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## **MODERN INFORMATION TECHNOLOGY IN THE SYSTEM OF ACCOUNTING AND ANALYTICAL SUPPORT OF ECONOMIC SECURITY OF AN ENTERPRISE**

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**Сучасні інформаційні технології в системі обліково-аналітичного забезпечення економічної безпеки підприємства**

**Анотація.** Визначено значення сучасних інформаційних технологій в формуванні обліково-аналітичного забезпечення в системі економічної безпеки підприємства. Автором окреслено основні проблеми становленні і розвитку обліково-аналітичного забезпечення у вітчизняному бізнес-середовищі. В роботі обґрунтовано, що автоматизоване облікове та аналітичне забезпечення є складовою частиною економічної безпеки підприємства і утворює комплексну інформаційну систему, яка поєднує в собі методи і технології бухгалтерського обліку, аналізу та процесу прийняття управлінських рішень щодо подолання внутрішніх і зовнішніх загроз та забезпечення сталого розвитку підприємства.

**Ключові слова:** інформаційні технології; обліково-аналітичне забезпечення; економічна безпека; автоматизація; автоматизоване обліково-аналітичне забезпечення.

**Summary.** Economic security has a sign of management and it is discrete in nature. This requires the development of appropriate theoretical and methodological apparatus designed to provide a favorable environment for the formation of accounting and analytical information, adequate management objectives that will contribute to effective management decisions.

Despite the value of scientific contributions of the scientists, there are still a number of unsolved theoretical and practical problems related to non-compliance organization providing accounting and analytical purposes of economic security.

The aim of the paper is to define the content and structure of accounting and analytical support in the system of economic security, its conformity to modern conditions of business environment.

The mechanism of accounting and analytical software provides the collection of data, its methods of synthesis and analysis, and the technique of providing the direct users an assess to the level of economic security of their own company or their partners and / or competitors whose activities may affect the security. So, we can form the main directions of implementation of accounting and analytical support in the system of economic security:

- diagnostics of financial and economic situation of the company in order to prevent its financial risks insolvency, bankruptcy;
- assessment of economic security and their own company, the reliability of potential partners of the company;
- evaluation of the safety and determine the strategy of market potential and actual competitors; preservation and enhancement of the potential resource of the company, its rational and effective use;
- management decision-making regarding the advisability of activity considering the identified threats and hazards;
- providing the most completed informational system of economic security as a whole, its individual functional units;

- promote the harmonization of interests of the company as a whole (as a legal entity and individual employees (as individuals)) to minimize internal threats etc.

Considering this, the principal organization of accounting and analytical software is the one, which refers to a set of tools, methods and techniques to streamline and optimize the accounting and analytical information. It is the awareness of stakeholders and people taking business decisions that is important factor in increasing the economic viability of the business, its efficiency and protection from exposure to internal and external threats. In the system of economic security arises the question of formation of complete and accurate information tailored to specific tasks and decision-making businesses.

We believe that the structure of accounting and analytical economic security business is complex and extensive and is not limited to those structural components that are proposed by the author.

Our studies provide an opportunity to formulate a series of generalized provisions that reveal the content of economic categories "Accounting and analytical support" and clarify its role as a significant factor in ensuring the economic security of the system entity.

First, accounting and analytical information is an economic model of the relationship between the system of economic security, information resources, what it is, and the informational process in the middle of the company.

Second, accounting and analytical information in the system of economic security can be characterized by different combinations of inherent properties (e.g., relevance, appropriateness, usefulness, etc.). A set of various properties is determined by the specific goals of obtaining information and its use.

Thirdly, accounting and analytical information in the system of economic security is formed in the process of implementing three management functions: accounting, analysis and synthesis.

However, the findings allow to state that in modern development theory and methodology of accounting and analytical support the functioning of economic security has a number of issues concerning the diagnosis of economic security, the use of innovative tools that require further consideration.

**Key words:** information technology; accounting and analytical support; economic security; automation; the automated accounting and analytical support.

**Formulation of the problem.** Updating the role of economic security as an important factor in the survival of businesses in today's business environment defines essentially qualitative aspects of methodological and organizational implementation. Today the main problems are the issues of informative providing of economic security.

The core software is accounting information and analytical support. Economic security has a sign of management and it is discrete in nature. This requires the development of appropriate theoretical and methodological apparatus designed to provide a favorable environment for the formation of accounting and analytical information, adequate management objectives that will contribute to effective management decisions.

**The analysis of studies and publications.** The issue of economic security of entities is deeply investigated by contemporary researchers. Among them, we should mention Gnylytska L. V., Kirichenko O. A., Krutov V. V., Ortynsky V. L., Franchuk V. I. and others [1; 2; 3; 4; 5; 6; 7; 8]. However, the question of accounting and analytical economic security is hardly raised, the exception is only Gnylytska L. V. [1] who considers this issue in her writings in a unified context without the relation to the specific industry sector.

Despite the value of scientific contributions of the scientists, there are still a number of unsolved theoretical and practical problems related to non-compliance organization providing accounting and analytical purposes of economic security.

**The aim of the paper** is to define the content and structure of accounting and analytical support in the system of economic security, its conformity to modern conditions of business environment.

**Presentation of the main material.** The system of economic security traditionally includes the following components: a) intellectual and human resources; b) information; c) technical and technological components; d) financial component; d) legal and political and environmental components; f) power.

The system of accounting and analytical support plays an important role in the functioning of the enterprise in management system, providing interaction of various structural units and responding to changing internal and external environment.

Analysis of domestic business activity let us state that the lack of satisfactory accounting and analytical support leads to the fact that making decisions by business entities is increasingly focused on irrational (social, psychological) approach «bounded rationality» [9].

The mechanism of accounting and analytical software provides the collection of data , its methods of synthesis and analysis, and the technique of providing the direct users an assess to the level of economic security of their own company or their partners and / or competitors whose activities may affect the security. So, we can form the main directions of implementation of accounting and analytical support in the system of economic security:

- diagnostics of financial and economic situation of the company in order to prevent its financial risks insolvency, bankruptcy;
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Considering this, the principal organization of accounting and analytical software is the one, which refers to a set of tools, methods and techniques to streamline and optimize the accounting and analytical information. It is the awareness of stakeholders and people taking business decisions that is important factor in increasing the economic viability of the business, its efficiency and protection from exposure to internal and external threats. In the system of economic security arises the question of formation of complete and accurate information tailored to specific tasks and decision-making businesses.

That is why the highest priority in order to improve accounting and information and structural and methodical process of financial reporting is an absorption of its informational content to ensure a high level of transparency. Key area of increased transparency and informativeness of accounting and analytical reporting is the review of the conceptual and methodological bases of financial reporting.

To achieve this goal, that is more informative and transparent financial reporting, it is appropriate, first of all, to identify the problems that are inherent in the current financial statements. These problems include:

- the format of financial statements, strict regulation of which does not provide opportunities to fairly reflect in all material respects the assets, liabilities and equity of the company;
- underestimated role of materiality of accounting and analytical information, which leads in unnecessary cluttering of financial statements, that is not relevant information, rather than detailing specific items;
- Lack of standardization for formation of accounting policy, which complicates the process of creating an integrated accounting system;
- limited use of the principle of substance over form, according to which accounting is not a mean of fixing formal data.

Solving these problems will help to increase reliability, transparency and informativeness of financial statements to improve the understanding and use of financial reporting by different users and will bring national accounting and financial reporting to international standards.

Creating a sustainable flow of accounting and analytical information in the system of economic security is based on certain principles, among which the main ones are: identifying information needs and the most effective ways to meet them; objective reflection of the processes of financial and economic

activity; unity of information coming from different sources; timeliness of information; increase the coefficient of reliability.

It is reliability, that is a major qualitative characteristic of accounting and analytical information, which reduces the risk of external and internal threats to economic security. The information is considered reliable if it does not contain material errors that are unbiased and users can rely on it as much as it reflects or is expected to reflect the real situation in the enterprise.

However, as the experience of domestic enterprises shows, the majority of Ukrainian accountants and financial managers in their practice aimed at the formation of indicators that take into account the interests of the management entity, thus distorting information about the real financial condition, which, in our opinion, is one of the major threats to economic security contractors who cooperate with it.

The continuous spread of intentional manipulation of financial data reporting domestic enterprises led to the searching of ways to prevent this phenomenon. Until recently it was thought that deal with distortions of financial information has an independent auditor. But as the experience of Ukrainian economy indicates, almost all false financial statements of large companies had a positive opinion. In this regard, it can be argued that the statutory examination of financial statements is not panacea for prejudice distortion effects [1].

In our view, the research perspective in the study of this phenomenon should be directed to the immediate users of the information who need to develop internal mechanisms to verify the reliability of financial reporting potential partners or other counterparties in order to:

- diagnosing their real financial and economic conditions to prevent the threat of cooperation with potential bankruptcy;
- accurate assessment of their financial stability in the implementation of the partnership;
- preparation of information for management decisions regarding cooperation with partners in terms of identified threats and hazards;
- the most complete information support system of their own economic security of the enterprise.

The introduction of such mechanisms is one of the main tasks of analytics for financial and economic security.

Accounting and analytical software is a component of economic security and water transport forms an integrated information system, which combines techniques and technologies accounting analysis to management decisions to counter internal and external threats, safe operation and sustainable development of the company. The system of accounting and analytical support based on operational data, statistical, financial and management accounting, including real-time data, and uses statistical analysis to economic, industrial, and other background information. Therefore, this system performs the collection, processing and evaluation of all types of information used for decision making at all levels. It is a part of the overall management and its essence is to bring together accounting and analytical operations into one process, perform an in microanalysis, ensuring continuity of the process and use the results to create recommendations for decision-making. The generalized idea of the composition and structure of accounting and analytical software and its forms is clearly shown in Figure 1.

Figure 1 shows three singled out groups with the help of which it is advisable to structure an analysis support economic security.

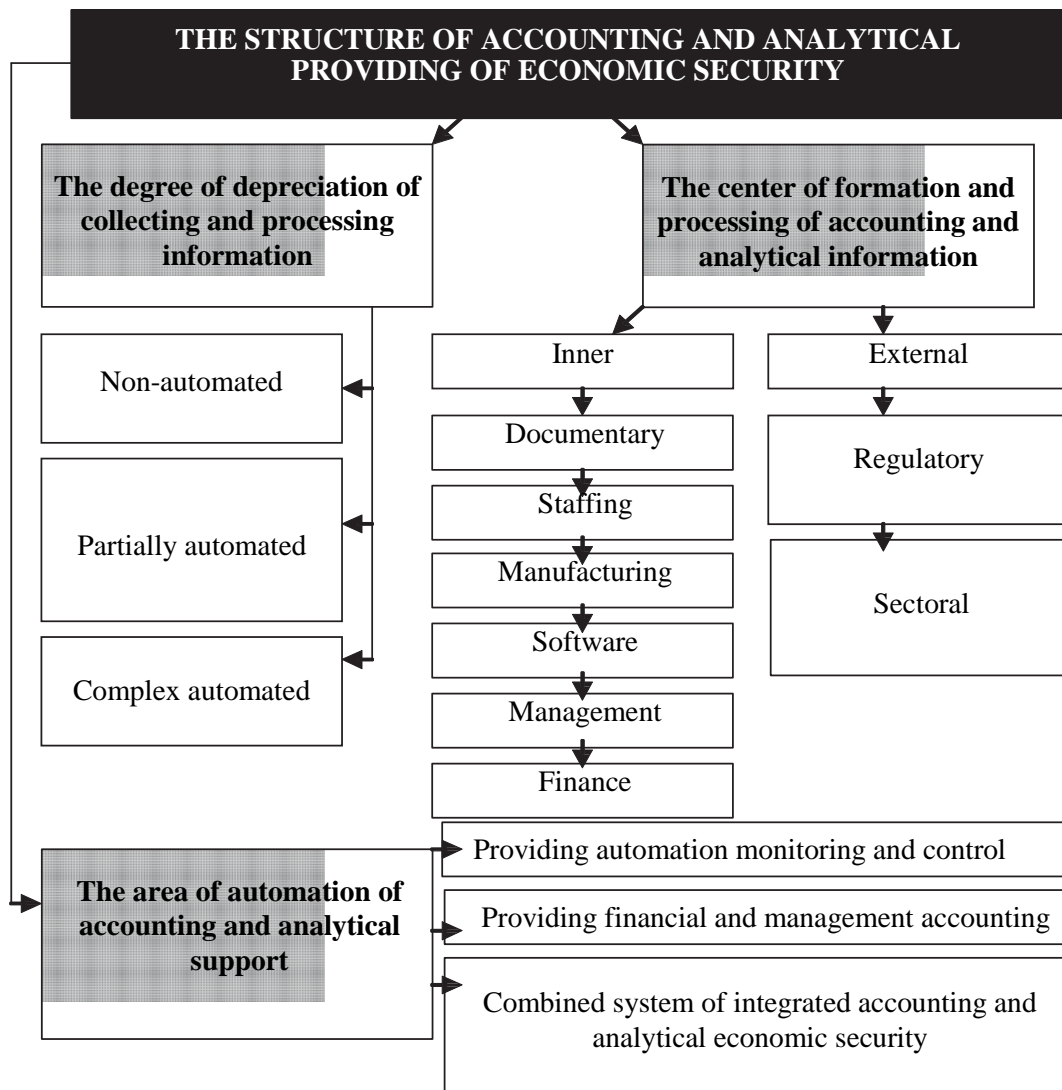


Fig. 1. Scheme of structure formation of accounting and analytical support economic security

Technological accounting and analytical support for the economic security includes universal and specific hardware intended for the collection and processing of accounting and analytical information: a computer network or specific surveillance monitoring equipment, automated systems of fuels and lubricants, etc.

Providing accounting and analytical support includes a list of universal and special software tools designed for the collection and processing of information: from ensuring the formation of primary accounting documents to decision support systems and automated production lines.

Administrative accounting and analytical support for economic security – a set of methods and forms of summarizing the information that would be given for management decisions, which is realized through the development of managerial accounting in enterprise that requires challenges that are imposed.

As the degree of automation of the collection and processing of accounting and analytical economic security expedient is structured into three components: a manual, partially automated and fully automated.

The first type includes systems for collecting and processing accounting and analytical information that is lacking automation. Such systems are, in a way, outdated and not suitable for modern enterprises.

Partially automated processing and gathering of information provides automation in certain areas of financial and management accounting or in the direction of monitoring individual that objects in the entity. Thus, most companies implemented computerized accounting system.

Complex automated collection and processing of accounting and analytical information include closed loop programs that accumulate information with minimum human intervention. In combination with automated systems of financial and management accounting system they are used for monitoring and control. Complex automated systems is designed for multimodal transport and logistics centers and provides a high level of access to accounting and analytical information and reduce the risk of losses from exposure to the human factor.

In the area of automation of accounting and analytical support, economic security companies it is advisable to highlight the following: providing automation monitoring and control, providing financial and management accounting and the combined system of integrated accounting and analytical economic security.

Accounting and analytical support for monitoring and control consists of hardware and software that allows you to track specific objects inside the entity from documents and contracts. These systems include CRM, simplified ERP, ERP and other branched.

Accounting and analytical support financial and management accounting automation system includes accounting information and filing reports. They solve complex problems of financial and management accounting and include in its membership a special software adapted to industry requirements and complex ERP systems, combined with accounting documents.

The combined system of integrated accounting and analytical economic security combine the first and second features and allows you to build a comprehensive system of accounting and analytical support economic security.

We believe that the structure of accounting and analytical economic security business is complex and extensive and is not limited to those structural components that are proposed by the author.

**Conclusions and recommendations for further research.** Our studies provide an opportunity to formulate a series of generalized provisions that reveal the content of economic categories "Accounting and analytical support" and clarify its role as a significant factor in ensuring the economic security of the system entity.

First, accounting and analytical information is an economic model of the relationship between the system of economic security, information resources, what it is, and the informational process in the middle of the company.

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