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## **RESERVES FOR INCREASING THE EFFICIENCY OF THE ECONOMIC SECURITY MANAGEMENT MECHANISM UNDER THE INFLUENCE OF DIGITAL DEVELOPMENT TRENDS OF ENTERPRISE**

### **РЕЗЕРВИ ПІДВИЩЕННЯ ЕФЕКТИВНОСТІ МЕХАНІЗМУ УПРАВЛІННЯ ЕКОНОМІЧНОЮ БЕЗПЕКОЮ ПІД ВПЛИВОМ ТЕНДЕНЦІЙ ЦИФРОВОГО РОЗВИТКУ ПІДПРИЄМСТВА**

The article examines the issues of effective functioning of the economic security management mechanism under the influence of digitalization and digital transformations of the economic environment. The methods of scientific research were: a monographic method, content analysis, generalization, the graphic method. Possibilities for optimizing the process of forming a mechanism for managing the economic security of an enterprise have been identified, such as: training personnel in techniques, minimizing personnel risks, optimizing the processes of searching and analyzing information in the digital space; creating a digital ecosystem; controlling digital risks; integrating digital risk management approaches into the mechanism for managing economic security.

**Keywords:** economic security, economic security management mechanism, digitalization, digital risk, enterprise development.

У статті досліджуються питання ефективного функціонування механізму управління економічною безпекою під впливом цифровізації та цифрових трансформацій економічного середовища. Методами наукового дослідження були: монографічний метод, який забезпечив теоретико-методичне підґрунтя для розробки авторських пропозицій і рекомендацій щодо оновлення підходів до функціонування механізму управління економічною безпекою; контент-аналіз фахової літератури, синтез наукових ідей і підходів у царині безпеки орієнтованого менеджменту, їх узагальнення, графічний метод було застосовано для демонстрації авторських пропозицій у доступній для сприйняття візуальній формі. Встановлено, що резерви підвищення ефективності механізму управління економічною безпекою під впливом тенденцій цифрового розвитку підприємства полягають у автоматизації процедури діагностики досягнутого рівня економічної безпеки; використанні аналітики великих масивів даних для формалізації безпеки орієнтованих управлінських рішень; ідентифікації ризиків за цифровими сигналами із зовнішнього середовища функціонування підприємства; розмежуванні інформації

та її збереження на різних серверах для покращення стану інформаційної безпеки; забезпеченні можливості миттєвої колегіальної реакції на прояви небезпеки завдяки використанням цифрових каналів комунікації. Виявлено можливості оптимізації процесу формування механізму управління економічною безпекою підприємства, такі як: навчання персоналу технікам безпеки орієнтованої поведінки у цифровому просторі, мінімізація кадрових ризиків, оптимізації процесів пошуку та аналізу інформації у цифровому просторі, її використання та збереження і захисту; створення цифрової екосистеми для функціонування механізму управління економічною безпекою; контроль цифрових ризиків; інтеграція підходів цифрового ризик-менеджменту у механізм управління економічною безпекою; зміцнення фінансової спроможності підприємства та розвиток його потенціалу в умовно безпечному цифровому середовищі; формування окремого бюджету фінансування безпеки орієнтованих заходів з частинами, призначеними для різних цифрових сценаріїв.

**Ключові слова:** економічна безпека, механізм управління економічною безпекою, цифровізація, цифровий ризик, розвиток підприємства.

**Statement of the problem.** The gradual increase in the level of digitalization of business processes of modern enterprises actualizes the problem of reducing their vulnerability to the influence of external and internal digital risks and threats. The integration of digital ecosystems of business entities into the global information space requires the modernization of mechanisms for ensuring their economic security, in particular, the information and analytical component of economic security systems. The growing need for the analysis of large data sets in digital format, automation of decision-making support systems using digital technologies and services affect the functional capabilities of the enterprise's economic security management mechanisms, leading to the need for digital transformation of functional subsystems of business entities. Enterprises that are unable to effectively implement security-oriented management under the influence of digitalization will not use the existing opportunities for digital development, will lose their competitive advantages, especially in high-tech industries. Modern science has not yet offered practitioners a comprehensive methodological approach to building high-tech mechanisms for managing economic security, therefore there is a need for research into the possibilities of assessing and modelling economic security systems of business entities suitable for use in the digital space. The arguments presented confirm the relevance of this publication and its suitability for use as an information basis for forming an effective policy of security-oriented management of an enterprise that is in the process of digital development.

**Analysis of recent research and publications.** The study of the problem of creating and functioning of the mechanism for managing the economic security of an enterprise under the influence of digitalization is actively taking place in the scientific field with the participation of Ukrainian scientists. For example, Popelo O., Samoilovych O. study the mechanism of adaptive management of the development of industrial enterprises in the context of ensuring economic security in the era of digitalization of the national economy [1], Levchenko O.M., Vovk M.O., Yurchenko N.I., Havryliuk A.R. offer approaches to diagnosing the system of managing the financial and economic security of competitive enterprises in the agro-food sector under the conditions of digitalization [2], Shchepka O.V., Salo S.O., Hryhir S.I. are looking for directions for increasing the level of economic security of enterprises under the influence of digitalization and adaptive management [3], Nadtochii I.I., Kramarenko I.S., Hryshyna N.V. investigate cloud technologies as a tool for effective

management of financial and economic security and HR technologies under the conditions of digitalization [4], Parshyna O.A., Parshyn Yu.I., Savchenko Yu.V. specify the current state of economic security in the context of digitalization and under the influence of the development of the information society [5], Tulchynska S.O., Solosich O.S., Chornii V.V. specify the impact of digitalization of management processes on the system of ensuring the economic security of an enterprise [6], Malakhovskiy Yu.V., Onofriichuk O.P., Kulishova O.O. specify the features of ensuring the economic security of business structures in the context of digitalization [7]. Hutnichenko M.O. proposes the foundations of the development and functioning of the mechanism for managing the economic security of an enterprise [8], however, does not take into account in his study the phenomenon of digitalization and its impact on the processes of security-oriented management of organizations.

Given the constant intensification of the processes of digitalization of the economic environment in which modern enterprises conduct their activities, we consider it appropriate to consider in more detail the aspect of the impact of digital risks and digital transformations on the functioning of the mechanism for managing the economic security of business entities, including from the perspective of assessing the state of the organization's economic security, which is an indicator of the level of effectiveness of security-oriented management mechanisms.

**Formulation of the research task.** The purpose of the publication is to search for reserves in the scientific and applied spheres to increase the efficiency of the economic security management mechanism under the influence of trends in the digital development of the enterprise.

**Summary of the main research material.** The most common approaches in security-oriented management when formulating theories and concepts of economic security management are systemic and process. With the systemic approach, the concept of economic security becomes formative for creating a system of economic security, which will be the object of managerial influence at the level of enterprise management. With the process approach, the focus shifts from the task of forming a system of economic security and protective mechanisms for countering risks and threats to doing business to establishing the process of managing economic security in compliance with the main functions of organizational management, defined in the theoretical and methodological paradigms of management science. Malakhovskiy Yu.V., Onofriichuk O.P., Kulishova O.O. note that in the scientific field, a standardized conceptual definition of such a broad

multidisciplinary category as the concept of economic security of an enterprise has not yet been formulated. A study of a significant volume of scientific publications related to the issues of economic security of an enterprise allows us to conclude that its level will be largely determined by the seriousness of the managerial approach to forecasting, preventing and responding to specific harmful threats [7, p.268]. The managerial approach to ensuring the economic security of an economic entity at the theoretical, methodological and applied levels is formalized in the mechanism of economic security management.

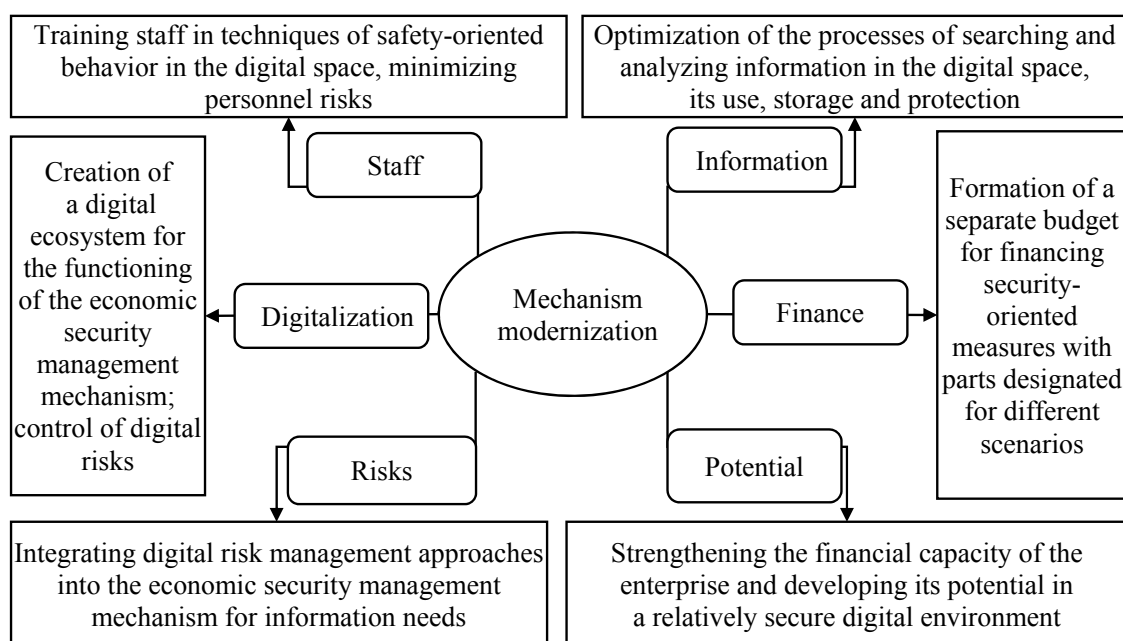
Hutnichenko M.O. believes that the effectiveness of managing the economic security of an enterprise is characterized by the degree of achievement of its goals and strategic guidelines. Internal efficiency can be characterized by an increase in the levels of financial, legal, technological, information, environmental, personnel, intellectual, power, production, managerial, commercial and other components of the economic security of an enterprise [8, p. 10].

It is appropriate to consider the digital development of an enterprise as a phased process of strategic transformation of its business processes, operational structure, management and techniques of interaction with stakeholders through the widespread implementation of digital technologies (such as artificial intelligence, big data, cloud services, the Internet of Things, online payments, etc.) in order to increase its competitiveness and economic sustainability in the context of the spread of the digital economy model. Manifestations of the digital development of an enterprise are: automation of economic and financial processes; use of digital communication channels; digitalization of management decision-making based on analytics of large data sets; innovation and openness to change. In previous studies, we came to a well-reasoned conclusion that in the context of the spread of the trend towards digitalization of the economic space, solving the

problem of managing the economic security of enterprises requires new strategies and tactics. Management of business entities feels the need to modernize economic security management mechanisms, taking into account the intensification of digital risks. To increase the level of efficiency of such mechanisms, it is advisable to provide in their architecture such elements and processes as the use of artificial intelligence, analysis of big data (Big Data), the use of cloud technologies and the concept of zero trust (Zero Trust Policy) when working with information. The mechanism for managing the economic security of an enterprise in the context of digitalization should be based on strategic management of digital risks. Therefore, effective security-oriented management of the economic security of companies in the digital space is possible only under the condition of a comprehensive combination of traditional risk management methods with the latest digital tools and intellectual resources [9].

Therefore, economic security management is an integral part of the successful functioning of an enterprise in modern conditions. Currently, it is a systemic element of enterprise management, which allows for a comprehensive impact on the financial condition, ensuring the ability to effectively use financial resources, competently managing threats, to achieve effective development and implementation of the enterprise strategy in the present and future periods [8, p. 51]. The use of a project approach will allow optimizing the process of forming an economic security management mechanism, adding flexibility to it, and ensuring a prompt response by the management of organizations to the manifestations of new risks and threats at the stage of creating a comprehensive system of economic security of a business entity [10].

In Fig. 1, we summarize the possibilities of optimizing the process of forming an enterprise's economic security management mechanism.



**Figure 1. Possibilities of optimizing the process of forming a mechanism for managing the economic security of an enterprise under the influence of digitalization**

*Source: compiled by the authors*

Without ignoring traditional and innovative threats, the company's management should nevertheless continue to effectively use its own assets to generate profit and expand economic potential and influence on the market. At the same time, it is advisable to search for additional opportunities to optimize the management of economic security of domestic companies, because in conditions of unpredictability of events in wartime, the achieved level of economic security can rapidly decrease, and only competent security-oriented management can prevent such a development.

To increase the effectiveness of the functioning of the economic security management mechanism, it is necessary to assess its current state. For this, we propose an author's approach, demonstrated in Table 1.

The effective functioning of the enterprise's economic security management mechanism will allow in the future to achieve the following positive results for the enterprise's activities:

- reduce the costs of risk management processes;
- avoid the need to urgently search for financial resources to implement security-oriented measures;
- form a personnel reserve of employees ready to begin performing duties in the field of economic security management due to their existing knowledge and competencies in this area.

The reserves for increasing the efficiency of the economic security management mechanism under the influence of the trends of digital development of the enterprise are:

- automate the procedure for diagnosing the achieved level of economic security;
- use of analytics of large data sets to formalize security-oriented management decisions;
- identify risks based on digital signals from the external environment of the enterprise's functioning;
- delimitation of information and its storage on different servers to improve the state of information security;

Table 1

**Author's methodological approach to express assessment of the level of economic security of an enterprise in the process of development under the influence of digitalization**

Questions to experts	Answer options	Points
Are the financial indicators of the enterprise within the normal range?	Yes Partly No	2 1 0
Are the dynamics of financial indicators positive?	Yes Partly No	2 1 0
Is the enterprise generating net profit?	Yes, steadily and constantly Periodically The enterprise is unprofitable	2 1 0
Are the assets of the enterprise growing?	Yes, consistently and constantly Periodically No	2 1 0
Do the employees of the enterprise demonstrate safety-oriented behavior?	Yes, consistently and constantly Periodically No	2 1 0
How often is additional training in safety measures or advanced training provided?	Once a year or more Less than once a year Occasionally or never	2 1 0
Is economic safety management carried out by a specialist?	Yes No, but it is practiced No, it is not practiced at all	2 1 0
Have the documents used in safety management been developed?	Yes, full set Partially No, missing	2 1 0
What is the level of information transparency of the official website of the enterprise?	High Medium Low	2 1 0
Is the position of a lawyer provided?	Yes, on staff Involved as needed No	2 1 0
What is the level of technological equipment of production?	High Medium Low	2 1 0
What is the company's position in the market?	Leader Average Player Outsider	2 1 0
Security level: 20-24 – high, 13-19 – medium, 7-12 – low, up to 6 points – critical	Max – 26 Min – 0	

Source: compiled by the authors



– ensure the possibility of an instant collective response to manifestations of danger through the use of digital communication channels.

**Conclusions.** The study of the possibility of finding reserves to increase the efficiency of the economic security management mechanism under the influence of digital development trends of the enterprise made it possible to draw the following conclusions.

1. The possibilities of optimizing the process of forming the economic security management mechanism of the enterprise under the influence of digitalization are: training personnel in techniques of security-oriented behaviour in the digital space, minimizing personnel risks, optimizing the processes of searching and analysing information in the digital space, its use and preservation and protection; creating a digital ecosystem for the functioning of the economic security management mechanism; controlling digital risks; integrating digital risk management approaches into the economic security management mechanism for information needs; strengthening the financial capacity of the enterprise and developing its potential in a conditionally safe digital environment; forming a separate budget for financing security-oriented measures with parts intended for different scenarios.

2. In the process of digital development of an enterprise, which we understand as a phased process of strategic transformation of its business processes, operational structure, management and techniques of interaction with stakeholders through the widespread implementation of digital technologies, the mechanism for managing the economic security of an enterprise must guarantee timely identification of digital risks, operate with tools for managing them, be integrated into the digital ecosystem of the business entity and be able to secure the receipt, use and storage of information coming from the external digital space in large volumes with increasing speed.

The practical significance of the results obtained lies in the possibility of using the author's approach to forming a mechanism for managing the economic security of an enterprise as a tool for strategically strengthening security-oriented entrepreneurial initiatives in the context of digital development of modern business.

The prospects for further research are related to the testing of the proposed methodology for assessing the level of economic security of an enterprise on the examples of specific economic structures and the formation of conclusions regarding their ability to withstand the risks of digitalization.

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