellectual property right owner could make money of his intangible assets by allowing multiple and independent third parties to use protected intellectual property. This could be done by a mechanism called licensing. In return the third party needs to pay him either licensing fees or royalty.

Both real estate and intellectual properties could be sold, given away for free or licensed out (Lindberg, 2009, Landes & Posner, 2003, Schaffer, Filiberto & Earle, 2009). This is achieved by way of commercial contract, assignment, philanthropy, endowment, gift or license.

Real estate owner could transfer and divide his rights to many parties at one time, through sale, lease, assignment, rent, charge or securitization. Intellectual property owners have a choice to commercially exploit his intellectual property rights personally, or assign or grant various licensing rights of his intellectual products to third parties.

Since both are not subjected to wear and tear, they could in long term offer product security. A building may be old and deteriorated but the land where the building is erected on could have appreciated in value. Regardless of age, physical appearance or repetitious usage, the value or feel good factors amongst intellectual property products’ owners would not diminish but potentially increase more when buyers purchase genuine intellectual property products. For example, a patented product is very valuable in absence

of further development, improvement or competition to the existing invention.

The time spent in creating, developing or improving both types of properties is usually lengthy. They are costly and may involve financing and loan facilities. While real estate has a slow deterioration rate, intellectual property product does not depreciate. An intellectual property product however could technically become obsolete, through prior art, advancement or new technologies or lapse of legal protection.

4.2 Methods Of Appraisal

Due to their common characteristics, it is plausible to adopt or adapt real estate methods in valuing intellectual property product. The real estate industry has long established methods in appraising and attaching financial values to real estate property. Undoubtedly these methodologies are based on academic theories. On top of that, these methods were designed based on scientific data, views from experts with methodical data collection and detailed analysis. So far these established methodologies are widely accepted globally, used and practiced by real estate industry worldwide to solve valuation problems. Amongst available methodologies, there are at least three methodologies particularly deemed suitable.

4.2.1 Market-Based Methods

A market value is derive by comparing sale prices of three to four properties of similar characteristics, like type and size in the same location, sold within the last year in an open and competitive market. A direct comparison is conducted when all characteristics are identical. Since no property is alike, explicit transactional and property adjustments of the comparables are required to consider dissimilar features and other factors that would affect value. Transactional adjustments involve property rights conveyed, financing terms, conditions of sale and expenditures made immediately after purchase and market conditions. Property adjustments mainly focuses on time, location and surrounding facilities, physical characteristics, economic characteristics, property use and utility.

This method is most suitable for organizations with several intellectual properties ready for commercial exploitation where prior licensing, royalty or franchise agreements and assignments are useful source of comparison. This is because intellectual property owners rarely sell off their products. They prefer to license it. Sales usually represent a small part of a larger transaction. Any private transaction involving IP product or their details are kept extremely confidential thus negative the possibility establishing personal relationship with intellectual property owner or agent for data. Negotiation skills may influent the transacted price too. Since no intellectual property

product is identical in terms of feature, reputation, quality thus value, adjustment is therefore mandatory.

4.2.2 Cost Methods

Here depreciation value, replacement or reproduction costs are considered in valuing property. Replacement cost is required expenditure to construct a building of equal utility like the use of modern construction techniques, materials, and design. Reproduction cost refers to present day cost to construct a replicated building in exact detail, including any outdated functional aspect of the building, like unnecessary fixtures or outmoded materials. Depreciation refers to any condition that could devalue a property like physical deterioration, functional or economic obsolescence. Apart from structural problems, almost all physical deteriorations are curable. Functional obsolescence refers to undesirable physical or design features like one bathroom bungalow. Economic obsolescence is caused by external factors, for example proposed construction of new highway next door.

It would be easy to calculate the real costs in creating developing or improving intellectual property product, using this method. They would include all initial investments, expenditures for research and development, prototype, registration and application for intellectual property protection, commercialization and others. The method is most suitable when the invention involves a new or emerging technology that has no similarity with other existing intellectual property. However it inherently excludes the potential future income intellectual property owner may generate from licensing and commercialization or the marketing cost. Other issues might arise including technology, functional and economic obsolescence.

4.2.3 Income Capitalization Approach

The method estimated value based on future net income a property supposedly could annually generate, in form of rental or lease, converted to present day value by capitalization. The capitalization is calculated at a discounted rate according to holding period for freehold land or remaining tenure for leasehold land. The rate is derived from sales data of similar property. Valuer must firstly considers net of vacancies, deducts operating and capital expenditure.

The estimation of all future incomes supposedly drawn from a property and conversion to present day value is done through Discounted Cash Flow (DCF) technique. It deducts anticipated future outgoings and takes into account only the net income for each future period before they are discounted back to its present value. The sum of all present capital value of the net income for each year represents the total value of all the discounted figures. The method recognizes market

conditions, likely performance and potential, and the time value of money. It is illustrative, demonstrating the cash flow potential, or not, of the property and is highly regarded and widely used in the financial community.

This is the most suitable technique and method in valuing many types of intellectual property products. It could consider factors like intellectual property tenure, changes in technology and future costs hence able to arrive at a good estimate of future income stream and costs involved. The problem here would be the determination of the discount rate, an issue which could be resolved by looking at other comparables from other available methods or data or further research.

5. Way Forward

To ascertain the future contribution of intellectual property in terms of income generation and continuous innovation and invention, it is timely to have a proper intellectual property valuation methodology in place than to do it on trial and error basis. Regardless of choice methods, these methods have so far able to reflect the real value of real estate. Borrowing the same spirit, it is believed they could produce the same results in valuing intellectual property products or services. A better understanding in the philosophical groundings, scientific theory, methods of collecting data and calculation would enable a valuer for intellectual property to choose confidently the appropriate method to use for valuing any type of intellectual property products or services each time.

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