METHODOLOGICAL BASIS FOR ACCOUNTING OF ENTITIES INTANGIBLE ASSETS MANAGEMENT

Abstract. The importance of methodological basis for accounting of entities intangible assets management research is conditioned by the necessity of enterprise competitiveness insurance in a way of the ability to react to the global challenges of the information economy.

The theory of accounting provides a useful account of how entities manage intangible assets within their accounting system. Theoretical insight into the intangible assets accounting questions on the levels of fundamental theories, theories that describe a particular area of reality based on the fundamental theories and particular theories bordering on some empirical laws are appropriated here.

The role of intangible assets management in entities activity has received increased attention across a number of disciplines in recent years. Moreover, the issue of intangible assets management has received considerable critical attention in practice of business accounting. At the same time, despite numerous achievements in the field of accounting for intangible assets researches, there are still various points of views at the peculiarities of accounting methodology.

In light of recent events in economic researches, it is becoming extremely difficult to ignore the existence of intangible assets accounting methodology. The purpose of the current study is to determine the approaches to define intangible assets both on theoretical and empirical levels and methods of intangible assets accounting for further innovative development management as the methodological basis for accounting process.

The paper considers the levels of intangible assets accounting questions. Inventory procedures for intangible assets are researched. Scheme of the account 12 “Intangible assets” sub-accounts transformation is developed. The principle of double-entry balance sheet approach to the concepts of “intangible assets” and “intellectual capital” is discovered.

The systematic approach to accounting and analysis of entities intangible assets application, determining the value of intangible assets is a prerequisite for the harmonization of the intangible assets accounting in Ukraine and in the world.

Keywords: intangible asset, accounting for intangible assets, sub-account, intellectual capital.

JEL Classification: M41

Formulas: 0; fig.: 3; tabl.: 1, bibl.: 16.
Teoria buxhalteretskого обліку забезпечує дослідження питань стосовно питань, які стосуються здатності суб’єктів господарювання управляти нематеріальними активами у своїй системі бухгалтерського обліку. Теоретичні уявлення стосовно обліку нематеріальних активів проявляються на рівнях фундаментальних теорій, таких теорій, які досліджують певний аспект реальності на основі фундаментальних теорій, а також окремих теорій, які межують з деякими емпіричними законами.

Роль управління нематеріальними активами в діяльності суб’єктів господарювання отримала більшу увагу протягом останніх років. Крім того, питання управління нематеріальними активами отримало значний розвиток у практиці ведення бухгалтерського обліку. Водночас, попри численні досягнення в галузі обліку нематеріальних активів, існують різні погляди щодо особливостей методології бухгалтерського обліку.

У світлі останніх подій в економіці надзвичайно складно ігнорувати існування методології обліку нематеріальних активів. Метою нашого дослідження є визначення підходів до обґрунтування нематеріальних активів як на теоретичному, так і на емпіричному рівнях, аналіз методів обліку нематеріальних активів для подальшого управління інноваційним розвитком як методологічної основи для бухгалтерського процесу.

Розглядаються питання обліку нематеріальних активів. Досліджено процес інвентаризації нематеріальних активів. Виявлено принцип подвійного балансового підходу до концепції «нематеріальні активи» та «інтелектуальний капітал».

Визначено, що систематизований підхід до обліку та аналізу застосування нематеріальних активів суб’єктів господарювання є необхідною умовою гармонізації обліку нематеріальних активів в Україні та у світі.

Ключові слова: нематеріальний актив, облік нематеріальних активів, субрахунок, інтелектуальний капітал.

Формулі: 0; рис.: 3; табл.: 1; бібл.: 16.

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МЕТОДОЛОГИЧЕСКИЕ ОСНОВЫ УЧЕТНОГО ОБЕСПЕЧЕНИЯ УПРАВЛЕНИЯ НЕМАТЕРИАЛЬНЫМИ АКТИВАМИ СУБЪЕКТОВ ХОЗЯЙСТВЕННОЙ ДЕЯТЕЛЬНОСТИ

Аннотация. Принято для исследования подходы к определению нематериальных активов на эмпирическом и теоретическом уровнях и метода их учета для управления инновационным развитием, как основы методологии учета нематериальных активов, что связано со становлением учетного процесса.

Ключевые слова: нематериальный актив, учет нематериальных активов, субсчет, интеллектуальный капитал.

Формулі: 0; рис.: 3; табл.: 1; бібл.: 16.

Urgency of the research. Intellectual components and information are of great importance for modern society development. Economic and social process modelling becomes an increasingly important area in entities activity that is held both in short-term and long-term timeframe. Such tendencies cause significant changes of views on nature and productive power of capital. The nature and peculiarities of intangible assets management are among the key aspects of researches. This allows foreign and Ukrainian researchers to define the importance of intangible assets for particular entities, regions and countries development.

Target setting. The concept of intangible assets provides us a useful account of how entities are able to manage their potential. Intangible assets are fast becoming a managerial instrument for
further development alternatives choice. There is a need to create an entity accounting managerial system that has been the subject of much systematic investigation.

**Actual scientific researches and issues analysis.** In general, accounting methodology is an essential part in a wide range of scientific works of numerous foreign and Ukrainian scientists. In particular, the theoretical features of entities intangible assets management accounting can be found in scientific works of I. Blank, O. Galagan, O. Melnik, V. Osipova O. Mendrul, M. Danko, D. Stechenko, S. Onyshko. There is also a growing body of foreign literature that recognises the importance of accounting for intangible assets, in particular scientific works of E. Broking, L. Edvinsson, P. Cleary, T. Stewart, R. Bowen, J. Commons, B. Cornell, G. Davies and others [1—8].

**Uninvestigated parts of general matters defining.** However, despite numerous achievements in the field of accounting for intangible assets researches, there are various points of views at the peculiarities of accounting methodology. In particular, there is a need to determine the applied aspect of intangible assets accounting. This is what explains the need to identify and analyse the methodological basis for entities intangible assets management accounting.

**The research objective.** The purpose of the current study is to determine the approaches to define intangible assets both on theoretical and empirical levels and methods of intangible assets accounting for further innovative development management as the methodological basis for accounting process. The essence of double entry in accounting is researched.

**The statement of basic materials.** The concept of intangible assets accounting is changing together with scientific and technical progress. One among famous Ukrainian scientists O. Galagan, considering development of accounting theory, notes that “firstly, each accounting theory is a collection of logically constructed considerations; therefore, each accounting theory construction means those methods use, which give this theory a character of logically faithful considerations”. At the same time, the scientist preferred the methods of formal logic, in particular, believing that the application of observation, classification, deduction and induction, synthesis and analysis methods is the key to “considering accounting theory as the scientifically constructed doctrine” [9, p. 13].

To date, the theoretical level of intangible assets accounting science have been represented within the entities activity. In particular, such researches are able to be considered on the three levels, namely: the level of fundamental theories, which are related to the most abstract and ideal objects; the level of particular theories that describe a particular area of reality based on the fundamental theories; the level of particular theories bordering on some empirical laws.

The fundamental level theories are connected with creation of a new approach to the challenges solution, posed by the accounting of intangible assets, in particular: the identification, measurement, registration, accumulation, synthesis, storage and transmission of information about the entities activities to external and internal users for decision-making.

The middle level intangible assets accounting theories logically include theories that characterize the fundamental theory components (theory of accounts, balance theory, the theory of double entry, evaluation theory, reporting theory). Empirical theories express the continuity, invariance of established essential properties, relations and trends of intangible assets accounting development and act as a logical basis for explaining the phenomena that occur and predictions of the future ones.

The basis for accounting theory is highly connected with determination of intangible assets accounting subject. First of all, the requirements for each science subject definition are suitable within intangible assets accounting determination, in particular: 1) the subjects are not the same within different branches of science, there are only common objects; 2) the definition should include the branch of science purpose and reflect its main essence; 3) definitions should contain the basic specific principles of the science subject cognition, considering object peculiarities.

It is beyond the scope of this study to examine the two levels of scientific knowledge, namely empirical and theoretical levels. The traditional approach to the empirical and theoretical levels connection represents the dialectic side of such connection. Empirical researches, defining new facts and dependencies, stimulate the development of theoretical knowledge. However, the
empirical knowledge is the result of the previous theory self-development. Thus, the subject of the intangible assets accounting is defined on two levels, namely: empirical and theoretical levels.

At the empirical level, the subject of entities intangible assets accounting is considered in accordance with an appropriate definition that represented in the third article of the Law of Ukraine “On Accounting and Financial Reporting in Ukraine”, the accounting and financial reporting purpose [10]. The informational and methodical aspects of providing users with complete, truthful and impartial information about the intangible assets of the enterprise are defined.

At the theoretical level, the subject of entities intangible assets accounting is considered as a system of principles for measuring, evaluating, registering and aggregating information about entities intangible assets. This allows identifying the patterns of innovative development and entities accounting system operation that is oriented to intellectual property management.

The current stage of accounting evolution and entities management systems causes the need to transform the accounting method into the instrument of enterprise value management.

Subject deployment of the method should be carried within a procedure that proves the effect of the factors, synthesized in the method, into separate operations. In accordance with such approach, the method provides regulation and control in the investigated activity, creates its logic. The general method of cognition creation is impossible. Thus, all new discoveries require the application of new methods and a new methodology of research.

The current paper proposes a new approach to intangible assets accounting method implication for entities innovative development management purpose, namely it is represented as: 1) the system of intangible assets categories; 2) methodological instrument for intangible assets accounting; 3) a set of principles, considering as procedural regulation of the methodology and methodic for intangible assets accounting for the purpose of entities innovative development management.

The elements of the intangible assets accounting assignment has to be connected with accounting process stages:

The first stage means chronological and timely constant, systematic intangible assets observation, namely: documentation and inventory. At the second stage, the measurement of intangible assets through a single monetary measure is provided, in particular estimation and calculation are held. The peculiarities of the third stage are registration and classification of data on intangible assets changes in order to differentiate their types, including accounts and double entry. The fourth stage means generalization of information about intangible assets for the purpose of reporting, particularly balance sheet and statement.

To date, there is necessity to note that intangible assets management is impossible without information support. Such information support is continuous in time and a specified within space. Therefore, an improvement is due to the manual data fixing replacement and data of systematization into automated and rather progressive one, which opens new opportunities for information resources creation. This also brings together two basic requirements for information, namely its efficiency and objectivity. In spite of above mentioned information, the balanced approach to information resources with different types of documents on intellectual property rights becomes important, taking into account their real role in the entity information potential.

Further research required to shed light on the mechanism underlying the use of typical primary accounting forms that are fulfilled in accordance with the Procedure for the standard forms of primary accounting of intellectual property objects within intangible assets use [11]. Besides the standard forms of primary accounting, the additional forms of primary accounting are used to register intellectual property rights objects [12; 13]. The additional forms of primary accounting are fulfilled by the representatives of intellectual property units for the operational accounting of such objects.

The analysis of primary documentation forms essence and content has shown that they do not fully meet the accounting objectives. In particular, there are doubts about the usage of an inventory card form № IA-2 (intangible assets), because the intangible assets object enters the economic circulation on the basis of supporting documents of the ownership (or use) of the object.
The fact of these objects receipt is drawn up by the act of introduction into the economic circulation of the intellectual property object as intangible assets component (form № IA-1). It can therefore be assumed that there is a duplication of information in these documents, which does not facilitate the simplification of the procedure for the accounting information formation.

Taken together, primary documents for intangible assets accounting have been developed only for intellectual property objects. The other types of entities intangible assets are accounted in accordance with standard forms for fixed assets accounting. Improvement in the primary accounting of intangible assets should take place within the directions of the content capacity increasing during the process of a specific form to ensure the reflection of all features of each object of intellectual production development. The implementation of primary documents rational forms will facilitate the adoption of managerial decisions, obtaining the necessary data for managerial accounting and economic analysis. This will affect the reliability of intangible assets assessment.

The order of the standard forms for intellectual property objects primary accounting application as the intangible assets component only partially solves the issue of “intangible” assets displaying within the accounts. In general, this is a duplication of the primary documentation of accounting for fixed assets. Therefore, the findings of this research provide for documents, which are used for operations with intangible assets, the differentiation into three groups, namely: 1) documents, confirming copyright and patent rights to intellectual property objects; 2) documents that reflect the transfer of property rights to the use of intangible assets and that are confirmed by licenses; 3) documents, confirming the emergence of contractual rights.

In order to simplify the inventory commission activity, an improved procedure for the implementation of inventory procedures for intangible assets has been proposed (Figure 1).

1. ORGANIZATION STAGE
   1. Selection of intangible assets inventory objects and operational plan of inventory preparation.
   2. Selection and acquisition of the inventory commission, making requests with the justification of the need to involve experts, as well as audit, consulting, valuation and other organizations.
   3. Inventory order issue.
   4. Inventory commission members instructing.

2. TECHNOLOGICAL STAGE
   1. Implementation of legal, scientific, technical and economic analysis of inventory objects by checking documents and information to define:
      - intangible assets exclusive rights;
      - intangible assets objects that are not exclusive rights objects;
      - potentially defensive intangible assets objects.
   2. Identification of rights to discovered results subjects.
   3. Development of recommendations on obtaining (registration) of legal protection for the revealed results of creative activity and other objects of intangible assets and their use within...

3. RESULTING STAGE
   1. Representation of recommendations in the inventory commissions protocols.
   2. Approval of the decision on the inventory results.
   3. Transfer of documentation to the entity that has appointed the inventory.
   4. Inventory results representation in accounting.

Fig. 1. Inventory procedures for intangible assets
Such approach to intangible assets inventory process provides:
- evidence of intangible assets existence and identification within accounting due to the availability of relevant documentation;
- compliance of the reflection order within accounting of the results of intangible assets objects testing;
- reliable presentation of data on intangible assets in accounting and financial reporting achieved through the inventory procedures implementation;
- study of development areas and increase of the control function value for intangible assets accounting through the transformation of the inventory concept in connection with the intangible resources attraction into production process.

An important function is the assessment both as an element of the accounting method and one of the most common, important and complex accounting procedures. The possibility of a reliable assessment is a mandatory and unchanging criterion for the recognition of all accounting objects.

Accounts are also an element of the accounting method, creating a system of entities information management in the form of an integrated model of accounting information, namely an account plan.

The detailed consideration of the account 12 “Intangible assets” and its subaccounts are established in the Instruction on the application of the accounting plan of the enterprises and organizations assets, capital, liabilities and business operations accounts [14]. The essence of intangible assets is represented in National Accounting Regulations (Standards) (NR(S)AU 8) [15] (Table 1). The particular objects do not represent the intangible assets category.

### Table 1

<table>
<thead>
<tr>
<th>Subaccounts</th>
<th>Intangible assets kinds</th>
</tr>
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<tbody>
<tr>
<td>121 „Natural resources use rights”</td>
<td>Rights to use subsoil, other natural resources, geological and other information about the natural environment</td>
</tr>
<tr>
<td>122 „Rights to use property”</td>
<td>Rights to use land, building, the right to lease premises, etc.</td>
</tr>
<tr>
<td>123 „Trademark rights”</td>
<td>Trademarks rights (marks for goods and services), rights for commercial (firm) names, etc.</td>
</tr>
<tr>
<td>124 „Rights to industrial property objects”</td>
<td>Rights for inventions, utility models, industrial designs, plant varieties, animal breeds, layout of integrated circuits, commercial secrets, know-how, protection against unfair competition, etc.</td>
</tr>
<tr>
<td>125 „Copyright and related rights”</td>
<td>Rights for literary and musical works, computer programs, databases, etc.</td>
</tr>
<tr>
<td>127 „Other intangible assets”</td>
<td>Rights to conduct activities, use of economic and other privileges, etc.</td>
</tr>
</tbody>
</table>

The Figure 2 represents an updated nomenclature of the account 12 “Intangible assets” subaccounts for the rights to intellectual property objects accounting in the context of separate groups, which substantially approximate the accounting of intangible assets to the norms and principles of the European Community.

Previous studies have found the essence of double entry in the accounting of operations with intangible assets as an important and relevant point of the theoretical aspects of accounting and analytical concept of intangible assets management. Overall, understanding the nature of intangible
assets business transactions duality helps to overcome difficulties in the process of predictive knowledge production and economic factors explanation. This is a basis for intellectual property disposition or traditional ways incomplete explanation of already known facts of economic life companies discovering.

Prior studies of the economic and accounting theories statements of double-entry of business operations convince that double-entry origins is connected with a need to reflect the circle of entity capital. In particular, V. Makarov devoted some attention to such position, underlining that business operations double-entry is caused by “... the economic nature of changes in the value forms in the process of economic means circulation” [16, p. 68].

Fig. 2. - Scheme of the account 12 “Intangible assets” sub-accounts transformation

Available sub-accounts

ACCOUNT 12 «INTANGIBLE ASSETS»

121 „Natural resources use rights”
122 „Rights to use property”
123 „Trademark rights”
124 „Rights to industrial property objects”
125 „Copyright and related rights”
127 „Other intangible assets”

121 „Means of entity individualization”
122 „Rights of intellectual property, protected by patents”
123 „Copyright and related rights”
124 „Rights on scientific and technical information objects”
125 „Commercial secret”
126 „Other intangible assets”

391 „Natural resources use rules”
392 „Rights to use property”
121 „Means of entity individualization”
122 „Rights of intellectual property, protected by patents”
123 „Copyright and related rights”
124 „Rights on scientific and technical information objects”
125 „Commercial secret”
126 „Other intangible assets”

Transformed sub-accounts structure

Source: compared by author

The particular entities estimate their intangible assets and display them in the balance sheet as non-current assets in the “Intangible assets” section. However, a lot of intangible assets are not able to be fully estimated. As a rule, the intangible assets contain patents, licenses and business reputation, owned by the company. In case of recognized and unrecognized in accounting intangibles assets estimation and the absence of such estimation in the “Intangible assets” section,
the assets value is growing by the fundamental value of recognized and unrecognized in accounting intangibles assets.

If the assets value is growing at a particular amount, than the liabilities value of the balance sheet should increase by the same amount. It is natural to add such amount to the intellectual capital, which is a part of entities own capital intangible component (Figure 3).

Fig. 3. - The principle of double-entry balance sheet approach to the concepts of “intangible assets” and “intellectual capital”

Source: compared by author

The Figure 3 shows that increasing the value of intellectual capital leads to an increase in entities own capital, and, accordingly, to increase the value of the company for shareholders. This approves that the concepts of “intangible assets” and “intellectual capital” represent two different approaches to the same indicator. In particular, intellectual capital explains the position of source of value creation, and intangible assets describe the position of value placement. In accordance with above mentioned information, intangible assets and intellectual capital are to be considered as equivalent and interchangeable, identical concepts that arise depending on the phase of the advanced in the intellectual property rights capital circuit.

Conclusions. In summary, these results show the importance of following facts and activities:

1. Application of the systematic approach to entities intangible assets accounting and analysis, determination of the intangible assets value.
2. The importance of harmonization questions, including of the intangible objects in Ukraine and in the world accounting and legal regulation of operations with intangible assets harmonization.
3. Problems of the techniques of intangible assets accounting and analysis modernization, optimization of the accounting and analytical service organizational structure, taking into account the intellectual activity results within knowledge economy, improvement of accountants and analysts qualification and competencies in the part of intangible assets accounting and analysis.
4. Ability to establish universal accounting criteria for the intangible assets identification and evaluation, ensuring a rational process of accounting for intangible assets and these objects managing. Accounting procedures should provide accurate and complete information about the use of intangible assets in the entity economic activity.
5. Separating the process of managing unidentified intangible assets as an independent functional subsystem.

6. Development of methods for analysing the efficiency of intangible assets use, which will help to form the strategy of entity innovation development.

Література


References


