SYNTHESIZING AND EXPOSURE OF THE ASSESSMENT METHODS OF THE INTANGIBLE ASSETS

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Abstract

Intangible assets evaluation involves finding the optimal path for the estimation of the value of an intangible asset by using one or more of the assessment methods. The premise of the application of assessment methods is represented by the quantified economic benefit that is associated with an entity's assets as a whole.

The intangible assets have considerable implications for the financing of the knowledge society.

The evaluation of such assets in accordance with international standards of evaluation and international accounting transactions are based on correct and complete definition of the value of such items.

Intangible assets evaluations are required for various purposes, including acquisitions, mergers and sales of businesses or parts of undertakings, purchases and sales of intangible assets, reports to the tax authorities, procedures of litigation and insolvency and financial reporting.[5]

Intangible assets evaluation in Romania is very little practiced; this is due mostly because of the alliance of such assets and of their unique nature.

In fact intangible assets evaluation is done by an assessor undertaking, they formed part of the assets of a company.

Our country faces a number of problems in this area, causing a number of these issues in the application of each of the specific assessment methods. Although confirmed by the experience of assessors in developed economies, the automatic application of methods cannot constitute a valid solution for the Romanian companies, just in case they may have strong arguments.

Keywords: Intangible assets, assessment methods, cost approach, income approach, method of the direct comparison market.

JEL Codes: M41, F47, D04, C52.

1. The purpose of evaluation

Assessing the intangible assets is determined by the need for the following situations:

a. Trading - often this type of asset are traded in active employment. Trademarks and patents are most often sold by companies, thus requiring evaluation.

b. Under accounting requirements - after purchase, the buyer must emphasize intangible asset in the balance sheet.

c. Pair businesses - companies often associated with exploitation of an object of intellectual property.

d. Licensing - where the owner obtains a license, the license must be obtained, in order to determine the fee.

e. Funding - where the intangible asset means a share in the assets of a business or when applying for a loan, the bank is likely to require evaluation of patents, trademarks, copyrights, in order to guarantee the loan.

f. Division performed after a divorce - sometimes in such a situation, it is necessary to evaluate patents owned by one spouse.

g. Compensation for counterfeiters - actually is an increase in litigation due to violation of trademarks and patents, asking them to establish damages assessment.

h. Transactions in the company - through the transfer of patents and trademarks, between group entities require determining the fair value thereof.

i. Taxation of property - patent, trademark or copyright, considered parts of the property to be assessed and may be donated by the owner. Being carrying value must be identified to establish fees related donation.

j. Bankruptcy - in this case required intangible asset valuations through the forced sale, in order to determine the net asset liquidation.

2. Stages of assessment

When assessing an intangible asset will go through the following steps:

1. Define the task assessor;

2. Collection and analysis of information;

3. Application of the three approaches to value;

4. Presentation opinion of the assessor.

The first stage must include the following elements:

✓ Identification of intangible assets subject to evaluation;

✓ Specify ownership, assessed with respect to intangible assets are subject to the assessment;

✓ Identification of the intangible asset owner;

✓ Delineation of the intangible asset characteristics, including analysis of the best use;

✓ Date of assessment;

✓ Assessing;

✓ Client and recipient evaluation report;

✓ Standard of value and valuation assumptions;

✓ Assumptions and limiting conditions.

The second stage, namely the collection and analysis of data, requires:

✓ To identify characteristics of intangible assets;

✓ Historian and the situation of the asset at the date of the assessment report;

✓ Identification of relevant financial information;

✓ Economic factors that may affect the value of the asset subject to the assessment;

✓ Supply and demand;

✓ Identification and analysis of previous transactions with similar intangible assets.

In the third stage you will need to choose the best approach to the value of intangible assets, choosing the best use obtained either via the approach, or the cost approach.

The last stage attaches great importance to the opinion of the assessor. It summarizes the results of the assessment, out and explains the differences noted in the evaluation. At the same time presenting and debating the effect of assumptions and limiting conditions.

In closing, the assessor shall submit its final opinion and argues.

3. The assessment methods of the intangible assets

In the business evaluation, in accordance with the international standards and European assessment for the evaluation of intangible assets are proposed the following three categories of approaches to evaluation, as follows:

3.1. Market approach (comparison approach);

3.2. The income approach (considering the advantage of keeping these items in terms of the benefit brought to company earnings, profit);

3.3. The cost approach.

Adopting an approach or another related method will be based on the nature of intangible assets that are subject to evaluation with accuracy and nature of income and will always depend on the circumstances.

The necessity of application of several evaluation methods is due to verifying the results.

3.1. Market comparison approach

Market comparison approach is applied in the comparison of the subject with similar intangible assets or partial rights over intangible assets, which were sold on the free market. [6]

The market approach presents the following comparison:

✓ Legal elements: property rights over intangible assets, an attestation by the granting of patents for invention, trade mark, design certification, works of art, works by under the auspices of copyright;

✓ The field or the economic activity in which intangible assets will be used;

✓ The physical characteristics, functional, technical and technological assets resulting from the use of intangible assets;

✓ Economic features of these assets;

✓ Economic conditions of all the markets in which they operate;

✓ The existence of favorable financing conditions;

✓ The number of trading similar intangible assets;

✓ Comparable rates similar assets;

✓ Inclusion or omission of the other assets in trading.

a. The method of purchase cost

An intangible asset can be bought in the market at a price equivalent to its value. Recommended test methods are cost savings, or cost per lead profit direct market comparison method. Therefore the cost of the purchase may be useful for testing the value of licenses and franchises. We are aware that the market sell and buy such assets, but the essence lies in obtaining information refer to each intangible asset separately.

b. The assimilation method

The assessor will consider the basis of reliable information, the transactions concluded in similar circumstances specific case that we analyzed, taking into account all corrections, positive and negative, gained from their expertise, as compared with cases where transactions were completed used as the basis for comparison.

3.2. The income approach

This approach tests the ability of intangible assets to produce future benefits due to the calculation of the expected gains desired. It consists in evaluating an intangible asset by converting one form of income associated value.

The value of an intangible asset or property rights thereof can be obtained by determining the present value of projected benefits.

The most common methods are included in the **income approach**, **direct capitalization of income** and **discounted cash flow method (Discounted Cash - Flow - DCF).**

a. The method of profit advantage

It applies to a situation in which it can be estimated roughly that possession and use of intangible assets; the advantage can be expressed through the synthetic net profit.

This method is based on the profit made directly by these property elements.

b. The method of variation profit contribution

This method is used where the benefit cannot be determined unit price due to lack of information, unable to make estimates for the holding of such an advantage.

However, in practice, we can meet those active variant causes a profit for the whole enterprise. This cannot be attributed to a particular intangible asset, being unique and identifiable.

In such a situation it is better that the assessment be based on profit contribution resulting from sales in addition.

These two methods have difficulty in exposing the final value as subjective assumptions are more frequent and difficult to sustain, especially since the result must always be realistic, believable and justified.

c. The royalty savings method

It is a very useful method for evaluation of patents and licenses.

The holder of an intellectual property right may allow other users to use such assets, in return for payment of a fee, which is usually represented by a percentage applied to the volume of sales generated by the use of intellectual property. The percentage varies between 3% and 7%, the most common being the sales level of 5%. It varies based on volume flows generated by the use of intangible assets.

Royalty rates can be done by several methods: [4]

- ✓ Profitability comparison method (PCM);
- ✓ Hybrid method of comparing with transactions (HMCT);
- ✓ Profit distribution method (PDM);
- ✓ The residual method (RM);
- ✓ Analysis DCF (Discounted Cash Flow Analysis).

d. The cost economy method

In practice, we encounter situations where intangible assets are those that generate measurable cost savings. Thus, these elements are an asset to any economic entity and contribute directly to the production of additional profit.

Such an advantage can be obtained by:

✓ Owning or a contract with benefits for buying raw materials (contracts for the supply of diesel);

✓ The existence of a process or a method that can reduce workload and reduces material costs;

✓ The existence of a contract of employment with very good staff with extensive experience.

3.3. The cost approach

It includes several methods of estimating the cost of reconstruction required an intangible asset with an identical utility with the asset being valued. Methods in question applies only irrelevant in the situation of a limited number of such assets being used as additional methods for supervising the correctness of the results obtained by the other methods.

These methods refer to **historical cost inflation**, reduced by **depreciation** and refer to **the cost method of recreation**.

This includes new inventions, a research and development, working practices and procedures of a company, owned labor etc. [2]

The cost method of recreation

The applicability of the method is limited by insufficient information required to carry identification or even estimating the effects of possession of such items. Most often it is used to verify and test the conclusions obtained from the application of other valuation methods.

However, if it is imperative to apply, it must be made carefully, based on the idea that most times, cost is not a significant indicator for identifying the value of intangible assets.

4. Study case: The most significant exposure assessment methods for intangible assets [1]

➢ **The direct market comparison method**

Example (fictional): Newspaper brand evaluation „Ring", with available information on two other similar transactions (Newspaper „Click" and „Libertatea" Newspaper)

Specification	NEWSPAPER RING	SIMILAR TRANSACTIONS	
		NEWSPAPER CLICK	NEWSPAPER LIBERTATEA
1. The transaction value	**? → 11.500 ron**	8.000 ron	10.000 ron
2. Special condition of transaction	Includes non-competition agreement	Includes non-competition agreement	Includes non-competition agreement
3.Circulation environment	100.000 pieces / day	80.000 pieces / day	90.000 pieces / day
4. The average percentage return	6%	5%	4%
5. Annual turnover	400.000 ron	250.000 ron	350.000 ron
6. % of total advertising revenue	9%	7,5%	6,5%
7. % Total subscriptions in circulation	5%	6%	7%

With this example will demonstrate the need ability and experience of an assessor.

The key element considered for this evaluation will be the relationship between the brand and the annual turnover. So I'll set some corrections set the following parameters: average percentage return, % total subscriptions in circulation, total advertising revenue etc. .

a. Determination of the relationship between the brand and the annual turnover: Newspaper Click: 3.2%, Newspaper Libertatea: 2.9%.

Therefore we consider as a basis for the Newspaper Ring a 2.9% level.

b. Correction applied to the basic amount:

+ 2.5% for % of total advertising revenue;

- 1% for % total subscriptions in circulation.

c. The calculation of Newspaper Ring value

Basic ± Corrections = $2.5\%Turnover_{annual}$ + 1.5% x $2.5\%Turnover_{annual}$ = 2.875% $Turnover_{annual}$ = 2.875% x 400.000 = **11.500 ron**

➢ **The royalty savings method**

Under evaluation is a patent for a new product used, the owner of the patent, is a joint stock company named IKAR which is acquired by another joint stock company – PILOT.

The assessment aims to review the registration of the patent by applying the purchase method, i.e. after following the acquisition by PILOT enterprise of IKAR joint stock Company, in its entirety.

The standard value is the fair value.

Assessment date: July 31, 2014.

The remaining useful life of the patent was estimated to be 5 years.

The assessment method used is *The royalty savings method.*

The turnover in respect of products manufactured on the basis of the patent of invention was estimated as follows:

- 3.400 thousands € in 2014
- 3.840 thousands € in 2015
- 4.227 thousands € in 2016
- 4.541 thousands € in 2017
- 4.818 thousands € in 2018.

The fair value of the patent is 521,5 thousands €.

The fee rate in turnover, in this matter, was set at 4%.

The company profit tax rate is 16%.

The economic discount rate (exemption) of net royalty was set at 16%.

The updated total fee is 456,4 thousands €.

The tax benefit of depreciation: 53,4 thousands €.

The discount rate is 16%.

The profit tax is 16%.

The depreciation period is 5 years.

Formula for calculating net profit updated useful life obtained due to the deductibility of depreciation of an asset that is:

BFA = RTA x [n/(n-(FVPA x s))-1]

where:

RTA = The updated total fee;

BFA = The tax benefit of depreciation;

n = number of years of patent pays:

FVPA = The factor present value of an annuity suite (capitalization factor);

s = the corporate tax rate.

The updated total fee = 456,4 thousands €.

FVPA 16% and n = 5 years is 3,274294.

[1/(1+0,16)] + [1/(1+0,16)2] + [1/(1+0,16)3] + [1/(1+0,16)4] + [1/(1+0,16)5] = 3,274294.

So,

BFA = 456,4 x {5 / [5 - (3,2742294 x 0,16)] - 1} = 456,4 x 0,117 = 53,4 thousands €.

Tabel no. 1: The evolution of the indicators necessary for the evaluation of the patent for invention (2014 - 2018)

Crt. No.	Indicators	2014	2015	2016	2017	2018
1	The turnover	3.400	3.840	4.227	4.541	4.818
2	The gross annual royalty 4% (1 * 4%)	136	153,6	169,1	181,64	192,72
3	The annual tax 16 % (2 * 16%)	21,8	24,6	27,1	29,1	30,84
4	The annual net royalty (2 - 3)	114,2	129	142	153	162
5	The factor update 16%	0,862	0,743	0,641	0,552	0,476
6	The annual net updated fee (4 * 5)	98,44	95,84	91,02	84,45	77,11

Source: Data processed by author

From the recorded data dissemination we can say that IKAR Company made a good deal by buying PILOT enterprise.

By merging the two companies and with new patent acquiring company – IKAR, becomes an emerging entity.

Concluding the study I recommend the acquire a longer cut of the selling price of the product obtained by the use of the patent and to take care of maintaining and even improving the quality of it because there is always the risk that the market appears a similar product but at a more advantageous price.

➢ **The method of variation profit contribution**

Suppose that this summer our restaurant where you stayed has higher sales than € 100.000 annually compared to the other two existing hostels nearby. To obtain the final value of intangible assets, we assume that the three restaurants have a similar profit margin of 25%.

What will be the value of intangible assets?

1. Additional restaurant's annual sales pension "Bio Rock" 100.000 euros.
2. Profit margin 25%.
3. Additional annual income 3 (1 * 2) 25.000 euro
4. Factor 12% discount for 3 years 1,64 → [1/(1+0,12)] + [1/(1+0,12)2] + [1/(1+0,12)3]
5. **The value of the intangible assets (3*4) 41.000 euro**

Looking at the specific site restaurant "Bio Rock", the evaluator noted that the only difference existing sales impact is the skilled labor force. The value of intangible assets was estimated at 41.000 euro. (The value of the training revolves around the amount of 8.000 euros, representing an index of the cost or investment in training staff, but no indication of the final value of these economic factors).

➢ **The creating cost method**

On July 31, 2014, an appraiser has the burden to establish the cost of implementing a new software program that will be implemented over two years.

After analysis, it has established the following costs:

Materials	20.000 thousands ron
Payroll	100.000 thousands ron
Services provided by third-party	10.000 thousands ron
Market research	30.000 thousands ron
Total costs	**160.000 thousands ron**
Return on investment (10%)	**16.000 thousands ron**

(Average 10% return on investment, i.e. 80,000 * 2 years * 0.1)

The cost of creating total	**176.000 thousands ron**

Conclusions (proposals or future research)

During the research I discovered multiple convergence, complex and intriguing notions that stir up and maintain reference list with regard to the evaluation of intangible assets.

Through analysis of economic value of intangible assets should take into account the following principles [3]:

1. Evaluation of an intangible asset or the intangible asset package is usually done at the same time, business valuation using them or controlling benefits from this asset class.

2. *Specification defining the corresponding assessment base, i.e. either market value or other values other than market value.*

3. *Specify the valuation premise.*

Adoption of certain approaches (assessment) or another related method will be made depending on the nature of intangible assets which are subject to assessment with fairness and revenue nature and will always depend on the circumstances.

It should be noted that the idea always correct evaluation results must justify evaluator activity of intangible assets in accordance with the requirements of International Standard Evaluation IVS 3 - Valuation Reporting.

From my point of view, valuation of intangible assets is one of the most complex problems that lay the assessor. The difficulty of such assets assessment approach corresponding to an enterprise scale shown in the assessment process and can be measured reliably only after being assessed enterprise as a whole by means of cash flow (cash - flow) updated after evaluation market value or fair value of all tangible assets, current and total debts.

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ACKNOWLEDGMENT
The author, (Vidrascu, Paula – Angela), would like to specify that this paper has been financially supported within the project entitled ***„SOCERT. Knowledge society, dynamism through research",*** contract number POSDRU/159/1.5/S/132406. This project is co-financed by European Social Fund through Sectoral Operational Programme for Human Resources Development 2007-2013. **Investing in people!**"