



# Intellectual Property Valuation

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<sup>1</sup> This fact sheet was first published in June 2013 and updated in April 2023.

## I. Introduction

Intellectual property (IP) assets such as patents, trademarks, copyrights or trade secrets are increasingly the core of many organisations and transactions. Licensing and assignments of corresponding IP rights are common, and the use of these types of assets as loan security has grown. Hence the growing importance of the valuation of intangibles: trading an asset requires knowing its value.

Several methodologies are commonly used on the market to value these assets. This fact sheet will explain the different methods, and examples of possible use scenarios of these methodologies are given. Different tools have been created by public organisations to assist companies in performing valuations. These free tools will also be presented in this document to help you save time and money. However, it has to be underlined that it is always recommended to consult an IP lawyer or IP valuation professional to ensure that the right method is chosen and applied correctly.

## II. Why you should care about intellectual property valuation

The valuation of IP rights is part of good IP management practices within an organisation. Indeed, knowing the economic value and importance of your organisation's IP rights is key to the strategic decisions to be taken on your assets. Still, it also facilitates transactions and the commercialisation of your IP rights.

There are many business situations where valuation is required, such as:

- a. Valuation of a company for a merger, acquisition, joint venture or bankruptcy:  
Companies are increasingly based on intangible assets and investment in R&D and knowledge. As expenditures in intangibles rise, so does the share of intangible assets in a company's value and on the market as a whole<sup>2</sup>. Therefore, to know the value of a company, it is essential to know the value of its IP.
- b. Technology transfer, e.g., assignment or licensing of IP rights:  
As in other business transactions, organisations negotiating agreements to sell or license IP rights commonly have to agree on a price. Knowing the value of the IP right is essential to reaching such an agreement and ensuring the parties engage in a good deal.
- c. Support in situations of conflict, such as court proceedings or alternative dispute resolution mechanisms (such as arbitration and mediation):  
In conflict scenarios, quantifying damages is often a necessary step of the process. Therefore, the correct valuation of the IP right at stake is essential to guarantee a fair recovery of the damages.
- d. Fundraising through bank loans or venture capital:  
The valuation of the IP to be used as security for bank loans or to attract venture capital and investors is essential. Indeed, several studies reveal that, in particular, owning patents and having proper IP management structures in place plays a crucial role in the decision of venture capitalists<sup>3</sup>.
- e. Assisting internal decision-making:  
Valuation also plays a role in decisions concerning the protection strategies and country selection for registration of IP rights and can assist organisations in identifying weaknesses such as ownership uncertainties, which may have an impact on the value of the IP and on decisions for the exploitation of such assets.

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2 ICC, Handbook on Valuation of Intellectual Property Assets, 2019

3 Kamiyama, S., J. Sheelan and C. Martinez (2006), "Valuation and Exploitation of Intellectual Property", OECD, Technology and Industry Working Papers, 2006/085, OECD Publishing.

f. For accounting and taxation purposes.

Organisations are required to report on their assets, including their intangible assets.

Valuation is, therefore, a necessary step, as well as in situations of tax planning involving IP.

Defining the objectives and context of the valuation is essential since it determines the strategy and the type of valuation method(s) that should be used. Hence, this is the first step to take when performing a valuation.

### III. Who should be involved in the valuation

IP valuation can be performed in-house or outsourced to a professional entity. If performed in-house, organisations must be aware that this should be a team effort involving several staff members with legal, technical, financial, marketing and strategic expertise.

**Tip: if engaging with the services of an external entity to perform the valuation of your intellectual property, do not forget to have confidentiality obligations in place to protect your business information**

Several national IP offices in the European Union and other public organisations have created free tools to assist particular SMEs in performing basic valuation in-house. Here are two examples:

#### √ IPscore

IPscore is a unique evaluation tool developed by the European Patent Office (EPO) to evaluate patents and technological development comprehensively. It is a simple, user-friendly tool that can be used by all companies that have a portfolio of patents and development projects<sup>4</sup>. It provides:

- basis for identifying the conditions that create value for the patent or development project. A strong evaluation profile, with tried and tested assessment factors and new reports, provides a comprehensive evaluation of the various conditions determining the value of a patent or development project.
- basis for assessment and valuation of the patent or development project. A quantitative financial module works out a financial forecast and determines the financial order of magnitude in the overall qualitative evaluation.

#### √ IP Panorama 2.0

IP PANORAMA 2.0 was developed jointly by the Korean Intellectual Property Office (KIPO), the Korea Invention Promotion Association (KIPA), and the World Intellectual Property Organization (WIPO). It consists of a set of e-learning modules (20 hours), one dedicated to the valuation of IP assets<sup>5</sup>. It provides information on topics such as:

- the relevance of IP and IP rights to a business;
- different forms of IP and IP rights;
- formulating your IP strategy; and
- growing and scaling business through ongoing IP management and utilisation.

<sup>4</sup> The IPscore is available at the European Patent Office: <https://www.epo.org/searching-for-patents/business/ipscore.html>

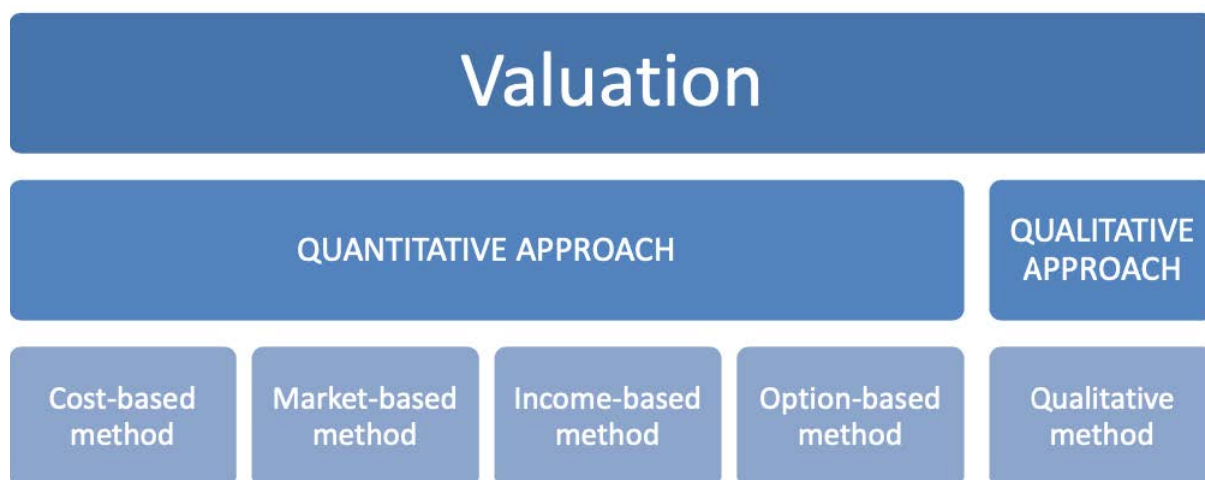
<sup>5</sup> The IP Panorama 2.0 is available at the World Intellectual Property Office: [https://www.wipo.int/academy/en/news/2022/news\\_0029.html](https://www.wipo.int/academy/en/news/2022/news_0029.html)

## IV. How is the valuation performed?

- Organisations use different approaches to IP valuation. Generally, these approaches are divided into two categories: quantitative and qualitative valuation.
- While the quantitative approach relies on numerical and measurable data to calculate the economic value of IP, the qualitative approach focuses on the analysis of the characteristics (such as the legal strength of the patent) and uses of IP<sup>6</sup>.

Several methodologies are used within the quantitative approach, but they can generally be grouped into four methods<sup>7</sup>:

1. cost-based method;
2. market-based method;
3. income-based method; and
4. option-based method.



<sup>6</sup> Lagrost, C., D. Martin, C. Dubois and S. Quazzotti (2010), "Intellectual property valuation: how to approach the selection of an appropriate valuation method", Journal of Intellectual Capital, vol. 11 n. 4, Emerald Group Publishing Limited.

<sup>7</sup> Flignor, P., D. Orozco "Intangible Asset & Intellectual Property Valuation: A Multidisciplinary Perspective", 2006

## 1. Quantitative approach

### 1.1 Cost-based method

This method assumes that there is a direct relation between the costs expended on the development of IP and its economic value.

Different techniques are used to measure costs, such as:

- i. Reproduction cost method: Estimations are performed by gathering all costs associated with purchasing or developing a replica of the intellectual property under valuation.
- ii. Replacement cost method: Estimations are performed based on the costs that would be spent to obtain an equivalent IP asset with similar use or function.

In both methods, we consider today's price, i.e., the expenditures as of the valuation date and not the historical costs when these were actually incurred<sup>8</sup>. Costs of two sorts should be included:

- a. direct expenditures, such as costs of materials, labour and management; and
- b. opportunity costs relating to the lost profits due to delays in the market entrance or investment opportunities lost to develop the asset<sup>9</sup>.

### 1.2 Market-based method

The market-based valuation method relies on estimating value based on similar market transactions (e.g., similar licence agreements) of comparable IP rights. Given that often the asset valued is unique, the comparison is performed in terms of utility, technological specificity and property, also considering the market's perception of the asset.

Data on comparable or similar transactions may be accessed in the following sources:

- a. annual company reports
- b. specialised online databases and services such as:
  - Royalty Source - Intellectual Property Valuation and Licensing: [www.royaltysource.com](http://www.royaltysource.com);
  - Royaltystat: [www.royaltystat.com](http://www.royaltystat.com)
  - Knowledge Express: <https://knowledge.express>
  - ktMINE: [www.ktmine.com](http://www.ktmine.com);
  - etc.
- c. from publications and organisations dedicated to licensing and royalties, such as the Licensing Executives Society: <https://www.lesi.org/>
- d. in court decisions concerning damages

<sup>8</sup> Drews, D., "The Cost Approach to IP Valuation: Its Uses and Limitations", IP Metrics Intellectual Property Valuation, 2001.

<sup>9</sup> Flignor, P., D. Orozco "Intangible Asset & Intellectual Property Valuation: A Multidisciplinary Perspective", 2006



### 1.3 Income-based method

This method tends to be the most frequently used<sup>10</sup>. It is based on the principle that the value of an asset is intrinsic to the (expected) income flows it generates. After the income is estimated, the result is discounted by an appropriate discount factor to adjust it to the present circumstances, thus determining the IP's current value.

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

- i. Discounted cash flow method: This method aims to estimate future cash flows, which are projected and later discounted by applying an appropriate discount factor. The primary source of information to estimate the cash flows is generally the company's business plan that exploits or intends to exploit the asset.
- ii. Relief-from-royalty method: In this method, the value of the asset is considered as the value of the royalty payments from which the company is relieved due to its ownership of the asset. Hence, the appropriate royalty rate must be determined, allowing the estimation of the future royalty income stream. A discount rate is applied to determine the present value of the asset.

### 1.4 Option-based method

Differently from the other methods, the option methodology takes into consideration the options and opportunities related to the investment<sup>11</sup>. It relies on option pricing models (e.g., Black-Scholes) for stock options to achieve a valuation of a given IP asset.

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<sup>10</sup> ICC, Handbook on Valuation of Intellectual Property Assets, 2019

<sup>11</sup> Kamara, A., "Introduction to real options", CFO Forum, 2002.

## 2. Qualitative approach

This method, also commonly referred to as evaluation, does not rely on analytical data. In fact, the valuation in this method is performed by analysing different indicators to rate the IP right, i.e., determining its importance.

The indicators cover all the aspects that can impact an IP asset's value, including legal aspects, the technology level of the innovation, market details and company organisation. The method is commonly implemented through a questionnaire comprising all these criteria. Examples of questions included in such questionnaires can be:

- ✓ How would you define the IP innovation compared to the actual state of the art?
- ✓ Which level of its life cycle has the IP right (e.g., patent) reached?
- ✓ What is the geographic coverage of the reference market?

## V. Selecting the right method

Selecting the most appropriate valuation method in a given situation is complex. The procedure should consider several factors, such as the type of IP at stake, the technology's development level, and the valuation's purpose.

The advantages and disadvantages of each methodology should also be weighed up. 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. For these reasons, and as mentioned at the beginning, it is always advisable to consult an IP lawyer or IP valuation professional to choose the most suitable method and apply it correctly.

In the table below, you will find scenarios where methods are more likely to be used.

	Method	When/Why	Advantages	Disadvantages
QUANTITATIVE	<b>cost-based</b>	<ul style="list-style-type: none"> <li>✓ Valuation of an asset in the early stages of development</li> <li>✓ Cases where there is no market revenue data</li> <li>✓ Accounting and tax purposes</li> </ul>	<ul style="list-style-type: none"> <li>✓ Simplicity</li> <li>✓ Information gathered easily since most of it is in the accounting sheets</li> </ul>	<ul style="list-style-type: none"> <li>✓ May be difficult to isolate the costs related to the intellectual property assets from the other research costs</li> <li>✓ The economic benefits associated with the assets are not taken into account</li> </ul>
	<b>market-based</b>	<ul style="list-style-type: none"> <li>✓ Valuation for internal purposes</li> <li>✓ Valuation for IP transactions</li> <li>✓ Valuation in litigation situations</li> <li>✓ Trade mark valuation</li> </ul>	<ul style="list-style-type: none"> <li>✓ Accuracy, since it is close to market reality</li> <li>✓ Objectivity</li> </ul>	<ul style="list-style-type: none"> <li>✓ May be difficult to gather comparable or similar data, since transactions are often confidential</li> </ul>
	<b>Income-based</b>	<ul style="list-style-type: none"> <li>✓ Valuation for fund raising</li> </ul>	<ul style="list-style-type: none"> <li>✓ Analytic</li> </ul>	<ul style="list-style-type: none"> <li>✓ May be difficult to use in high risk sectors</li> <li>✓ Subjective assumptions can be made</li> </ul>
	<b>Option-based</b>	<ul style="list-style-type: none"> <li>✓ Valuation of an asset in the early stages of development</li> <li>✓ Sectors of high uncertainty</li> </ul>	<ul style="list-style-type: none"> <li>✓ Deeper analysis since it takes into account the uncertainty of potential cash-flows</li> </ul>	<ul style="list-style-type: none"> <li>✓ Complexity</li> </ul>
QUALITATIVE	<b>Qualitative method</b>	<ul style="list-style-type: none"> <li>✓ Internal management decision making</li> </ul>	<ul style="list-style-type: none"> <li>✓ Simplicity</li> </ul>	<ul style="list-style-type: none"> <li>✓ Subjective</li> </ul>

## VI. Useful Resources

For further information on the topic, please also see:

- WIPO, [Valuing intellectual property assets](#)
- European IP Helpdesk webinar on [“IP assessment: how to improve informed decision-making”](#)
- EUIPO, [Why IP valuation matters](#)
- ICC, [Handbook on the Valuation of IP Assets](#)
- OECD, [Intellectual Property Statistics and Analysis](#)

Our main goal is to support cross-border SME and research activities to manage, disseminate and valorise technologies and other IP rights and assets at an EU level. The European IP Helpdesk enables IP capacity building along the full scale of IP practices: from awareness to strategic use and successful exploitation.

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The heart of our service portfolio to keep you updated



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Our Helpline team answers your individual IP questions



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## EVENTS

Meet us at key networking and brokerage events and conferences



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Detailed IP knowledge provided through our high level publications



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Our regional ambassadors provide IP support throughout Europe



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