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THE MEASUREMENT OF INTELLECTUAL PROPERTY VALUE AT THE MICROECONOMIC LEVEL

Abstract. The intangible assets created through the processes of innovation represent a major share of the value of modern firms and play an important role in their strategies. But the accurate valuation of IP still remains a challenge. There are several accepted ways to measure the value of IP such as: cost approach, income approach, market approach and debatable relief from royalty approach. In addition to the traditional methods, several alternative methods are available. The paper tries to discuss and compare the traditional approaches and to describe and comment the alternative methods.

Keywords: intellectual property, intellectual property protection, valuation of intangible assets

POMIAR WARTOŚCI WŁASNOŚCI INTELEKTUALEJ NA POZIOMIE MIKROEKONOMICZNYM

Streszczenie. Wartość niematerialna powstająca w procesach innowacyjnych stanowi znaczący udział w wartości współczesnych firm oraz odgrywa ważną rolę w realizowanych przez nie strategiach. Jednak dokładna wycena własności intelektualnej nadal pozostaje wyzwaniem. Istnieje kilka akceptowanych sposobów jej pomiaru, m.in. podejście kosztowe, dochodowe, rynkowe. Oprócz tradycyjnych metod istnieje jednak wiele alternatywnych metod. Artykuł omawia i porównuje tradycyjne podejścia oraz opisuje i komentuje nowe, alternatywne metody.

Słowa kluczowe: własność intelektualna, ochrona własności intelektualnej, wycena aktywów niematerialnych

1. Introduction

Intellectual property (IP) refers to different creations of the human mind such as: inventions, literary and artistic works, symbols, names, images, and designs used in commerce. Intellectual property assets are a sub-set of intangible assets. They are distinguished from other intangibles by the fact that these are created by law¹. They are legally protected and can be legally enforced. Also they can be independently identified and are transferable and have an economic life (in contrast to their legal life, which is generally longer than their economic life)². Intellectual property rights (IPR) are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time. IPRs are like any other property rights which allow creators or owners of intangible asset to benefit from their own investment in a creation process of the asset. The form of protection depends on the type of IP. Intellectual property rights fall principally into some main areas: patents, industrial designs, trademarks, copyright, trade secrets, design rights, geographical indications and others.

The importance of intellectual property was first acknowledged in the Paris Convention for the Protection of Industrial Property (1883) and the Berne Convention for the Protection of Literary and Artistic Works (1886). Both of them are administered by the World Intellectual Property Organization (WIPO). The WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), negotiated in the 1986-94 Uruguay Round, introduced intellectual property rules into the multilateral trading system for the first time

The valuation of intellectual property uses the same basic valuation concepts used to value other business assets. But in details intangible assets valuation differs from valuing tangibles because most intangibles are capable to generate more than one value stream simultaneously and very often the value is determinate by the authority, relevant laws (tax laws) or empirical experiences. The uniqueness of intellectual property makes comparisons with other IP difficult. As a result, valuations are often based on assumptions about the asset's future use, what important milestones will be met and what management decisions will be taken.

The paper tries to explain the issue of intellectual property valuation. It focuses on the various approaches to valuing the intangible assets that make up intellectual capital, discussing the benefits and weaknesses of each approach.

¹ Intellectual property is not an asset by itself but only when covered by legal rights. Once protected under the relevant intellectual property law it becomes legally enforceable right.

² In legal perspective an IP asset can be defined in terms of particular qualitative characteristics or standards (such as that of novelty or originality). In economic perspective this asset can be defined in terms of the economic benefit linked to it.

2. Valuation of intellectual property

In recent years, valuations of intellectual property has been necessary in many business situations, including³:

- evaluating potential merger or acquisition candidates,
- identifying and prioritizing assets that drive value,
- strengthening positions in technology transfer negotiations,
- making informed financial decisions on IP maintenance, commercialization and donation,
- evaluating the commercial prospects for early stage Research & Development (R&D),
- valuing R&D efforts and prioritizing research projects.
- supporting a valuation for loan collateral.

Another reasons for intellectual property valuations include⁴:

- assisting the decision-making process for strategic business development in the firms,
- securing financial investment,
- determining a “walk away position” in any business negotiation,
- establishing potential damages for IP infringement,
- determining of licensing royalties (i.e. benchmarking),
- importance for legal and accounting standards requirements,
- importance for taxation, particularly capital gains tax and stamp duty liabilities.

Accurate valuation is needed for many purposes of financial reporting and accounting including the reporting of fair estimates in annual reports. International accounting standards require companies to report values of their intellectual property assets, which are comparable to other companies.

Nowadays experts seeking an intellectual property valuation tool can use several different methods to find a satisfactory solution. For business purposes, methods can be divided into two approaches: quantitative and qualitative. Before any other aspects of the valuation process are analyzed is decided between a qualitative and a quantitative approach⁵.

The quantitative approach relies on numerical and measurable data with the purpose to calculate the economic value of the intellectual property.

The qualitative approach is focused on the analysis of the characteristics (such as the legal strength of the patent) and uses of the intellectual property.

³ WIPO, Introduction to the Basic IP Valuation Issues, WIPO 2012, www.wipo.int/edocs

⁴ P. McGinness: Intellectual Property Commercialization: A Business Manager's Companion, Lexis Nexis Butterworths, Australia 2003.

⁵ C. Lagrost, D. Martin, C. Dubois, S. Quazzotti: Intellectual Property Valuation: How to Approach the Selection of an Appropriate Valuation Method. Journal of Intellectual Capital, Volume 11, Issue 4, Pages 481- 503, October 2010.

3. Quantitative approach

Several methodologies are used on the quantitative approach, but generally they can be grouped in four methods⁶:

- cost-based method;
- market-based method;
- income-based method;
- option-based method.

The qualitative approach include a cost approach, market approach, income approach, option-based approach or a combination of all four.

3.1. Cost-based method

This cost-based method is based on the principle that the direct relation between the costs expended in the development of the intellectual property and its economic value exists. The basic assumption of this method is that the cost to build or buy an intellectual property equals the value of its ownership. It means that there is a direct correlation between the costs and the value .

The cost methods includes two techniques: the history-based and the future-based. In the history-based method, firm has to value how much the intellectual property right has cost during the creation and the development from the beginning until the present moment. The future-based method includes two popular methods called: the reproduction cost method and the replacement method.

In the reproduction cost method estimations are performed by gathering all costs associated with the purchase or development of a replica of the intellectual property under valuation. It is the total cost, at current prices which is necessary to develop an exact duplicate or replica. This duplicate asset would be created using the same or similar materials, standards, quality, design and layout used to create original asset. This method does not account for changes in technology, higher utility from other materials and other factors.

In the replacement cost method all estimations are performed on the basis of the costs that would be spent to obtain an equivalent asset with similar use or function. In other words it

⁶ P. Flignor, D. Orozco: *Intangible Asset & Intellectual Property Valuation: A Multidisciplinary Perspective*. 2006; K. Idris: *Intellectual Property: A Power Tool for Economic Growth*. WIPO, Geneva 2004; A. Wyatt: *Accounting Recognition of Intangible Assets: Theory and Evidence on Economic Determinants*". *The Accounting Review*, Vol. 80, No. 3/2005.

contemplates the cost to recreate (rebuilt) the functionality or utility of intellectual property but in a form or appearance quite different⁷.

The replacement intellectual property may have greater functionality and/or utility and would be created with different methods and it can be developed according to current standards, state-of-the-art design and layout, new technology and the highest possible quality. If the replacement asset is better than the subject asset it must be reckoned with while making an estimate of obsolescence.

In both future-based methods the current price is taken into account, i.e. the expenditures as of the valuation date and not the historical costs when these actually happened⁸. In all considerations two sorts of cost should be included⁹:

- direct expenditures, such as costs with materials, labour and management;
- opportunity costs, relating to the lost profits due to delays in market entrance or investment opportunities lost with the aim of developing the asset

The cost method is not popular nowadays and in fact it is the least used method. It is considered suitable only as a supplement to the income method. The cost method is normally used in situations where the subject intellectual property is currently not generating any income. Approaches based upon the measurement of cost are generally used in accounting, bookkeeping and in accordance with accounting rules. It is commonly agreed that cost based methods are only useful for bookkeeping purposes or as a supplement to an income approach¹⁰. They are only relevant in historical cost based accounting systems or where taxation methods dictate their use.

Possible advantage of the method is that IP becomes visible in the company's books and intellectual property awareness is increased. The method is also a useful indicator of intellectual property value in the case of assets whose future benefit is not yet evident. It is recommended that the cost approach is used for legal and accounting standards requirements or when comparable market information is not available¹¹. It is also useful during litigation when damages from IP infringements need to be determined.

The main disadvantage is that there is no direct correlation between cost of development and the future revenue potential of assets. It is a fact that expensive to produce intellectual property, may not necessarily be the most valuable. The same applies to old intellectual

⁷ W. Anson, D. Noble, J. Samala: IP Valuation: What Methods Are Used to Value Intellectual Property and Intangible Assets? *The Licensing Journal*, Volume 34(2), Pages 1-7, Feb 2014 and R. Reilly, R. Schweih. *Valuing Intangible Assets*. Hardcover, 1st edition, McGraw-Hill, 1998.

⁸ D. Drews: *The Cost Approach to IP Valuation: Its Uses and Limitations*, IP Metrics Intellectual Property Valuation, 2001.

⁹ P. Flignor, D. Orozco: *Intangible...* op. cit.

¹⁰ H. Wirtz: *Valuation of Intellectual Property: A Review of Approaches and Methods*. *International Journal of Business and Management*, Volume 7, No. 9, Pages 40-48, May 2012.

¹¹ P. Sullivan: *Profiting from Intellectual Capital – Extracting Value from Innovation*, John Wiley & Sons, New York 1994.

property which has been written down in value. So this method has very limited effect and does not show earning power of the technology and ultimate market share.

3.2. Market-based method

The market-based valuation method relies on the estimation of value based on similar market transactions (e.g. similar license agreements) of comparable intellectual property rights. Very often the asset under valuation is unique so the comparison is performed in terms of utility, technological specificity and property, having also in consideration the perception of the asset by the market. Market based methods include intellectual property auctions, comparable market and comparable royalty rate methods¹².

The idea behind these approaches is that the market decides the accurate price and therefore the value of the IP. According to Reilly and Schweih's the value of the intellectual property asset is affected by the law of demand and supply which leads to a price equilibrium in the competitive markets¹³. This means that the traded assets have to be homogeneous, willing buyers and sellers can be found at any time and prices are publicly known. Unfortunately typical intellectual property market does not fulfill these requirements. That's why the estimator has to seek similar and comparable transactions. Additionally any transaction objective is by definition unique and therefore the number of transactions is limited. Therefore one can question whether a concrete price can be seen as an equilibrium price. Intellectual property asset is not similarly exchangeable product like many tangible products. Thus the market method values the intellectual property asset more or less based on somebody else's estimation of some similar asset.

Market based methods are useful when a market value is required for any typical intellectual property. These methods need an active market, a comparable exchange of intellectual property between two independent entities and access to information of transaction price. However, formal markets for intellectual property are limited and the relevant pricing information is not usually public. As a result, the use of the comparable market value approach to valuing intellectual property is rare. The use of comparable royalty rates is more widespread. Many databases of industry royalty rates and comparable transaction information have been collated by many intellectual property right holders and independent companies which offer valuation services. Data connected with comparable or

¹² In the perfect auction, there are many potential buyers with perfect information about all aspects of transaction and item. The value of the intellectual property is determined by the price reached through bidding. In the comparable market value method the value of the intellectual property is given by comparison with similar comparable independent asset or similar transactions. In the comparable royalty rate method the market based valuation methods may also be connected with the comparison of royalty rates used when licensing similar asset. Many sectors often use industry averages as a basis for setting royalty rates in license agreements or in establishing damages in litigation. The value of the intellectual property is given through the comparison of the subject asset with the royalty rates in similar license agreements.

¹³ R. Reilly, R. Schweih's. *Valuing Intangible Assets*. Hardcover, 1st edition, McGraw-Hill, 1998.

similar transactions may come from the following sources: company annual reports, specialized online database¹⁴, publications dedicated to licensing and royalties such as the *Licensing Economics Review* and court decisions concerning damages. A number of sources are available to identify comparable transactions:

- internal database – licenses previously done by organization
- published surveys – relatively very few in number
- public announcements – internet searches and database services
- word of mouth – contacts in the industry involved in deal making
- litigation – outcomes and documents from trials
- required disclosure – contained in Securities Industry filings

Although many disadvantages of this method exists, it is widely used and it is perceived as often advantageous method when the determination of the input parameters in the cost method is difficult due to a high degree of uncertainty. Although the method is quite straightforward and simple, the problem is that finding a comparable intellectual property asset or enough public information. The market method is useful for estimating an overall value of the assets and maybe in the future, when intellectual property markets become active and public, the use of the market-based method become more popular. But as long as the estimation used is largely based on the knowledge and experience of people who valued the comparable asset it is not recommended to use as the only method.

3.3. Income-based method

The income-based methods are perceived as the most useful for valuation of rights. This methods equate the value of rights to the income that the right is expected to generate

This method is based on the principle that the value of an asset is intrinsic to the future income flows it generates (expected income). After the income is estimated, the result is discounted by an appropriate discount factor with the objective to adjust it to the present circumstances and therefore to determine the present value of the intellectual property.

There are different methods of calculation of the future cash flows, such as:

- discounted cash flow method (DCF),
- risk adjusted net present value (rNPV),
- relief-from-royalty method,
- technology factor metod.

Discounted cash flow method is the most fundamental and widespread of all income based valuation methods. Its main goal is to estimate future cash flows, which are projected and

¹⁴ The best well-know specialized online databases are: Royalty Source: Intellectual Property Valuation and Licensing (www.royaltysource.com), Recap (www.recap.com), PharmaVentures (www.pharmaventures.com), Royaltystat (www.royaltystat.com), Knowledge Express (www.knowledgeexpress.com), Intellectual Property Research Associates (www.ipresearch.com), ktMINE (www.ktmine.com), etc.

after discounted by applying an appropriate discount factor. The main source of information to estimate the cash flows is the business plan of the company that exploits or intends to exploit the asset. The two key factors that must be accounted for in a DCF calculation are: the time value of money and riskiness of the forecasted cash flows. Using this methodology requires compensation for inflation, risk and return on the investment. This method can be applied at any stage of development of the technology. Only the ability to obtain accurate data will limit this approach. This method also requires significant knowledge of the competitive environment. The main disadvantage of this method is that it is very easy to manipulate this analysis to obtain the value that firm want it to result in by adjusting the inputs. The company valuation using discounted cash flows is a valid method to assess the company's value if special precaution is put on the validity of the underlying assumptions. As with all other financial models, the validity of this method almost completely depends on the quality and validity of the data that is used as input. If used wisely, the discounted cash flow valuation is a powerful tool to evaluate the values of a variety of assets and also to analyze the effects that different economic scenarios have on a company's value¹⁵.

Risk adjusted net present value (rNPV) approach is an extension of the DCF method. It is mainly used in the pharmaceutical and biotechnology industries. This approach was specifically developed to cope with technical risk during the development of intellectual property assets. To account for risk, the method adjusts the cash flows of each stage of development by fixed probability rates based on established industry indicators.

Among the most common income based methods is the relief-from-royalty method, where it is possible to estimate cost savings (or income enhancement) from using an intangible such as a trademark or patent. Under the relief-from-royalty method, value is based on the avoided third party license payment for the right to employ the asset to earn benefits. In other words in this method the value of the asset is considered as the value of the royalty payments from which the firm is relieved due to its ownership of the asset. The appropriate royalty rate must be determined to allow the estimation of the future royalty income stream. A discount rate is applied to establish the present value of the asset. The method assumes that the value of the intellectual property is defined as the rental charge other companies would pay to use it. Estimating this royalty rate is only a first step. As with other income approaches, the royalty rates are then discounted through an appropriated discount rate.

The technology factor method is used to translate the future economic income into the present value on the basis of the potential ability to create economic benefit when a patented technology is applied to a product. It requires the estimation of anticipated period of income stream or future cash flow, required capital expenditures, cost structure, a discount rate, etc¹⁶.

¹⁵ F. Steiger: The Validity of Company Valuation Using Discounted Cash Flow Methods. Seminar Paper 2008, <https://arxiv.org/ftp/arxiv/papers/1003/1003.4881.pdf> 10.04.2017

¹⁶ H. Park, Hyun-wo, Jun, Seung-Pyo, Kim, Sang-Gook: A Comparative Study on Methods of Income Approach to Technology Valuation. *Journal of Supply Chain and Operations Management*, Volume 10, Number 2, September 2012.

This method firstly calculates a risk-free net present value for the intellectual property (similarly to the DCF method) and multiplies this with a risk-factor, or “technology factor”. The technology factor value is worked out from attributes reflecting the commercial strengths and weaknesses of the intellectual property. The aim is to account for technical, legal, market and economic risks related to the valued intellectual property.

In general, income approaches to valuation of intellectual property are only accurate if the following variables are available or can be accurately estimated: an income stream either from product sales or license of the intellectual property, an estimate of the duration of the intellectual property’s useful life, an understanding of IP specific risk factors for incorporation into the valuation and a valid discount rate¹⁷.

In the literature there are many other approaches to measure the intellectual property value by using income method. Probably the most well-know are¹⁸:

- Monte Carlo,
- Rule of Thumb – 25% Rule

The described above discounted cash flow (DCF) technique can be further refined by applying Monte Carlo analysis in order to simulate the sensitivity of the result to variations in the assumptions. The Monte Carlo method provides approximate solutions to a variety of mathematical problems, including valuations, by performing statistical sampling experiments on a computer. This method is based on the discounted cash flow approach but incorporates uncertainty to provide a more rigorous analysis. This is done by assigning a range of values to the variables used in calculating the net present value of an asset¹⁹.

Some industries have developed standard royalty rates over the years based on what could be considered “rules of thumb”. Patents and other intellectual property aren’t commodities and thus can not be accurately valued at a set rate/price. However, if a patent is being valued for an external transaction within an industry that traditionally applies standard royalty rates, then the use of this standard rate in the valuation can not be totally dismissed. For an internal valuation, the use of standard royalty rates is not recommended.

“Rule of Thumb” or “25% Rule” is a method which values intellectual property by calculating a royalty of 25% of the expected gross profit, before taxes, from the enterprise operations in which the intellectual property is used. This method, while it is a rough estimate, is useful to generate a ballpark valuation²⁰. It is also useful when the intellectual property is

¹⁷ S. Chaplinsky: Methods of Intellectual Property Valuation. University of Virginia Darden School <https://faculty.darden.virginia.edu/chaplinskys> 10.05.2017.

¹⁸ WIPO Workshop on Innovation, Intellectual Asset Management and Successful Technology Licensing: Wealth Creation in the Arab Region Muscat, Oman, December 12 and 13, 2011.

¹⁹ M. Samis, G.A. Davis: Using Monte Carlo simulation with DCF and real options risk pricing techniques to analyse a mine financing proposal. International Journal of Financial Engineering and Risk Management, Vol. 1, No. 3, 2014.

²⁰ Valuation of Intellectual Property. Australian Institute for Commercialization. http://www.ausicom.com/filelib/Valuation_of_Intellectual_Property_-_RG.pdf 23.03.2017

at a commercial stage or for litigation purposes. It should always be used with caution since it does not consider a fair return on investment nor potential profitability.

3.4. Option-based method

Differently from the other methods, the option methodology takes into consideration the options and opportunities related to the investment. It relies on option pricing models for stock options to achieve a valuation of a given intellectual property asset. The theory behind option pricing was primarily developed for use in pricing financial options but can also be applied to a number of other situations other than financial assets²¹.

The real options method (ROV) applies financial options theory to quantify the value of the intellectual property. This method is based on theories of market behavior, and is designed to explicitly incorporate and analyze risk and uncertainty connected with real assets²². The real options method applies financial options theory to quantify the value of intellectual property. The option method is also often applied when a company is entering a new area of activities, which is connected with the risk of market reaction to its offer. The most popular models of real option valuation are analytical solutions proposed by Black-Scholes and numerical solutions known as a binomial model²³. The assessed value of real option increases the company value obtained from the income approach (DCF) or from the discounted economic profit approach²⁴. The DCF valuation can only determine the possibility of future actions. The use of real options method in valuation is of huge importance in the projects where the value calculated with traditional DCF method is around the break-even point²⁵. The concept of real options may help to understand how to limit the risk and how to design an alternative plan in order to effectively prevent risk and minimize losses²⁶.

The disadvantages of real options valuation are that it can be a difficult and time consuming process and this method is mathematically very complex. It is considered as particularly applicable for valuation of an early stage technology. Some experts doubt the accuracy of options based models for use with real investments such as intellectual property. The main arguments are that option based models over-value intellectual property through the inclusion of non-viable development and commercialization decisions.

The real options method is particularly applicable when there is a high degree of uncertainty, some managerial flexibility, and lack of some information at a particular time. It

²¹ The basic definition of an option is a right but not an obligation, at or before some specified time, to purchase or sell an underlying asset whose price is subject to some form of random variation.

²² F. Black, M.S. Scholes: The Pricing of Options and Corporate Liabilities, *Journal of Political Economy*, Vol. 81/1973, pp. 637-659.

²³ *Metody wyceny spółki: perspektywa klienta i inwestora*. Red. M. Panfil, A. Szablewski, Poltext, Warszawa 2006.

²⁴ P. Szczepankowski: *Wycena i zarządzanie wartością przedsiębiorstwa*. PWN, Warszawa 2007.

²⁵ G. Urbanek *Wycena aktywów niematerialnych przedsiębiorstwa*. PWN, Warszawa 2008, p. 138.

²⁶ A. Brach: *Real Options in Practice*. John Wiley & Sons New Jersey 2002, pp. 11-12.

is commonly used in the biotechnology and pharmaceutical industries and early stage intellectual property developments.

4. Qualitative approach

This method, also commonly referred as evaluation, does not rely on analytical data. In fact, the valuation in this method is performed through the analysis of different indicators with the purpose of rating the intellectual property right, i.e. of determining its importance.

Qualitative methods provide a general guide through the rating and scoring of intellectual property based on factors which can influence its value. It examines, at a micro level: the quality of intangible assets themselves, their position and importance (relative to other business drivers), the industry within which the business operates and the potential value for business's competitors and potential competitors²⁷. Commonly, the method is implemented through a questionnaire comprising all these different criteria

Qualitative methods rate and score different factors related to the type of intellectual property in subject. These factors or "value indicators" can influence the value of the intellectual property both positively and negatively. The result of qualitative methods is a descriptive analysis and/or a score. This method can be especially useful for management purposes, to assist with decision making and to communicate the significance of the intellectual property assets. Qualitative valuation methods are capable of accommodating a multiplicity of factors but are not able to give an answer in monetary terms. This kind of analysis is particularly useful for management related intellectual property valuation causes²⁸.

The main advantage of this method is its relative simplicity. Once the relevant information has been researched and is available in a useable form, it is relatively easily to classify and evaluate the intellectual property without the need for much complex methods. Another advantage is that the data for the evaluation is often publicly available, without paying additional extra costs (often free of charge).

Qualitative evaluation methods are most often used for the purpose of internal intellectual property management. They are most useful for comparing and ranking intellectual property within a portfolio. They are also useful for assessing the risks and opportunities. The qualitative valuation methods are not used as much as the quantitative ones²⁹.

²⁷ WIPO: Introducing to... op.cit.

²⁸ Final Report from the Expert Group on Intellectual Property Valuation. European Commission, Luxembourg 2014, p. 15.

²⁹ Saaranto A.: A Review of the Methods for Valuing Intellectual Property Rights. Independent Research Projects in Systems Analysis 2016, http://sal.aalto.fi/publications/pdf-files/esaa16_public.pdf 2.06.2017.

5. Conclusions

Selecting the valuation method to use in a given situation is complex. Several factors should be considered in the procedure, such as the purpose of the valuation, the type of intellectual property at stake as well as the level of development of the technology. The advantages and disadvantages of each methodology should also be weighted and commented. There is no specific rule on this matter. However, there are some situations where certain methods are more likely to be used, even though in theory all methods may be applied.

Intellectual property valuation is just an estimation of an intangible asset value, thus it is not a precise figure. It is always qualitative and quantitative, and always subjective (in a case when having access to same data, two valuers can always come out with different figures). Therefore the experience of valuator is essential.

Described methods have a lot of advantages and disadvantages. The qualitative approach gives more generic overview of the intellectual property. It does not require a numerical valuation process. Instead, it summarizes the quality of the intellectual property using valuation indicators. In this method a lot of information about the particular intellectual property is needed which might not be available. Less information means less precise in valuation process. In fact this method is always less precise than the quantitative one. The quantitative approach presents the financial value of the intellectual property. Unfortunately this methods fail to incorporate the legal aspects of the intellectual property which may have an effect to its value. Each valuation method uses different techniques. It is usual that when calculating a value of the intellectual property asset to overvalue it or undervalue it, especially when concerning the value in the future.

The paper tries to present and compare methods which can be used in the intellectual property valuation. Finding the right method is extremely important in the process of creation and implementation of company's strategy. Intellectual property is often the key asset of a firm and the background of its competitive advantage. Therefore has to be properly priced and adequately protected.

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