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TÍTULO: Problemas para determinar el valor razonable de la propiedad intelectual en la práctica contable.

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RESUMEN. El artículo examina las peculiaridades de la valoración de la propiedad intelectual. Se debe tener en cuenta que al determinar el valor de un producto como propiedad intelectual, es necesario saber que una característica esencial del mercado de productos intelectuales no es la circulación de los objetos en sí, sino los derechos para usarlos. El artículo analiza los métodos para determinar el valor razonable de un objeto de propiedad intelectual en la práctica del sistema contable ruso.

PALABRAS CLAVES: Sistema Contable Ruso, propiedad intelectual, valoración, investigación y desarrollo.

TITLE: Problems in determining the fair value of intellectual property in accounting practice.

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ABSTRACT. The article examines the peculiarities of intellectual property valuation (IPO). It must be borne in mind that when determining the value of a product as intellectual property, it is necessary to know that an essential characteristic of the market of intellectual products is not the circulation of the objects themselves, but the rights to use them. The article analyzes the methods to determine the fair value of an object of intellectual property in the practice of the Russian Accounting System (RAS).

KEY WORDS: Russian Accounting System, intellectual property, valuation, research and development.

INTRODUCTION.

Having no reliable information on the magnitude of the actual cost of each individual product, achieving innovative solutions during the implementation of the innovation project, obtaining detached decisions related to obtaining innovative projects, selling and (or) transferring the accompanying products to third parties for temporary use, with costs, which determined them. Therefore, such a technique is required to calculate the cost of an innovative product, which will allow to form a reliable value of the indicator of the actual cost of a new object of accounting and calculation, an innovative and technological product.

To solve the above problems in the current legislation, it can be changed on the basis of the existing calculation unit - an innovative project. In this regard, there is a justified need for a reliable valuation of the innovative products being created, which allows reflecting objective information in accounting and reporting on the composition of assets of organizations.

DEVELOPMENT.

The main component of intellectual property is organizational structural capital [Stewart T.A., 2001]. Therefore, the object of calculating the cost price can be not only the final product, which is an innovative product, but also an intermediate product, namely a scientific or scientific and technical product.

Methods.

In today's economy, analysis, information reflection and cost estimation are particularly important tools of enterprise management [Kovrizhnyh O.E., Nechaeva P.A., 2016]. The basis for determining the value of the estimated intellectual property through a cost approach is the procedure of summing up all the costs necessary for its creation or acquisition, protection, production and sale, including the developer's profit [Elohova, I. V., & Nazarova, L. A., 2012].

The methods of the cost approach differ in the nature of the costs on the basis of which the value of intellectual property objects (IPO) is calculated. The methodical basis of the income approach is the principle of expectation, which establishes that the value of the object is determined by the sum of the current (reduced to the date of valuation) values of all future benefits, the receipt of which it provides to its owner. According to this principle, the cost of the intangible assets (IS) is determined by the quantity, quality and duration of the future benefits from the use of OIC.

Future benefits from the use of IPOs should be understood as future earnings of net profits from the use of OIC. The method of discounting the cash flow implies the calculation of cash receipts for all future periods. The group of profitable methods is the most numerous. Methods of income approach are divided into direct and indirect. Direct are applicable in those cases where it is possible to compare two close in technical and economic indicators of products or two ways of producing the same product. Indirect ones are applicable without limitations, but the degree of reliability of the assessment by indirect methods is lower than the degree of reliability of the evaluation by direct methods.

A comparative approach is based on market information and consists in comparing OIC with similar utility, which makes their values close in value. To apply the comparative approach, relevant information about the analogues and the prices for them is needed. In order to represent the sample, there should be at least 3-5 analogue objects that are comparable in quality with the evaluated object.

However, it should be noted that researchers Smith G. V., Parr R. L. believe that it is practically impossible to independently determine the profitability of IP objects [Gordon V Smith, Russel L Parr, 2004].

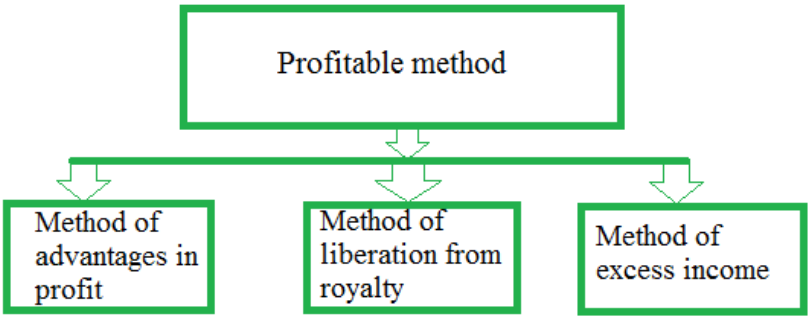
In practice, the majority of Russian enterprises use the cost approach in estimating the fair value of the intangible assets. Axtle-Ortiz emphasizes that the importance of components and elements of intellectual capital depends on the different cultural contexts in which these organizations are located [Axtle-Ortiz M.A., 2013].

But this method has one significant drawback - the value of the IA formed with its help is not fair. Therefore, for the most accurate calculation of the fair value of innovative IA, it is necessary to use either a comparative method or a profitable one. This is justified by the fact that it is not so difficult to predict the sales and accordingly the expected profits, as well as to determine the royalty rate

[Sveiby K.-E., 2018]. A detailed analysis of methods for measuring intellectual capital is presented in [Dominiak P., Mercik J., 2011].

Since we are dealing with innovative IA, when using a comparative approach, it is often difficult for him to find similar assets. Therefore, it is more rational to use the income method, which has several varieties (Figure 1), when determining the fair value of the IA.

Fig. 1 — Types of income method in determining the fair value of IA



Note that the excess income method is used primarily to estimate goodwill. Therefore, to calculate the cost of patents, licenses and similar IA, it is more rational to use the profit-based method (formula 1) and the royalty-free method (formula 2) [Palamarchuk A.S., 2011]:

$$S_{IA} = \sum_{i=1}^{n}(P_1 - P_2) * q_i * d\ , \qquad (1)$$

Where:

Sia - the value of the object intangible assets;

P1 — profit per unit of output using an intangible asset;

P2 — profit per unit of output without using an intangible assets;

q1— the volume of the determined output with the help of an intangible asset pcs., kg, in the i-th year;

d — the discount factor.

$$S_{IA} = \sum_{i=1}^{n} q_i * R_i * p_i * d, \qquad (2)$$

Where:

q1— the volume of the determined output with the help of an intangible assets pcs., kg, in the i-th year;

Ri — royalty in the i-th year (%);

pi — price of products under license in the i-th year;

n — the term of the license agreement.

The use of these methods is justified by the fact that it is not so difficult to forecast sales, and accordingly, the expected profits, as well as to determine the royalty rate.

In modern conditions, IA valuation has been widely used in connection with the two main areas of use of this property-market implementation and IA capitalization.

The capitalization of IA is the transformation of IP into the property of the enterprise and the reflection of this property on the balance sheets of the enterprise as IA. The process of capitalization includes the inventory of OIP, their valuation and setting on the balance sheet of the enterprise as an IA. Only methods of income approach, based on capitalization or discounting of future streams of income from the use of property, can most accurately reflect the real value of intellectual property [Brichka E.I., 2007].

The wide introduction of innovations is hampered by the lack of a unified assessment system that allows taking into account all the advantages obtained through innovative projects and thereby stimulating participants in investment and construction activities. Analysis of methods for measuring intellectual capital, which have instability, is presented in [Intellectual Capital Revisited, 2007].

Thus, there are objective difficulties that arise before developing and innovating enterprises in determining the fair value of their innovative products, that is, a sound evaluation of all aspects of the creation and use of this product is necessary.

It is known that the value of IA, by which they are reflected in the balance sheet, may not correspond to their real value. Therefore, in accordance with the principle of prudence, such valuation methods should be used in accounting, which prevent underestimation of the assessment of liabilities and expenses and overestimate the valuation of the assets and incomes of the enterprise.

The convergence of the Russian accounting system with international practice and its harmonization with IFRS caused an increased scientific interest in the types of valuation in accounting activities, and in particular, at fair value.

Results and Discussion.

Summarizing the approaches to fair value, defined in international and national standards, it is possible to single out the following its signs (table 1).

Table 1 — Signs of fair value

Feature	Description
The interest of the parties	The buyer wants to acquire an asset from his own convictions and pays no more than a market price. The seller also acts not under compulsion and tries to reach the optimum price, which is possible in the market conditions
Independence	The parties are equal in rights and do not have any connections with each other, which can lead to the appearance of a non-market price
Awareness	Parties must have all the necessary information to assess the object of its properties and the possibilities of using it
The current valuation date	The transaction should not be based on past assessments, but on the basis of actual valuation

These features make it impossible to apply a common approach to the evaluation of all IA. The impossibility of applying a common approach to the valuation of all IA enterprises necessitates the development of a differentiated method capable of taking into account the essence of the IA as an

accounting object and the existing workings of domestic and foreign scientists in the field of accounting. Such a method in world practice is a fair assessment.

IFRS 13 Fair Value Measurement at fair value is the price that can be obtained upon the sale of an asset or paid when transferring an obligation to conduct a transaction on a voluntary basis in the main (or most profitable) market on the valuation date in the current market environment (that is, the output price), regardless of whether such a price is directly observable or is calculated using another valuation technique [Vera, Palea, and Maino Renato, 2012]. In Russian accounting, there is no concept of "fair value", and very often, it is called - "market value".

In accordance with IAS 13, four stages can be identified for the valuation of IAS at fair value:

1. Determine the date of assessment and formulate a list of IA with the date of putting them into operation.

2. Justification of the reasons for the assessment of IA.

3. Market analysis and the information base is formed at the market value of similar assets.

4. Selection of the approaches to its definition is carried out. Moreover, IFRS 13 offers three options - market, profitable and costly, from among which the business entity must choose what it is better to use. In addition, he independently chooses to use one approach or several approaches.

Despite the similarity of definitions, the concept of "fair value" is broader than "market value" and the value itself is determined differently.

Let's compare the main criteria and requirements for IFRS and RAS that must be fulfilled to recognize research and development (R&D) as an IA (table 2).

Table 2 — Comparison of the main criteria and requirements for IFRS and Russian Accounting Standards

IFRS	RAS
The availability of a technical capability to complete R&D so that it is available for use or sale.	The amount of expenditure can be determined and confirmed
The intention of the enterprise to complete R&D, as well as use or sell it	There is a documentary evidence of the work performed
Availability of the enterprise's ability to use the results of R&D	The use of R&D results for production and (or) management needs will lead to future economic benefits (income).
The company has a way of obtaining future economic benefits from R&D.	The use of R&D results can be demonstrated.

As the above comparison shows, the approaches to accounting for R&D in IFRS and RAS are different. In accordance with international standards, the recognition of R&D as an IA is related to the time after which the research results allow the enterprise to obtain information on commercial and technical opportunities for the implementation of the project and the timing of its implementation.

The difference in approaches to determining the beginning and end of the capitalization of costs leads to significant differences in the evaluation of the cost of R&D at initial recognition. According to international accounting standards, the R & D process can be divided into two phases: the research stage and the development stage. In this case, the term "Research" roughly corresponds to the term RAS "Research", and the term "Development" - the term RAS "Experimental Design and Technological Work".

Expenses associated with the conduct of research work do not form the value of an intangible asset, but relate to the current expenditures of the reporting period. Expenses in the development phase are capitalized and included in the cost of the IA. Unlike IFRS, the standard that regulates the accounting of R&D in RAS - RAR 17/02 does not regulate the accounting of costs that form the cost of R & D until the completion of work, and does not determine when capitalization of costs begins.

Summarizing, innovation as the result of creative work, realized in new products or technology, as the creations of the human mind, its intellect, are objects of intellectual property. Intellectual property, unlike ownership of material objects, has a number of features.

The formation of the fair value of intellectual property under the rules of IFRS 13 Fair Value Measurement is carried out, as in the US GAAP system, on a three-tier system. The first level combines the price of a quotation of an identical asset in an active market. The fair price at the second level represents the quotation price of a similar asset in the active market of such property. The third level of asset appraisal at fair value is due to the amount of discounted cash flows. When assigning an evaluation to the second or third level of the hierarchy, the following circumstances are taken into account:

— The presence or absence of observed output parameters using the appropriate assessment technique;

— The significance or insignificance of the observed initial parameters for determining fair value.

An analysis of the rules for the formation of fair value in accordance with IFRS 13 Fair Value Measurement allows us to conclude that its application in accounting and financial reporting is associated with significant costs.

The lowest costs for calculating such a value in relation to assets are possible when there is an active market for them. In other situations, an independent appraiser should be involved in performing the calculations. It should also be taken into account that the notion of "fair value" is not even established in the US appraisal activity, and the definition of the IFRS has become the most widely used of its definitions.

CONCLUSIONS.

Analyzing the results of using the estimate at fair value in the world practice of accounting and reporting, it should also be borne in mind that it is difficult for the auditor to determine the

reliability of such an assessment of objects, since it is impossible to prove that some estimate is correct. A skeptical auditor will always find flaws in the evaluation report. The auditor's decision on the reliability of financial statements, formed not only according to accounting records, confirmation of the correctness of the professional opinion of the appraiser and the company's managers in assessing assets and liabilities at fair value are quite a challenge. In this regard, individual scientists associate the fate of the application of fair value with the ability of auditors to form a correct idea of the fair value of objects in the composition of reporting information.

Thus, taking into account all the conditions and risks accompanying the use of fair value in Russian accounting practice will make it possible to make informed decisions on the use of this category in the regulatory and legal regulation of accounting and reporting in Russia.

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