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# DEVELOPMENT OF ACCOUNTING-INFORMATION PROVISION OF ENTERPRISE VALUE-BASED MANAGEMENT

Abstract. The article considers the issues concerning the development of theoretical and methodological bases of the accounting-information provision of enterprise value-based management. The growing role of accounting data in the processes of value formation and value management of the enterprise determines the necessity for further research. The problems of value assessment within the framework of value-oriented management are analyzed and the most important directions of accounting informativeness expanding for needs of different categories of stakeholders are determined. The essence of the main tasks of accounting-information provision formation in the context of key elements of the enterprise value-based management is disclosed. The main approaches concerning the value-based management are described. The system model of accounting-information provision of enterprise value-based management is developed.

**Keywords:** value of enterprise, accounting-information provision, assessment, management, financial reporting, stakeholders.

**JEL classification:** D20, L25, M41. Formulas: 0, fig.: 3, tabl.: 0, ref.: 18.

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## РОЗВИТОК СИСТЕМИ ОБЛІКОВО-ІНФОРМАЦІЙНОГО ЗАБЕЗПЕЧЕННЯ УПРАВЛІННЯ ВАРТІСТЮ ПІДПРИЄМСТВА

статті розглянуто питання розвитку теоретикозасад обліково-інформаційного забезпечення управління методологічних вартістю підприємства. Розширення ролі облікових даних у процесах формування і управління вартістю підприємства вказують на необхідність подальших досліджень. Проаналізовано проблеми вартісної оцінки в рамках управління вартісно-орієнтованого та визначено напрями розширення інформативності бухгалтерського обліку для потреб різних категорій стейкхолдерів. Визначено та розкрито сутність основних завдань формування обліково-інформаційного забезпечення у розрізі ключових елементів управління вартістю підприємства. Охарактеризовано основні підходи до оцінки вартості підприємства. Розроблено та обґрунтовано системну модель обліковоінформаційного забезпечення управління вартістю підприємства.

**Ключові слова:** вартість підприємства, обліково-інформаційне забезпечення, оцінка, управління, фінансова звітність, стейкхолдери.

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#### РАЗВИТИЕ СИСТЕМЫ УЧЕТНО-ИНФОРМАЦИОННОГО ОБЕСПЕЧЕНИЯ УПРАВЛЕНИЯ СТОИМОСТЬЮ ПРЕДПРИЯТИЯ

**Аннотация.** В статье рассмотрены вопросы, касающиеся развития теоретико-методологических принципов учетно-информационного обеспечения управления стоимостью предприятия. Расширение роли учетных данных в процессах формирования и управления стоимостью предприятия указывает на необходимость дальнейших исследований. Проанализированы проблемы

стоимостной оценки в рамках стоимостно-ориентированного управления и определены направления расширения информативности бухгалтерского учета для потребностей разных категорий стейкхолдеров. Определена и раскрыта формирования учетно-информационного сущность основных заданий обеспечения элементов управления разрезе ключевых стоимостью предприятия. Дана характеристика основным подходам к оценке стоимости предприятия. Разработана И обоснована системная учетномодель информационного обеспечения управления стоимостью предприятия.

**Ключевые слова:** стоимость предприятия, учетно-информационное обеспечение, оценка, управление, финансовая отчетность, стейкхолдери.

Формул: 0, рис.: 3, табл.: 0, библ.: 18.

Introduction. Sustainable development of business entities, as a complex and dynamic system, requires relevant and reliable information, including enterprise value. Value (cost) is a complex criterion reflecting financial and economic efficiency of the enterprise, possibilities for its` further development; it also serves as the main benchmark for both owners and managers, as well as for investors, creditors and other stakeholders. The value-based management (VBM) system of the enterprise involves the whole set of methods, techniques, procedures and indicators to assess the enterprise value and to have a further effect on it. According to this accounting is the main information supplier for the system.

Due to constant changes of the enterprises environment, accounting information cannot fully meet the growing needs of users; it creates additional risks, reduces the reporting indicators analyticity, and leads to some asymmetry. That is why a comprehensive study of the accounting-information supporting system reduces the risks of managerial decisions making, increases the confidence of the information quality to be assessed, identifies the reserves of effective value-based management of the enterprise and ensures its competitiveness.

**Research analysis and problem definition.** Enterprise value assessment is considered within the value-based management framework to maximize its shareholder value.

The concept of VBM was initially applied in 1994 by James M. McTaggart, Peter W. Kontes and Michael C. Mankins in their research *«The Value Imperative: Managing for Superior Shareholder Returns»* [1], which systematizes approaches based on value-based management in order to increase profitability and assess company's potential. Theoretical VBM concept is associated with a large number of researches. Alfred Rapport (1998) in "Creating Shareholder Value: The new standard for business performance" [2] systematized key aspects for creating VBM and introduced the idea of shareholders value added (SVA).

- B. Stewart in his work *«The Quest for Value: a Guide for Senior Managers»* [3] disclosed the main aspects of increasing the enterprise value for shareholders.
- T. Copeland, T. Koller and J. Murrin in their research «Valuation: Measuring and Managing the Value of Companies» [4] investigated the essence of the concept through the use of value thinking for effective management.

G. Arnold in *«Tracking the Development of Value Based Management»* [5] identified and researched the key elements of value-based management.

All existing approaches to implementing the concept of value-based management are based on various fundamental principles of value creation (strategy, organizational structure, measuring instruments), use of various measuring instruments (economic value added, market value added, shareholder value added, etc.) and information base, and intend generally to define the real enterprise value.

At the same time, the certain studies were conducted in the field of accounting towards expanding its information capacity for needs of different users in terms of determining the company's value.

- H. Kapnick in his work «Value-Based Accounting: Evolution or Revolution» [6] drew attention to the fact that the accounting information does not meet the investors requirements concerning the information of enterprise value, and pointed to the necessity for the accounting system construction, oriented to the enterprise value.
- S. A. DiPiazza and R. G. Eccles in *«The Future of Corporate Reporting»* [7] have proved that financial statements do not often meet the requirements of users (primarily the external ones). The authors argue that in order to meet the ever growing demands of stock market participants the financial statements should disclose information about factors affecting the enterprise value, that is, its investment value (from the market participants' perspective). They have developed a concept of value reporting.

Thomas A. Stewart in *«Intellectual Capital. The New Wealth of Organizations»* [8] pointed out a systemic defect in the available methodological framework for determining the company's value. He proved that the information contained in the balance sheets does not correspond to the real value of the enterprises.

Matt H. Evans in his work «Creating Value through Financial Management» [9] argues that the refusal of the traditional model of accounting, which, to a certain extent, distorts true measures of value and limits financial performance reporting for performance evaluation, is important for securing the financial function in forming the enterprise value.

M. Koriahin analyzes the theoretical and methodological principles of enterprise management based on the value-based approach, and indicates that modern accounting does not reflect the full value of the company. He proposes to use the economic value added (EVA) concept, which allows to display in the accounting system the full value of the company [10].

In Ukraine, a business entity value assessment is regulated by the National Assessment Standards (NAS) [11], whereby methodological regulation of property evaluation, property rights and professional evaluation activities are provided. The assessment of some individual objects and accounting results are based on Ukrainian Accounting Standards [12] and IFRS [13]. At the same time, a reliable assessment of the enterprise value and its components is necessary for enterprises that offer their corporate rights for official sale, change ownership, attract foreign financial investments, etc.

Thus, fundamental researches concerning different value-based management concepts expand the role of accounting data in the process of enterprise value formation and management and also indicate the importance of this study.

The purpose of the article is to develop theoretical and methodological principles of enterprise value-based management in order to increase its` efficiency within the system approach.

**Research results.** Accounting-information support is the basic element of the enterprise value management, which affects the entire management system construction and provides management with practical tools for decision making and value assessment.

The theoretical and methodological principles of accounting-information provision of value-based management are shown in Figure 1.

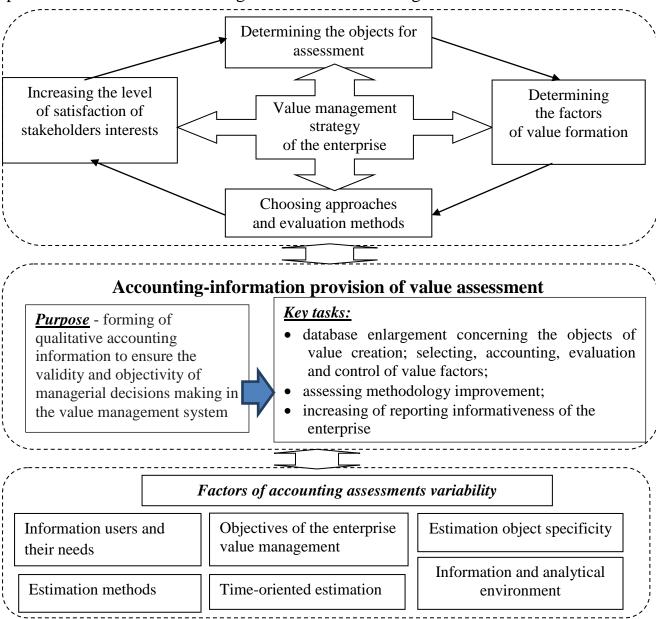


Figure 1. Main tasks of accounting-information provision in terms of key elements of enterprise value management

Source: compiled by authors

Nowadays, the level of stakeholders' satisfaction is one of the key factors in the investment attractiveness growth; it also influences the choice of value management strategy of the enterprise. As owners, investors and managers have totally different goals and priorities in company's management, this results in alternative assessment and accounting information asymmetry. That is why a detailed analysis of all stakeholders, their interests, identifying the most influential and most important ones, setting priorities for different groups allow to form an adequate database and fully satisfy their interests.

Moving from evaluation-statistical assessing procedure to search-and-prognostic value management requires the quality information supporting system for managerial decisions making in the context of key value formation objects.

Traditionally the accounting system covers mainly balance objects and almost does not disclose environmental, social, intellectual and other indicators.

The complexity of additional objects considering can be explained by the lack of methodological approaches, regulatory and legal recommendations concerning both recognizing and assessment of intellectual, human, social capital and other similar off-balance-sheet objects.

The system of accounting-information provision should be guided by information, concerning the possibilities and risks of enterprise value management through the defining value formation factors that reflect the modern paradigm of value management.

The defining of factors, according to T. Copeland, T. Koller and J. Murrin, will help to understand how the enterprise creates and maximizes its value. They recommend to identify 5-10 key value factors for the overall enterprise performance assessment. The maximum number of them can be 20. If more than 20 value factors are used, the problem of choosing the most relevant will surely arise [4].

According to McKinsey experts, these factors should be met by those individuals who can help the company to achieve its goals, monitor them on a monthly basis, and, if necessary, regularly review them [14].

The process of determining the value factors includes three stages:

- 1) *recognition* involves the creation of value parameters scheme with the identifying systematic interconnections of the enterprise operational elements with value creation process;
- 2) *prioritization* involves identifying key factors that have the greatest impact on value through the developing of discounted cash flow model and capacity building for each of them;
- 3) *institutionalization* introduction of value factors into the value measurement system.

Performance indicators become the units of value factors measurement [4].

For Ukrainian enterprises financial indicators (financial, economic and property state of the enterprise, level of technical equipment, market share, etc.) are the dominant factors for determining the value. Their influence can be determined by quantitative assessments. However, it is also necessary to pay some attention to non-financial (qualitative) factors (use of intellectual and social capital), which can be formalized weakly. The level of their influence on the enterprise value formation is

estimated by expert methods (analysts' assessments, rating assessments). These include company reputation, brand awareness, the presence of intellectual, human capital, etc.

While identifying factors, it is necessary to take into account their subordination, determine the degree of influence on the result indicator of value formation, and designate individuals responsible for the process. An important aspect is their focus not only on current activities, but also on the long-term perspective. In each particular case, this process requires individual approach.

The effectiveness of value-based management strategy depends on the chosen assessment methodology. The established accounting system in order to ensure its compliance with the key information users' requirements should be based on assessment methods that reflect their value for the enterprise and provide an opportunity to assess the value change depending on the impact of internal and external factors.

Nowadays the prevalence of historical value in objects assessment is one of the most controversial questions.

Due to the accounting past time orientation, it has the additive characteristics that allow applying the estimation on the basis of historical expenses and determining the "arithmetic value".

An assessment, based on the historical value principle in accounting, is generally accepted due to its benefits.

According to G. Lant, this method can be considered as objective, since the value can be confirmed by the amount of money paid to a third party during the transaction; so nowadays the financial statements are prepared traditionally using the historical costs concept [15].

L. Nikolai, J. Bazli, J. Jones [17] and E. Khendricksen [16] note the following benefits of historical assessment: ease of use, reliability, outgoing documents availability.

Despite the identified advantages of such an assessment, it is criticized for not being able to adequately reflect the company's profit and value under influence of inflation, the impossibility to reflect the asset value, taking into account the costs incurred to obtain it (in terms of intellectual capital), and the contradiction with the prudence concept, etc.

Considering the modern accounting development tendencies, international and national accounting doctrines employ a variety of assessment methods for different types of assets, depending on the ways of their receipt and the assessment date, taking into account the business operations content.

Most Ukrainian enterprises evaluate assets and liabilities using the general methodological approaches determined by the appropriate Ukrainian Accounting Standards and apply the following assessments: historical, initial, amortization, liquidation, revalued, fair and residual value.

However, in most cases a mixed assessment is used, whereby historical (actual) cost is combined with present value, restorative cost, net market value, etc. (Figure 2).

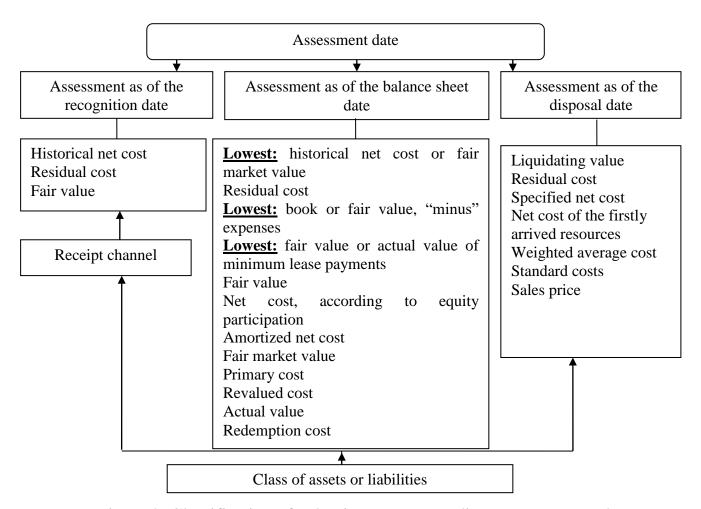


Figure 2. Classification of valuation types according to assessment date *Source: compiled by authors* 

Thus, in Ukrainian accounting practice, various valuation bases are acceptable to apply while preparing financial reporting, which confirms the existence of different approaches to the individual objects assessment.

The combined assessment model is also possible to be used in the international accounting doctrine. In particular in their comments to SFAS 141 "Business Combinations", the developers note that applying this standard results in use of assessments combination based on historic costs and fair value in order to assess assets and liabilities [18].

The necessity to improve the quality of accounting information leads to the gradual shift of the Ukrainian domestic accounting system to the international standards where the approaches to fair value-based assessment are prevailing.

Basic approaches to assessing the enterprise value, as outlined in the National Valuation Standards [11], include comparative (market), property (expense) and income approaches.

It is precisely choosing these approaches to the fair value measurement that IFRS 13 "Fair value measurement" [13] focuses on; it also requires markets revision to identify the key (or most profitable) ones, analysis of the best and most effective way of using non-financial assets, the selection of relevant output data and assessment methods.

Each approach has basic characteristics, which were formed on the basis of stakeholders' information requests:

- comparative (market) approach is aimed to satisfy the owners information needs and reflects market value based on comparing current information on similar business sales, due to a set of factors affecting the value (usage area, consumer-oriented, economic, functional, etc.);
- income approach considers investors interests and involves determining the investment value, based on the current value of expected incomes from the most efficient use of the assessment object considering the income from its' possible resale; and uses forecasting information;
- property (expense) approach promotes the managers interests and is aimed at calculating the value of the company and considering the initial capital value, based on the amount of costs incurred during its creation or necessary for its reproduction or replacement; and relies on retrospective information.

The appropriateness of these methods or their combinations depends on the object type, adequacy and reliability of the external and internal accounting information and other factors that can be investigated by market participants while the price setting.

The limitations of traditional methods require using a combination of approaches that incorporate individual components of value assessment and take into account the advantages of traditional procedures. The combined approach covers all objects assessment, considering the complex impact of financial and non-financial value factors, and provides relevant information for management and investment needs. This makes it possible to get an integrated assessment of company's potential development and to choose the optimal cost-growth strategy.

The efficiency increasing of accounting-information provision of enterprise value-based management is possible subject to measure, assess and systematize in terms of the most significant aspects of activity (financial, marketing, production, social, etc.).

Nowadays, financial statements of Ukrainian enterprises do not take into account stakeholders' needs, do not reflect both future changes in financial state and risk factors, do not fully uncover intangible assets, causing a significant gap between balance sheet value and market value.

Considering the lack of relevant information about the enterprise value, financial reporting needs to be expanded and complemented by appropriate key elements. In order to achieve compliance the methods for adjusting financial reporting should be used, such as inflation correction, normalization and transformation of accounting statements.

Last years a new paradigm of integrated reporting appeared that meets the growing user requirements concerning the information about key financial and non-financial factors of sustainable enterprise development.

The modern concept of accounting-information provision of value-based management is based on use of fundamental provisions, according to which the main elements of accounting-information provision system contain the accounting subsystem (operational, financial and management), the audit subsystem and the

subsystem of analysis, including interconnected blocks: methodology, technology, organization and management procedures.

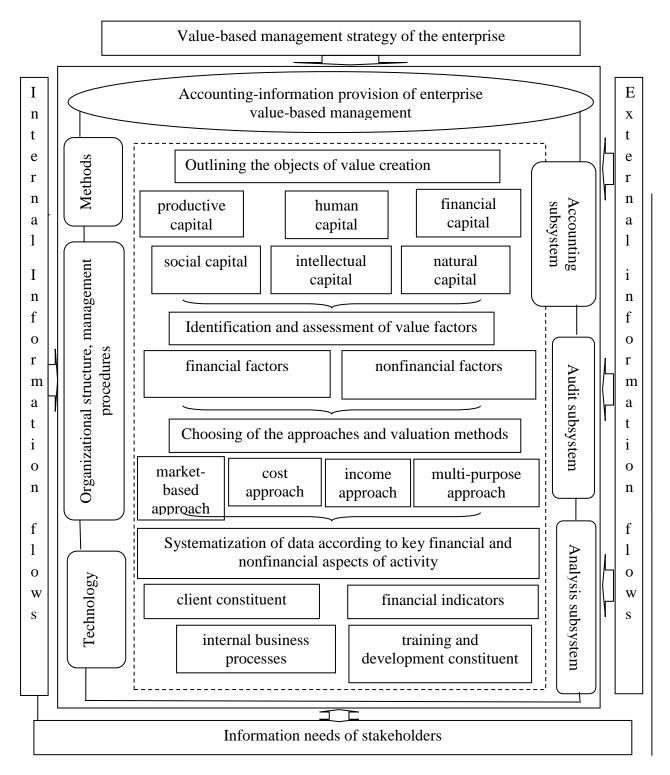


Figure 3. System model of accounting-information provision of enterprise value-based management

Source: compiled by authors

Implementing the concept of sustainable development and value-based management into business processes implies the necessity to form a modern accounting paradigm aimed to consider the production, human, financial, social,

natural and intellectual capital of value creation, which are realized in the course of operational, financial and investment activity, and stipulate the effects in a balanced system of financial and non-financial indicators which generate business value. The key elements of modern model of accounting-information provision of value-based management are presented in Figure 3.

Practical utilization of the model allows systematizing information about the value creation objects in terms of key financial and non-financial aspects, reducing the information asymmetry, improving the quality of accounting-information provision of enterprise value-based management.

#### **Conclusion**

Thus, the further development of accounting-information provision of enterprise value-based management in the context of this study will increase the indicators certainty and reduce risks in management decisions making, raise the trust level to the information quality, identify internal reserves, ensure competitiveness in the context of sustainable development.

Moreover, the justification for choosing the assessment methods and approaches will facilitate to generate reliable accounting and reporting information concerning the achieved results in terms of key financial and non-financial aspects of the activity. The necessity to transform the existing regulatory framework in direction of expanding the Ukrainian accounting system informativity is also emphasized.

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