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Економіка та управління підприємствами  
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Фінанси і грошовий обіг  
Економіка праці, управління персоналом та маркетинг  
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# ECONOMICS AND BUSINESS MANAGEMENT

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## UNCERTAINTY AND RISK AS A PREREQUISITE FOR ANTI-CRISIS MANAGEMENT OF ENTERPRISE

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crisis, insignificance, risk,  
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bankruptcy

The current state of entrepreneurship development in Ukraine has a high level of uncertainty, reliance on a vast collection of external and internal enterprise variables, and an increasing level of risk. There are a variety of risks in such circumstances, including economic and political instability, high inflation, a lack of clear legislation and frequent changes, the use of outdated technology and worn-out equipment, and low economic culture. Many domestic enterprises are on the edge of extinction in such conditions. As a result, there is a current problem with ensuring effective anti-crisis management for them, which will allow for the early identification of the primary aspects of driving the deterioration of the enterprise's financial state and the design and implementation of appropriate measures. It has been established that economic uncertainty has a direct impact on risk. In doing so, the authors address uncertainty from different perspectives, such as a measure and quality of information, a discrepancy between the economy's expected status and its actual advancement, the opportunity to choose from various options, and a source of risk. The following variables have been discovered to contribute to the occurrence of uncertainty in the operations of enterprise activity entities: uncertainty of environmental factors, a lack of information about the state of the market and economic entities, and insufficient managerial qualification, all of which complicate the process of selecting the best solutions and can lead to unpredictable outcomes. The link between uncertainty, risk, and loss has been proven. It has been identified that risk is inherent in the following characteristics: a property of economic entities; a change in the conditions of their activities due to external environment variables; a result of the outcome's uncertainty. Enterprise managers need to pay attention to risks that can lead to losses, such as systematic, the requirement for economic activity, and temporal variability in the formation of anti-crisis management.

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## НЕВИЗНАЧЕНІСТЬ І РИЗИК ЯК ПЕРЕДУМОВИ АНТИКРИЗОВОГО УПРАВЛІННЯ ПІДПРИЄМСТВОМ

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**Ключові слова:**

криза, невизначеність, ризик,  
підприємство,  
антикризове управління,  
банкрутство

Сучасний стан розвитку підприємництва в Україні характеризується високим рівнем невизначеності, залежністю від великої сукупності зовнішніх та внутрішніх чинників діяльності підприємств, а також постійно зростаючим рівнем ризику. У таких умовах виникають ризики, які викликані різноманітними кризовими явищами, нестабільністю економічного і політичного розвитку, значними темпами інфляції, відсутністю чіткої законодавчої бази і частими змінами в ній, використанням застарілої технології та зношеного устаткування, низькою економічною культурою. За таких обставин багато вітчизняних підприємств перебувають на межі виживання. Тому актуальним є питання забезпечення на них ефективного антикризового управління, що дозволить завчасно визначити основні чинники, що впливають на погіршення фінансового стану підприємства

з метою розроблення і реалізації відповідних заходів. Встановлено, що невизначеність економічної ситуації безпосередньо впливає на формування ризику. При цьому невизначеність розглядається з різних боків: як міра і якість інформації; як відхилення між очікуваним станом і фактичним розвитком економіки; як можливість вибору різноманітних альтернатив; як джерело ризику. Виявлено, що причинами виникнення ситуацій невизначеності в діяльності суб'єктів підприємницької діяльності є: невизначеність факторів зовнішнього середовища; брак інформації про стан ринку та суб'єктів господарювання; недостатня кваліфікація менеджерів, що значно ускладнює процес вибору оптимальних рішень і може привести до непередбачуваних результатів. Обґрунтовано взаємозв'язок між невизначеністю, ризиком і втраченою. Встановлено, що ризику притаманні такі особливості: властивість діяльності суб'єктів господарювання; зміна умов їх діяльності під впливом чинників зовнішнього середовища; наслідок невизначеності результату. При організації антикризового управління менеджерам підприємств слід звертати увагу на такі властивості ризиків як системність, необхідність господарської діяльності, мінливість у часі, що можуть призвести до втрат.

### Problem statement

The breakdown of commercial linkages, an overall unfavorable economic condition, and political instability of the state define the external environment of businesses today, all of which have a detrimental impact on the development of economic entities. In such circumstances, ensuring the identification and investigation of the factors influencing the emergence of a crisis, the development of appropriate measures, and their implementation in management practice is a relevant management task and serves as a prerequisite for enterprise protection and efficient management.

In market conditions, enterprises must constantly prevent crisis phenomena and develop and implement measures related to bankruptcy prevention, independently determining the range and volume of production, the nature of relationships with suppliers and consumers, credit, investment, innovation, dividend policy, and so on that is why the establishment of an anti-crisis management system is becoming increasingly vital.

Furthermore, the establishment of such a system will enable the following economic entities: to demonstrate a propensity for financial insolvency promptly; to develop and implement anti-crisis measures; to make efficient use of available resources; to prepare for unexpected changes in the external environment; to determine the basic needs of the market; to identify and exploit favorable environmental conditions; to improve coordination and control.

Because uncertainty is an unavoidable part of business situations, the risk is objectively a required component in making any economic decision. It is not always feasible to gain comprehensive and precise knowledge about the environment for the implementation of a decision that is distant in time, about all the internal and external components that are active or capable of manifesting themselves at the time of making the decision. Due to this, there is doubt about achieving the targets, and as a result, the intended target by the solution chosen is not reached to a greater or lesser extent.

### Analysis of recent researches and publications

Domestic scientists such as V.V. Vitlinskyi, H.I. Velykoivanenko [1], P.I. Verchenko [2].

S.M. Klymenko, O.S. Dubrova [3], V.I. Korcheva, N.M. Kriuchkova [4], H.M. Tarasiuk, D.I. Polishchuk [5] and others have paid close attention to the problem of uncertainty and risk.

Scientists point out that uncertainty is regarded from several perspectives: as a measure and quality of information; as a source of risk; and as a result of the diversity of events, and so gives multiple possibilities for the development of events and, as a result, the ambiguity of their consequences. They investigate the sources of uncertainty in the actions of enterprise activity entities in their research. The study of risk qualities as a result of uncertainty receives focus. However, the link between these groups has received insufficient attention.

### Formulating of objectives

The purpose of this article is to study the link between uncertainty and risk, as well as their consideration in the practice of corporate crisis management.

### Presentation of the main research material

In today's turbulent economic climate, where uncertainty and risk abound, anti-crisis management is a vital instrument for ensuring the survival and development of domestic enterprises.

In the scientific literature, there are several meanings for the term "uncertainty". The most acceptable meaning of this phrase, in our opinion, is offered by V.V. Vitlinsky and G.I. Velykoivanenko as a key characteristic of inadequate provision of the process of making economic decisions with knowledge of a specific problem scenario [1].

According to research, the following methods can be separated in terms of the substance of the category of uncertainty:

1. Uncertainty is seen as a sort of information. This is the most typical way of interpreting the characteristics of this group. The availability of sufficient knowledge on the circumstances, limits, and characteristics of socioeconomic systems reflects the certainty of the particular situation. However, even under ideal settings, it is difficult to make proper management judgements about a firm and its surroundings due to the inability to quantify uncertainty.

2. Uncertainty describes the system's status in regard relation to the reference circumstances. Yes, uncertainty is defined as a difference between predicted and actual economic progress. This difference necessitates the creation of planning measures.

3. Uncertainty arises from the option of selecting alternatives. In other words, the nature of uncertainty suggests that there are an endless number of development possibilities to pick from, but without clearly defined criteria for optimality and efficacy.

4. Uncertainty determines the quality of information. This relates to the evaluation of information in terms of its dependability, completeness, and objectivity.

5. Uncertainty is a source of risk since it is impossible to determine its probability.

6. Uncertainty arises from the multivariate implementation of events, which indicates multiple choices for the development of events and, as a result, the ambiguity of their results.

Thus, uncertainty reflects one of the primary aspects of objective reality, which has the following characteristics: the lack of evident boundaries between objects, the dominance of dependence of qualities and states over their relative independence, and the expression of necessity as opportunity and chance rather than inevitability.

The approaches described above emphasize, that the negative side of uncertainty is connected with the potential for unexpected situations with unknown consequences.

It should be noted that there are different causes of the creation's uncertainties in the operations of enterprise activity entities. However, most authors [1; 2; 4] combine them into four main groups:

1. The uncertainty of the processes, such as scientific and technological progress, natural disasters, and competitor and customer behavior occurring in society at large and the economic life;

2. Lack of complete information in organizing and planning the market entity's behavior, or its subjective, low-quality analysis;

3. The influence of subjective factors on the research findings (skill level of employees, withholding of some information by some economic agents).

In this way, under market-economy conditions, all of the above kinds of uncertainty should be considered at each step of the enterprise development strategy.

Uncertainty availability complicates the process of selecting optimal solutions, and it might result in unpredictable outcomes. However, in practice, economic analysis frequently avoids uncertainty and operates based on deterministic models, supposing that the factors influencing decision-making are known exactly. Actuality frequently contradicts these beliefs, and in many cases, the policy of effective decision-making without considering uncertainty can result in several economic and societal consequences.

We have to note that practical significance has differences between risk and uncertainty. Uncertainty refers to a lack of information regarding likely future events, whereas risk refers to a situation in which people never know what will happen but consider the probability

of every available option. Risk, unlike uncertainty, is a quantitative indicator that is expressed as the opportunity of a positive or negative result.

The entrepreneur demonstrates a willingness to take risks in the face of uncertainty because the chance of increased money outweighs the danger of loss.

Unaccounted-for risks in the Business Plan are a source of both losses and profits. It is feasible to select solutions with lower risk but also lower profit. Higher risk is associated with a greater possibility of getting more income [6].

Uncertainty and risk of entrepreneurial activity play an important role including the discrepancy between the planned and the actual; that is, the cause of entrepreneurial activity development. The external environment combines the objective economic and sociopolitical conditions in which the enterprise operates and to which it is required to adapt. The situation's uncertainty is related to dependence on a profusion of elements, counterparties, and people whose behavior cannot always be foreseen with acceptable precision. There is also a lack of clarity in the definition of objectives, criteria, and indicators for their evaluation. Management decisions are usually forward-looking; thus an element of uncertainty and risk must be considered while making them.

So, decision-making under risk is the decision of a solution option under conditions where each action leads to one of many possible independent outcomes and every possible outcome of an appearance may be identified.

Decision-making under uncertainty is the decision of a solution option when one or more acts have numerous independent outcomes, but their probability are unknown or do not make sense.

Risk, unlike uncertainty, can thus be managed.

It should be noted that uncertainty is the key and must condition for the appearance and development of risk: the existence of risk in an economic entity's activities is absent if there is no uncertainty. In other words, uncertainty is the primary phenomenon, whereas risk is the secondary one.

Scientists H.M. Tarasiuk and D.I. Polishchuk focus on uncertainty as a larger definition than risk and that it means ambiguity and lack of knowledge about the outcomes and conditions of a solution [5]. They also consider developing a way to fully remove uncertainty to be impossible.

According to them, the formation of uncertainty, and thus risk, is due to factors such as:

1) direct factors happening in the enterprise's internal and external environment and having an effect on its functioning, all other things being equal;

2) indirect factors related to the effect of other economic entities on specific business activity (e. g., a change in fuel prices leads to a change in the cost of production).

Furthermore, the enterprise's operations could be adapted to deal with uncertainty by applying a strategic plan. The failure to follow strategic planning as a result of a lack of an effective economic development strategy or its unplanned qualitative changes damages the entity's economic activities.

Uncertainty cannot be measured in advance, so accurately predicting the possibility of future events or

states occurring is impossible. Risk, on the other hand, includes the possibility of determining the outcomes of relevant developments and their consequences in the enterprise with a certain probability of occurrence (non-occurrence). Uncertainty is the ambiguity of the future, and risk indicates the probability of the occurrence of certain dangers (opportunities) caused by this uncertainty, resulting in a deviation of real outcomes from planned ones.

Considering the foregoing, any kind of analysis and assessment of anti-crisis solutions must take risk and uncertainty into account.

Figure 1 illustrates the link between the major categories.

In the scientific literature, there are methods to determine the essence of the risk category that can be combined into three main areas:

1) the first area is dedicated to optimum control theories [7]; they view risk as a characteristic of purposeful human activity carried out under environments of limited resources and the opportunity to choose a method to achieve goals. There is no human aptitude or action to remove risk; only ways to minimize it exist.

According to the literary sources in this area, the risk is the probability of events occurring that cause a change in the equilibrium stability of socioeconomic systems. Special attention is focused on the exploration of risk properties such as:

- consistency. It is reflected as probabilistic uncertainty in the implementation of target functions, the nature, content, direction, and circumstances for attaining which are not fully grasped by the decision-maker;
- the universality principle. It argues that risks are not an accidental consequence of an individual’s determined effort, but rather a fundamental requirement for the existence of a creative person who wishes to improve theirs. The risk is regarded as the probability and possibility of socioeconomic changes in the functioning and development of systems at various levels;

– dynamic probability. That allows risks to be assessed and forecasted under asymmetric information distribution conditions and explored as continually temporal variability;

2) the works [7; 8] demonstrate the second area, in which risk is understood as the accumulation of regressive potential. The primary focus of this research is on negative risk characteristics, such as:

- irreparable loss of monetary and spiritual benefits and many attributes and qualities that were beneficial in the past but are now defunct;
- the formation of new material and spiritual values, attributes, and qualities, the level of which risks and regressive potential are uncertain in the future;
- increasing environmental hazards as a result of industrial development.

The central focus of this approach is on the analysis of risk aspects such as normatively, irreversibility, growing dimension, and qualitative uncertainty. Most of these risks are not possible to quantify, and information about them is probabilistic and not available to many economic entities;

3) the third area concerns authors looking into the risks linked with a particular economic activity known as entrepreneurship [3].

When analyzing risks, differentiate the following concepts: ‘factor (cause),’ ‘type of risk,’ and ‘kind of loss (damage)’ from the occurrence of risk events (Figure 2).

Risks can be caused by unanticipated occurrences that could develop and disrupt the planned goal of anti-crisis management, or situations that cause uncertainty about the situation’s outcome. At the same time, some of these occurrences may be predicted, while others cannot.

As a result, the definition of risk includes both losses, the probability of which is linked to uncertainty (lack of information, unreliability), and gains and profits, which can only be acquired through risky acts. The definition of ‘risk’ in management is related to the nature and complexity of problems, the circumstances for making managerial decisions, and projecting the outcome. The amount of the enterprise’s losses under uncertain

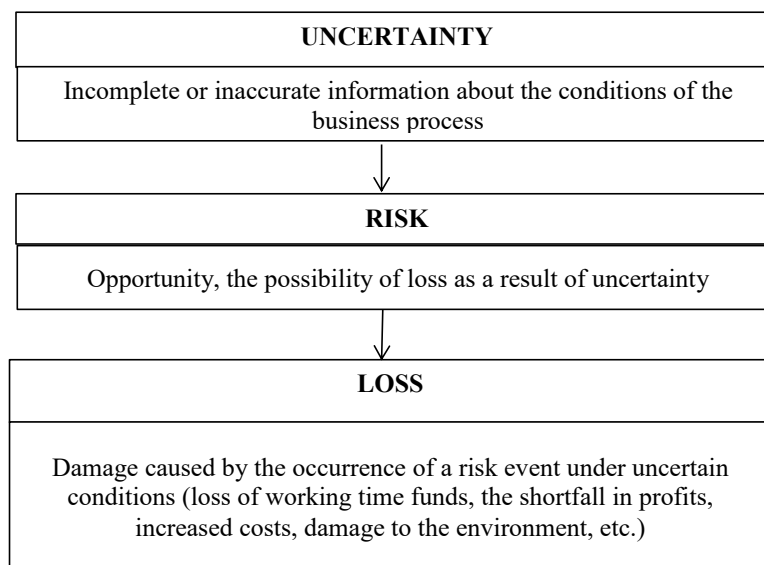


Fig. 1 – Category connection: «uncertainty» – «risk» – «loss»

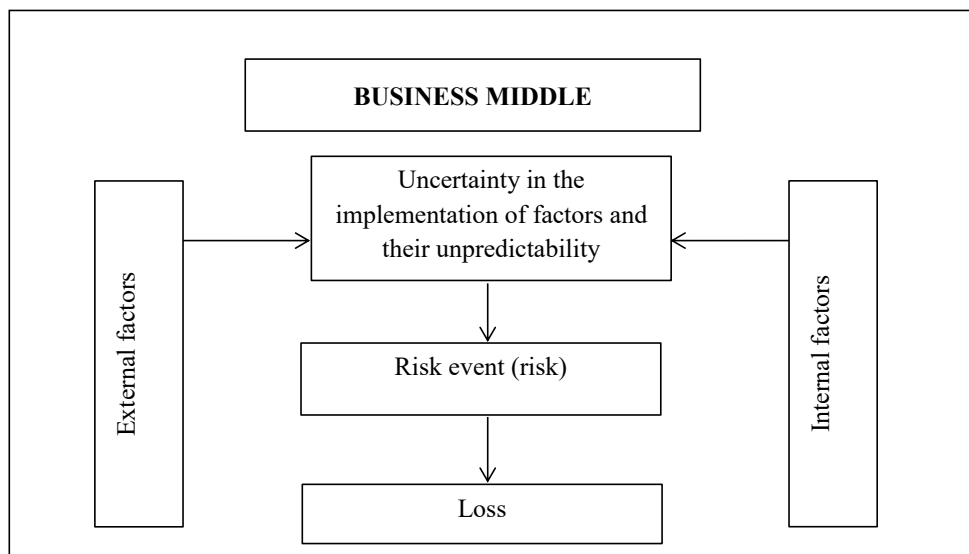


Fig. 2 – Interrelationship of the primary risk characteristics

conditions is the price of risk, and the amount of success (extra profit) is the risk payment.

### Conclusions

External and internal uncertainties relating to the opportunity of events and phenomena affecting the firm's operations are the key sources of entrepreneurial risk. Uncertainty and the probability of losses are risk indicators. Before making any decision, every entrepreneur must remember the logical link between likelihood, uncertainty, and risk. In other words, probability breeds uncertainty, which leads to risk. It is feasible to diminish the level of

uncertainty and, as a result, risk by taking proper measures. However, in the face of uncertainty, the entrepreneur is usually willing to take risks because the chance of higher profits outweighs the danger of losses.

Business managers should identify and examine external and internal elements that influence the establishment of risk qualities such as systemic, the need for economic activity, and unpredictability over time, resulting in losses when planning crisis management.

Simultaneously, the anti-crisis management system can be included in the enterprise's general management concept to prevent the impact and incidence of risk situations.

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## DIGITALIZATION AS A FACTOR OF DEVELOPMENT AND IMPROVEMENT OF THE COMPETITIVENESS OF ENTERPRISES IN A CHANGING MARKET ENVIRONMENT

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**Key words:**

digitalization, enterprises,  
digital economy,  
information and communication  
technologies, innovations,  
competitiveness

Today, there is a rapid development of innovations, new innovative products, software, information technologies and there is a need to study the digital technology market by business entities. It is important for enterprises to study the experience of foreign and domestic companies, the features of digitalization. It is found that digitalization is a fundamental process of transformation in the structure of the world economy, the development of industries, domestic enterprises. The study shows that in the context of intensifying competition in the markets for products, enterprises need to develop new products, new approaches to doing business. It is digitalization at enterprises that makes it possible to form new approaches to doing business, promotes innovative development and the use of digital technologies in production processes, the introduction of software to increase the competitiveness of enterprises, the quality of development and management decisions, automation of production, increase in profitability and minimization of costs. However, the implementation of digitalization at enterprises requires sufficient financial resources and effective management. Digitalization plays a decisive role in the formation of competitive advantages of enterprises. The concept of "digitalization" as an integral component of the competitiveness of the Ukrainian economy and individual domestic enterprises in the world market is investigated. The level of digitalization and introduction of the latest technologies in Ukraine on the basis of the Networked Readiness Index and at enterprises is assessed. The analysis of the level of digitalization at enterprises on the example of the use of domestic digital products is carried out. The problems that arise in the process of digitalization are identified and proposals for the development and improvement of the competitiveness of enterprises through the use of information and communication technologies are formed, which will ensure not only the formation of competitive advantages, but also the improvement of the results of financial and economic activity.

## ДІДЖИТАЛІЗАЦІЯ ЯК ФАКТОР РОЗВИТКУ ТА ПІДВИЩЕННЯ КОНКУРЕНТОСПРОМОЖНОСТІ ПІДПРИЄМСТВ В УМОВАХ ЗМІННОСТІ РИНКОВОГО СЕРЕДОВИЩА

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**Ключові слова:**

діджиталізація, підприємства,  
цифрова економіка,  
інформаційно-комунікаційні  
технології, інновації,  
конкурентоспроможність

В умовах сьогодення відбувається стрімкий розвиток інновацій, з'являються нові інноваційні продукти, програмне забезпечення, інформаційні технології та виникає потреба у дослідженні ринку цифрових технологій суб'єктами господарювання. Важливим для підприємств є дослідження досвіду іноземних та вітчизняних компаній, особливостей проведення діджиталізації. З'ясовано, що діджиталізація є фундаментальним процесом трансформації в структурі світової економіки, розвитку галузей, вітчизняних підприємств. Проведення дослідження показує, що в умовах загострення конкурентної боротьби на ринках збуту продукції підприємства потребують розробки нових продуктів, нових підходів до ведення бізнесу. Саме діджиталізація на підприємствах дає змогу формувати нові підходи до ведення бізнесу, сприяє інноваційному розвитку

та використання цифрових технологій у виробничих процесах, впровадження програмного забезпечення забезпечують підвищення конкурентоспроможності підприємств, якість розробки та прийняття управлінських рішень, автоматизацію виробництва, зростання дохідності і мінімізацію витрат. Проте, здійснення діджиталізації на підприємствах потребує достатнього обсягу фінансових ресурсів, ефективного управління. Діджиталізація займає визначальну роль у формуванні конкурентних переваг підприємств. Досліджено поняття «діджиталізації», як невід'ємної складової конкурентоспроможності економіки України і окремих вітчизняних підприємств на світовому ринку. Проведено оцінку рівня діджиталізації та впровадження новітніх технологій в Україні на основі Networked Readiness Index та на підприємствах. Здійснено аналіз рівня діджиталізації на підприємствах на прикладі використання вітчизняних цифрових продуктів. Визначено проблеми, які виникають в процесі діджиталізації та сформувано пропозиції до розвитку і підвищення конкурентоспроможності підприємств шляхом використання інформаційно-комунікативних технологій, що забезпечить не лише формування конкурентних переваг, але й покращення результатів фінансово-господарської діяльності.

### Statement of the problem

Over the past few years, there have been significant changes in the technology market, as new information technologies and software are emerging, the use of which greatly facilitates the work of enterprises. In addition, the digital economy is in a state of constant development, as artificial intelligence, virtual reality, blockchain and other technologies are developing. Enterprises need to study the experience of foreign companies, implement best practices in the direction of digitalization, use information and communication technologies not only to automate work, but also to create competitive advantages. Digitalization of enterprises is an important factor in increasing competitiveness, innovative development and guarantees successful financial and economic activity. Therefore, enterprises are forced to introduce digital technologies, become more active on the global Internet due to the growing level of competition.

### Analysis of recent studies and publications

The concept of “digitalization” and the problems of introducing information and communication technologies, some theoretical aspects of this issue are covered in the scientific works of such scientists: Hrybinenko O.M. [1, p. 35–37]; Korobka S.V. [7, p. 88–86]; Kraus N.M., Goloborodko O.P., Kraus K.M. [8]; Ligonenko L., Khripko A., Domanskii A. [9, p. 21–24]; Pizhuk O.I. [10, p. 504]; Semylytko D. [11, p. 76–79]; Ustenko M.O., Russkikh A.A. [13, p. 181–192].

In the future, digital technologies will play an increasing role in the production processes of enterprises. Accordingly, there is a need for constant research of information and communication technologies, evaluation of the effectiveness and feasibility of their use and further implementation in enterprises. The issues of assessing the level of use of domestic digital products at enterprises and determining the prospects for increasing the competitiveness of enterprises through digitalization remain unexplored.

### Objectives of the article

The article is aimed at analyzing the approaches of scientists to defining the definition of “digitalization”;

studying the level of digitalization and introduction of the latest technologies in Ukraine on the basis of the Networked Readiness Index (an indicator of the development of information and communication technologies (ICT)) and at enterprises; assessing the level of use of domestic digital products at enterprises; formulating proposals for the development and competitiveness of enterprises.

### The main material of the research

In today's conditions, there is a rapid development of digitalization, new information and communication technologies are emerging and at the same time the level of competition in the markets is increasing. The implementation of digitalization of enterprises, the use of information and communication technologies allows to form competitive advantages, increase competitiveness, ensure innovative development, improve information policy, modernize production, and determine the directions of development. Accordingly, most enterprises are trying to start the process of digitalization for successful development in the future, establishing the process of doing business, and increasing financial performance.

Therefore, enterprises are making significant efforts to adapt to the “new reality” and successfully compete in international markets. Digitalization in business today has become perhaps the most important condition for business success.

“Digitalization – the massive adoption of connected digital services by consumers, businesses and governments – has become a key economic driver of growth and job creation in recent years” [3]. In the current global economic environment, digitalization plays an important role in helping policymakers stimulate economic growth and employment. According to an econometric analysis conducted by Strategy& and despite the unfavorable global economic climate, digitization has boosted global economic output by \$193 billion and created 6 million jobs worldwide in 2021 [17].

The concept of “digitalization” appeared in the USA and literally means “digitization”. “Digitalization is the use of digital technologies to provide new opportunities to

generate income and increase the competitiveness of the company in the modern market” [9].

In the Ukrainian scientific literature, there are several possible interpretations of the concept of “digitalization”, for example, Hrybinenko O.M. considers digitalization, first of all, “the process of transformation of economic processes and the introduction of digital technologies, which leads to the automation of production processes and further increase in the efficiency of the enterprise” [1]. In turn, Semylytko D. emphasizes that “the process of digitalization is the transition of the enterprise to new forms and ways of doing business, including mobile and digital technologies, the use of social networks, changing the style of management and the introduction of new business models” [11].

It should be noted that digitalization can be considered as a technological shock that affects the main economic results through competition, productivity and employment, as well as through interaction with institutions and governance. Digital technologies also change the way companies do business and interact with their customers and suppliers.

The issue of digitalization of the economy is gaining relevance not only in Ukraine but also at the international level. In order to calculate key indicators of informatization and digitalization of the economy, a number of different ratings have been formed in the world, among which the following can be distinguished:

1) Networked Readiness Index (indicators of the development of information and communication technologies (ICT));

2) Global Innovation Index (indicators of the effectiveness of the introduction of innovative technologies);

3) ICT Development Index (indicators of the effectiveness of the implemented ICT);

4) Global Competitiveness Index (indicators of competitiveness of the national economic system) [19].

Indicators of the development of information and communication technologies (ICT) of the World Economic Forum show how well the economy uses information and communication technologies to increase competitiveness and welfare of the population.

The world is approaching the Fourth Industrial Revolution, which is marked by a transition to a new set of systems that combine digital, biological and physical technologies in new and powerful combinations. It is the Networked Readiness Index that shows how each country is prepared to take advantage of the transition and how it can cope with the new challenges.

The Networked Readiness Index is based on a wide range of information. Data for it is collected from international agencies such as the International Telecommunication Union, UNESCO, UN agencies and the World Bank. Additional indicators are obtained from the World Economic Forum’s Executive Opinion Survey, in which more than 14,000 CEOs from more than 140 countries participated [16].

It should be noted that the economic power and resilience of a country does not always reflect its network

readiness, as the top 10 Asian countries show that while Singapore leads the world, China is ranked only four places higher than Sri Lanka.

Companies are facing growing market pressure, challenges of the modern world, which requires constant innovation. Seven countries can be distinguished in terms of the economic impact of their corporate digitalization: Finland, Switzerland, Sweden, Israel, Singapore, the Netherlands and the United States. These countries have a very high level of information technology adoption in business.

Businesses and governments are losing the opportunity to meet the rapidly growing digitalization needs of the population. The demand for digital goods and services from the global consumer base is met by a relatively small number of companies. Businesses need to step up and implement digital technologies to take their share of the market.

Let’s analyze the indicators and place in the Networked Readiness Index (NRI) rating of Ukraine for 2021 (Table 1).

Table 1 – Networked Readiness Index – 2021 for Ukraine

Networked Readiness Index	Rank	Score
Technology	50	49,20
1) access	60	67,15
2) content	42	45,53
3) future technologies	57	34,92
People	48	54,29
1) individuals	17	74,62
2) businesses	50	46,44
3) governments	71	41,80
Governance	57	58,93
1) trust	55	49,57
2) regulation	61	65,02
3) inclusion	65	62,19
Impact	42	46,73
1) economy	42	46,73
2) quality of life	57	69,01
3) SDG Contribution	53	65,45
Average score	53	55,70

Source: compiled by the authors on the basis [18]

The NRI Index is a summary indicator that includes a fairly large number of indicators of the state of the country’s ICT, including: mobile tariffs and phone prices; household access to broadband Internet; Internet access in schools and other educational institutions; development of mobile applications [18].

In 2021, Ukraine ranked 53rd out of 130 countries included in the ranking. It can be seen that Ukraine’s strength is associated with the “influence” indicator, according to which the country ranks 42nd in the overall ranking and received a score of 46,73. At the same time, the greatest room for improvement relates to the “governance” indicator, where Ukraine ranks 57th in the ranking and received a score of 58,93.

The indicator “technology” is aimed at assessing the level of technology in Ukraine, which is a prerequisite for the country’s participation in the global economy.



Ukraine received a score of 49,20 and took 50th place. It can be seen that the increase in the ranking is hampered by the sub-component “access” and this indicates the existing problems with the population’s access to the Internet, insufficient infrastructure for the digitalization of enterprises, problems with computer equipment.

According to the “people” indicator, Ukraine ranked 48th in the 2021 ranking and received a score of 54,29. This indicator indicates a high level of personnel qualification, education of the population and the ability of Ukrainians to keep up with the world.

The “governance” indicator is also important, which can be used to determine the security of firms in the context of the network economy, regulation and digital inclusion. In 2021, the indicator was the lowest for Ukraine – 57th place among 130 countries and received a score of 58,93.

According to the “Networked Readiness Index 2020”, Ukraine ranks 1st among lower-middle income countries, as it scores higher in each of the four components than the average for the group of countries with the same income level. At the sub-component level, it also scores higher than the average for lower-middle income countries. Among European countries, Ukraine ranks 34th in the “Networked Readiness Index 2020”, lagging behind its region in each of the four main components [18].

Considering the issue of digitalization, it is worth noting the flagship digital project of the Ukrainian government “Diia”. Diia is a modern application that acts as a platform for obtaining public services and a place to store digital versions of official documents. For the first time in the world, digital passports and driver’s licenses have the same legal status as paper originals, which was a salvation for millions of citizens who crossed the borders of Ukraine during the war [4].

The motto of the platform is “a state that helps, not hinders” [4]. At the end of 2021, 13 million people were registered on the “Diia” platform (one third of the country’s 44 million population) and in 2020, 6,7 million Ukrainians used the application, and in 2022 this figure increased to 22 million. The “Diia” platform provides more than seventy services, including useful services for businesses. By registering and filling out the form, you can open a sole proprietorship and close it in one click. On the new special portal “Diia Business” you can get the necessary analytical information on the market, request consulting services that will help you make the most effective management decision. Since 2021, the developers have added the ability for entrepreneurs to pay taxes. Such a service is available exclusively for sole proprietors of the 1st and 3rd groups who do not have employees, do not pay VAT, have not changed their taxation group since the beginning of 2021 and are not in the process of terminating their business [4]. The breakthrough service was the formation of an electronic signature, which can be done by purchasing a qualified electronic signature certificate [5].

In Ukraine, digitalization is typical and widespread in all sectors of the economy where there is interaction with the consumer. In particular, the introduction of digital technologies is taking place in the banking sector, where Internet banking is used (PrivatBank, Raiffeisen Bank, as

well as Monobank, which is generally an Internet bank and does not have its own branches to serve customers) [13].

The COVID-19 epidemic has become a test for most enterprises, because in a short time it was necessary to transform into a digital format and adapt their employees to innovations in the organization. Some companies do not have time to adapt and lose their competitive position in the market and are therefore displaced. Ukraine is creating all conditions for the development of technical innovations, digitalization, which is a prospect for the future of infrastructure and the energy sector.

The largest private energy company in Ukraine, “DTEK Energy”, has created special digital technologies for mines. Due to the hazardous mining and geological conditions in many mines in the country, the company has engaged in digital transformation. In 2019, active work began on a project called “Modus” [6]. This project provided for a complete digital transformation of one of the mines in Ukraine (its name is “Yubileynaya”).

The transformation took place in several stages. The first stage of transformation was to create contact between workers underground and workers on the surface. Therefore, 130 km of cable was laid along the perimeter of the entire mine, which will allow uninterrupted work in the Internet using the Wi-Fi system. On 130 km, 120 communication sensors were installed and more than 400 access points were created [6]. The next step was the installation of beacons, “smart” lamps and online surveillance cameras.

The beacons work on the Bluetooth system and this allowed to solve the issue of employee positioning. This is especially important in the context of security and in the event of an emergency. Smart lamps, which were installed on 1500 miners’ helmets, can not only illuminate, but also record and transmit in real time to the dispatcher of the “Yubileynaya” mine where the employee is located [6].

Online monitoring allows to control coal production without human intervention. The system determines the quantity and quality of coal. In the future, “DTEK Energy” plans to create similar digital mines in other regions of the country [12].

Today in Ukraine there is a need to join the European programs of digitalization and digital transformation of business. Noteworthy is the desire of European countries to increase the level of use of cloud settlement services by national companies; the growth of the level of digital intensity of small and medium-sized businesses with indicators of involvement in the digitalization processes of 90% of these economic entities; the growth of private companies that reach a capitalization of \$1 billion and above twice. The growth of private companies that reach a capitalization of USD1 billion and above has doubled. These promising directions of development are reflected in the provisions of “2030 Digital Compass: the European way for the Digital Decade” [15].

A good example of digitalization and the introduction of digital technologies in the domestic market is 3D-printing. Enterprises can already pay attention to the benefits that this technology offers to increase efficiency and sustainable development. In particular, 3D-printing is changing the

rules of the game for healthy and environmentally friendly industry around the world.

Ukraine has a developed 3D-printing industry that can compete with foreign companies. Among the most popular representatives of the 3D-printing segment is the domestic company “Infomir 3D Printing”, which specializes in the manufacture of parts for automakers and medical equipment. “TitanEra” manufactures components for the aerospace industry and has its own line of titanium powder products. Not far behind is the Ukrainian startup “Additive Laser Technology”, which has a technology for the

production of parts from complex metals and is engaged in the manufacture of titanium implants and individual parts for aircraft engines [14].

Let us consider and evaluate the indicators of digitalization at Ukrainian enterprises (Table 2).

Analyzing the data presented in Table 2, it can be seen that the number of enterprises that carried out e-commerce during 2020 compared to 2019 significantly increased among enterprises engaged in the processing industry by 23, engaged in information and telecommunications activities by 12. In turn, among enterprises engaged

Table 2 – Use of information and communication technologies at enterprises in 2018–2020: e-commerce, ICT specialists and skills, use of 3D printing

Indicators	Years	Manufacturing	Electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities	Construction	Wholesale and retail trade; repair of motor vehicles and motorcycles	Accommodation and food service activities	Information and communication	Real estate activities	Professional, scientific and technical activity	Administrative and support service activities
	Types of activities									
Number of enterprises which have made e-commerce	2018	673	29	107	914	147	2204	333	888	1145
	2019	661	29	93	924	166	1197	222	883	1137
	2020	684	32	98	929	170	2209	225	880	1134
	absolute deviation. 2020/2019	23	3	5	5	4	1012	3	-3	-3
Value of the turnover of e-commerce sales (thousand UAH)	2018	52600790,7	441913,2	1358493,2	128502264,3	1923729	3993376,1	1043018,9	2119916,1	4506051
	2019	56297178,5	338606,4	1933818,5	104074764,4	2010629	5065412,6	109060,2	1713579,3	2672497,8
	2020	61018044,8	423456,7	2063877,6	144775433	2021741	5924611,6	511958,6	1689638,3	3295710,8
	absolute deviation. 2020/2019	4720866,3	84850,3	130059,1	40700668,6	11112,8	859199	402898,4	-23941	623213
Share of the number of enterprises which have conducted training to develop ICT-related skills of the total number of enterprises by type of training, % training for ICT specialists	2018	4	2	1,3	3,8	1,1	113,5	11,9	4,8	11,9
	2019	3,9	4	1,4	3,9	1,5	114,3	11,8	66	22,1
	2020	4	3,2	2,3	5	2	117,2	22,9	66,7	11,8
	absolute deviation. 2020/2019	0,1	-0,8	0,9	1,1	0,5	2,9	11,1	0,7	-10,3
Share of the number of enterprises that used 3D printing of the total number of enterprises, %	2018	3,1	1,4	2	1,5	1,9	11,1	11,1	22,1	11,7
	2019	3,4	1,3	2,2	1,6	2,8	22,1	11,6	33,2	1,8
	2020	3,6	1,3	2,2	1,5	2,9	22,2	11,5	33	1,8
	absolute deviation. 2020/2019	0,2	0	0	-0,1	0,1	0,1	-0,1	-0,2	0

Source: compiled by the authors on the basis [2]

in professional, scientific and technical activities and activities in the field of administrative and support services, there is a decrease in the number of enterprises engaged in e-commerce by 3.

There is a positive trend of increasing the volume of sold products (goods, services) received from electronic commerce among all types of activities. The largest increase in the volume of products sold during 2020 compared to 2019 occurred in the processing industry by UAH 4720866,3 thousand, in wholesale and retail trade; repair of motor vehicles and motorcycles by UAH 40700668,6 thousand and enterprises specializing in real estate transactions by UAH 402898,4 thousand.

The share of the number of enterprises that conducted training in the field of ICT in the total number of enterprises by activity increased during 2020 compared to 2019 among information and telecommunications enterprises by 2,9% and among enterprises specializing in real estate operations by 11,1%, a negative trend is observed among enterprises supplying electricity, gas, steam and air conditioning, where a decrease in ICT training by 0,8% was recorded.

3D-printing technology in 2020 prevailed among manufacturing enterprises, where an increase of 0,2% was

recorded, as well as among temporary accommodation and catering enterprises by 0,1%.

The dynamics of the Internet usage rate at Ukrainian enterprises was also analyzed (Table 3).

After analyzing the statistics presented in Table 3, we can conclude that as of 2021, the number of enterprises with access to the Internet has significantly increased. The construction sector was noted, where an increase was recorded during 2021 compared to 2019 by 258 companies, as well as enterprises related to activities in the field of administrative and support services – by 125 companies, the number of enterprises with Internet access in the field of wholesale and retail trade decreased by 112 companies.

Based on the second indicator, the number of employed workers with access to the Internet, it is growing during 2021. In particular, during 2021, compared to 2019, an increase was recorded in the field of information and telecommunications by 14691 people; professional, scientific and technical activities – 2008 people; in the field of electricity, gas and steam supply, there is a significant decrease in the number of people with access to the Internet – by 1004 people.

Table 3 – Use of information and communication technologies at enterprises: Internet use in 2018–2021

Indicators	Years	Manufacturing	Electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities	Construction	Wholesale and retail trade; repair of motor vehicles and motorcycles	Accommodation and food service activities	Information and communication	Real estate activities	Professional, scientific and technical activity	Administrative and support service activities
	Types of activities									
Number of enterprises which have access to the internet	2018	10878	1831	4783	10759	1279	11949	22704	22636	12958
	2019	11089	1847	4883	10742	1261	11946	22697	22685	13024
	2021	11323	1917	5141	10630	1293	11971	22796	22796	13149
	absolute deviation 2021/2019	234	70	258	-112	32	25	99	111	125
Number of employed who have access to the internet (persons)	2018	255685	73958	47304	336140	16666	88726	25353	77246	43650
	2019	257644	80599	50120	349764	16379	73357	24728	80347	42709
	2021	261207	79595	52181	359642	16437	88048	25395	82355	44803
	absolute deviation 2021/2019	3563	-1004	2061	9878	58	14691	667	2008	2094
Share of the number of enterprises use a fixed internet connection of the total number of enterprises, %	2018	63,5	64,7	58,1	64	54,6	775,3	558,6	67,5	0
	2019	62,6	65	55,7	62,7	52,9	0	158,6	66	551,4
	2021	63,1	61,4	56,3	66,2	53	774,6	559,9	666,1	150,5
	absolute deviation 2021/2019	0,5	-3,6	0,6	3,5	0,1	774,6	401,3	600,1	-400,9
Share of the number of enterprises which have a website of the total number of enterprises, %	2018	43,7	30,3	25,1	37,7	37,2	557,4	23,4	444,6	123,6
	2019	43,2	31,9	24	37,6	36,8	557,1	24,5	0	22,9
	2021	44,1	28,8	23,6	38,8	34,9	557,1	23,6	343,8	22,1
	absolute deviation 2021/2019	0,9	-3,1	-0,4	1,2	-1,9	0	-0,9	343,8	-0,8

Source: compiled by the authors on the basis [2]

The share of the number of enterprises using fixed Internet access during 2021 shows a positive trend. In general, in 2021 compared to 2019, the most active increase is in the field of real estate transactions (by 401,3%) and in the field of wholesale and retail trade; repair of motor vehicles (by 3,5%), a decrease in the indicator was recorded in the supply of electricity, gas and steam (by 3,6%).

The share of the number of enterprises that have a website as of 2021 has remained almost unchanged and compared to 2019, an increase of 1,2% was recorded in wholesale and retail trade and a decrease of 0,9% in real estate transactions, a decrease of 3,1% was recorded in the supply of electricity, gas and steam and a decrease of 1,9% in temporary accommodation and catering.

Taking into account the results of the study, it should be noted that the main problem that hinders the development of digitalization is not sufficiently developed infrastructure [8]. The digital economy requires businesses to be seamlessly connected regardless of their location, and therefore relies on a robust, reliable, responsive, secure and scalable digital infrastructure. In addition, the development of digitalization of enterprises is negatively affected by the lack of financial resources, the changing legislative framework, the unstable financial and political situation, the lack of qualified personnel, the decline in the share of investment capital, the downward dynamics of financial performance.

For the digital economy to thrive, it is necessary to continue investing in the expansion and modernization of digital communications, especially as technology advances. Technological advances such as 5G and Wi-Fi 6 will be key drivers of the new economy in the coming years. For example, various organizations are now implementing private 5G networks for various use cases, such as remote triage in connected ambulances in the healthcare sector, remote inspection by mobile robots in hazardous environments in the energy sector and factory automation in manufacturing.

Another problem faced by the digitalization process is the lack of people with high technological literacy

and territorial digital inequality [10]. Improving the ICT skills of employees will be crucial for organizational digitalization efforts in enterprises.

Among the proposals to intensify digitalization at enterprises, which will contribute to the development and increase competitiveness, the following should also be highlighted: replacement of worn-out fixed assets; modernization and automation of production; attraction of investments and obtaining grant programs; improvement of the management system; training of employees; implementation of software; rational allocation of financial resources; attraction of experience of foreign enterprises. Thus, the use of modern technologies at enterprises not only improves the results of work, but also forms competitive advantages, promotes innovative development.

### Conclusions

Thus, in today's conditions, digitalization has become an integral tool for achieving business success. The use of technology allows enterprises from different sectors to become more productive, efficient, win new customers, and increase the level of competitiveness. It is advisable for enterprises to introduce information and communication technologies and increase interaction on the Internet, which will allow collecting big data about customers, purchase patterns and will help to improve business, introduce new products and services. It is determined that to increase the speed and quality of customer service, enterprises need to introduce elements of artificial intelligence in the form of chatbots, interactive platforms. Based on the results of the study of the peculiarities of the use of information and communication technologies in enterprises, the problems of digitalization are identified and recommendations for intensifying their use are formed, which will contribute to innovative development, the formation of competitive advantages and improve the results of financial and economic activity. Thus, enterprises should constantly explore the information technology market, introduce more effective ones to ensure successful development in the future.

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## SYSTEM OF STRATEGIC ENSURE OF THE COMPETITIVENESS OF INDUSTRIAL ENTERPRISES

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strategic enterprise  
competitiveness management,  
SWOT-analysis,  
competitor opportunities,  
economic entity,  
competitive product

The article discusses the methods of strategic management of the competitiveness of industrial enterprises. The author of the article identified models of strategic management of industrial enterprises at the national level, as well as researched technical-technological and organizational-management measures that will contribute to increasing the volume of production of export-oriented products. The role of the enterprise at the national level is defined. The technical-technological and organizational-management measures of the enterprise were studied. The article examines modern approaches to managing the competitiveness of the enterprise. It is substantiated that for successful management of competitiveness, it is necessary to study the market, to correctly assess one's competitiveness, the capabilities of competitors and the factors that determine them. Attention is focused on the fact that the competitiveness of an enterprise can be defined as the potential or realized ability of an economic entity for effective long-term functioning in a relevant external environment. It is important to carry out such management, which will ensure the adaptability of the enterprise to various unforeseen situations in the future. The article defines the factors of competitiveness of the territorial producer. The coverage of a wide range of concepts in the study of the essence of competitiveness is analyzed. It was determined that the successful development of a metallurgical enterprise is possible only under the condition of full-fledged activity of the entire set of interconnected economic mechanisms, as well as the formation and implementation of a system of strategies of metallurgical enterprises based on a logistic approach. It was concluded that the technological competitiveness of an industrial enterprise can reach a high level only if an effective system of its management is formed and operates. Therefore, the construction of such a system is impossible without using the principles of strategic management. It was determined that the absence or improper functioning of at least one link in the system of strategic priorities for the use of management of the competitiveness of industrial enterprises is accompanied by negative microeconomic changes, deformations in the construction of industrial relations, productive forces, etc., which ultimately affects the competitiveness and dynamics of the development of these enterprises. A well-founded set of mechanisms and approaches to choosing from existing alternatives, forming and implementing strategic priorities for the use of management of competitiveness of industrial enterprises determines the possibility of effective, less resource-consuming, dynamic, as much as possible predicted implementation of basic, vital for increasing competitiveness and innovative transformations of the activities of these enterprises. In the article, strategic guidelines for the internal development of metallurgical enterprises were formed; the enterprise evaluation process was developed; identified strengths and weaknesses; conducted SWOT-analysis based on which hidden opportunities and potential threats are identified. As a result, further planning and development of activities based on competitive advantages was carried out at PJSC "Zaporizhstal". It was concluded that the elements of the strategy can be both defensive and offensive in nature, which allows the enterprise not only to solve the problem of survival, but also to realize the prospects of development, strengthening of competitive positions, formation of competitive advantages. For this, the author of the article developed a system for ensuring the appropriate level of competitiveness of the enterprise.

## СИСТЕМА СТРАТЕГІЧНОГО ЗАБЕЗПЕЧЕННЯ КОНКУРЕНТОСПРОМОЖНОСТІ ПРОМИСЛОВИХ ПІДПРИЄМСТВ

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### Ключові слова:

управління  
конкурентоспроможністю  
підприємства,  
конкурентоспроможність,  
промислові підприємства,  
потенціал  
конкурентоспроможності  
підприємства,  
стратегічне управління  
конкурентоспроможністю  
підприємства,  
SWOT-аналіз,  
можливості конкурентів,  
економічний суб'єкт,  
конкурентоспроможний товар

У статті розглянуті методи стратегічного управління конкурентоспроможністю промислових підприємств. Автором статті визначені моделі стратегічного управління промислових підприємств на національному рівні, а також досліджені техніко-технологічні та організаційно-управлінські заходи, що сприятимуть нарощуванню обсягів виробництва експортоорієнтованої продукції. Визначена роль підприємства на національному рівні. Досліджені техніко-технологічні та організаційно-управлінські заходи підприємства. В статті досліджуються сучасні підходи до управління конкурентоспроможністю підприємства. Обґрунтовано, що для успішного управління конкурентоспроможністю потрібно вивчати ринок, правильно оцінювати свою конкурентоспроможність, можливості конкурентів і чинники що їх визначають. Акцентовано увагу на те, що конкурентоспроможність підприємства можна визначити як потенційну або реалізовану здатність економічного суб'єкта до ефективного довготривалого функціонування у релевантному зовнішньому середовищі. Важливо здійснювати таке управління, яке забезпечуватиме пристосованість підприємства до різних непередбачених ситуацій у майбутньому. У статті визначені чинники конкурентоспроможності територіального виробника. Проаналізовано охоплення широкого спектру концептів при дослідженні сутності конкурентоспроможності. Визначено, що успішний розвиток металургійного підприємства можливий лише за умови повноцінної діяльності усієї сукупності взаємопов'язаних економічних механізмів, а також формування і реалізації системи стратегій підприємств металургії на основі логістичного підходу. Зроблено висновки, що технологічна конкурентоспроможність промислового підприємства здатна досягти високого рівня лише у тому разі, якщо сформована і діє ефективна система управління нею. Отже, побудова саме такої системи неможлива без використання принципів стратегічного управління. Визначено, що відсутність або неналежне функціонування хоч би однієї ланки в системі стратегічних пріоритетів використання управління конкурентоспроможністю промислових підприємств супроводжується негативними мікроекономічними змінами, деформаціями в побудові виробничих стосунків, продуктивних сил тощо, що зрештою впливає на конкурентоспроможність і динаміку розвитку цих підприємств. Обґрунтована сукупність механізмів і підходів до вибору з існуючих альтернатив, формування і реалізації стратегічних пріоритетів використання управління конкурентоспроможністю промислових підприємств зумовлює можливість ефективної, менш ресурсовитратної, динамічної, в максимально можливому ступені прогнозованої реалізації основних, життєво важливих для підвищення конкурентоспроможності і інноваційних перетворень діяльності цих підприємств. У статті сформовано стратегічні орієнтири внутрішнього розвитку підприємств металургії; розроблено процес оцінювання підприємства; визначено сильні та слабкі сторони; проведено SWOT-аналіз, на підставі якого виявлені приховані можливості та потенційні загрози. В результаті здійснено подальше планування та розвиток діяльності на основі конкурентних переваг на ПАТ «Запоріжсталь». Зроблено висновок, що елементи стратегії можуть мати як захисний, так і наступальний характер, що дозволяє підприємству не лише вирішувати проблему виживання, але і реалізувати перспективи розвитку, посилення конкурентних позицій, формування конкурентних переваг. Для цього автором статті розроблена система забезпечення належного рівня конкурентоспроможності підприємства.

### Statement of the problem

The constant increase in strategic priorities for the use of management of the competitiveness of industrial enterprises has recently become more and more real, provided that modern forms and methods are introduced, among which strategic management is the most effective. Strategic management provides the enterprise, the region, the national economy with tools for strategic analysis of multivariate development, proactive decision-making methods, and mechanisms for their implementation to ensure sustainable development and the regional economy's acquisition of qualities that determine its beneficial position [1].

The toolkit of strategic management of competitiveness is aimed at activating the strategic potential, strengthening the production and resource content of the economic entity, ensuring the development of its human resources and interregional cooperation. Strategic management involves the application of such a model that guarantees optimal, efficient and rational use of potential [2].

At the same time, the strategic management of the competitiveness of the region is not considered from the standpoint of a systemic approach, which allows structuring the component structure of the specified management system and outlining its functional connections. In the modern conditions of market relations, when the competitive struggle in the markets of goods and services is becoming more and more intense, it becomes increasingly necessary to expand the range of urgent issues of important scientific research in the field of economic security of the state. At the same time, evaluation methods and tools for increasing the level of economic security in the field of strategic priorities for the use of management of the competitiveness of industrial enterprises are of particular importance [3].

The problem of the effective functioning and development of metallurgical enterprises is multifaceted and quite complex, as it is closely related to the general development of industrial production, the adaptation of metallurgical enterprises to the market environment and the need to increase the competitiveness of metallurgical products, enterprises and the industry as a whole [4].

In countries with a market economy, competitiveness management plays an important role as a factor of intensification of socio-economic development. For Ukraine, the problem of guaranteeing the use of competitiveness management as a factor in the development of industrial enterprises is of particular importance, which is due, first of all, to the current state of development of the domestic sector of this industry and the expansion of production capacities, which is carried out mainly in an extensive way [5].

The objective need for state regulation of the use of management of the competitiveness of industrial enterprises is caused by the features inherent in this industry, its place and role in guaranteeing strategic priorities. The analysis of domestic and foreign experience shows that the negative consequences of the instability of internal and external management of the competitiveness of industrial

enterprises significantly affect the parameters of their development. The importance of theoretical understanding and methodological support for the improvement of the regulatory policy of the development of complex industry under global changes in the external environment is explained, first of all, by the need for quick adaptation of this industry to new circumstances and the formation of prerequisites for the stable development of this sector of the Ukrainian economy in the long term. Therefore, the search and improvement of new theoretical and practical approaches to the determination of strategic priorities for the use of management of the competitiveness of industrial enterprises is an urgent task [6].

### Analysis of recent research and publications

The issue of competitiveness and existing methods of its assessment is reflected in scientific works Porter M.M. [1], Fatkhuridinov R.A. [2], Mazaraki A.A. [3], Balabanova L.V. [4], Levytska A.O. [5], Karpenko Ye.M. [6], Altukhov P.L. [7], Borysiuk I.O., Yeromenko A.V. [8], Rybnytskyi D.O. [9], Litvinova V.O. [10], Dykan V.L. [11] etc.

Depending on the object of research, the term "competitiveness" should be distinguished between product competitiveness and enterprise competitiveness. At the same time, it is considered that the competitiveness of the product is a manifestation of the competitiveness of the enterprise, and the competitiveness of the enterprise reflects the competitiveness of the country in general. Therefore, it is the competitiveness of the enterprise that is important both from the microeconomic and macroeconomic points of view [12].

Assessment of the level of competitiveness of the enterprise allows [1]:

- form management tasks: determination of approaches to production, technology, marketing, labor resources, financing, information and organizational support;
- make a management decision: reducing costs, focusing on a specific market segment, concluding contracts;
- to develop measures for the development of competitive advantages: the introduction of innovations, offensive measures in the direction of securing long-term advantages, protective measures in the direction of preventing the actions of participants, developing a program for entering new markets, attracting investor funds;
- to adapt the enterprise to the market conditions of business, which as a result gives victory in the competition for the consumer and sales markets.

It should be noted that today a number of methods are used to assess the competitiveness of an enterprise [13–27].

### Objectives of the article

The author of the article stated the following to the factors of industrial enterprise competitiveness: enterprise evaluation process; identification of strengths; identification of weaknesses; SWOT-analysis; hidden possibilities; potential threats.

The purpose of the article is to develop a system for ensuring the competitiveness of industrial enterprises.



### The main material of the research

The research methodology of the system for ensuring the appropriate level of competitiveness of PJSC “Zaporizhstal” is reduced to the following stages [12]:

- 1) enterprise evaluation process;
- 2) identification of strengths;
- 3) identification of weaknesses;
- 4) SWOT- analysis;
- 5) hidden possibilities;
- 6) potential threats.

The process of evaluating the enterprise is reduced to the identification of strengths and weaknesses.

Strengths include the following elements:

- 1) professional personnel;
- 2) the possibility of working with raw materials of low quality;
- 3) support for humanitarian projects of the city;
- 4) extensive social support of employees;
- 5) high tax payments to the local/state budget;
- 6) availability of an environmental monitoring system;
- 7) control system of raw materials and products ICO9001;
- 8) availability of certificates for products of international standard.

The company’s weaknesses include:

- 1) outdated equipment;
- 2) not modern steel production technology;
- 3) incomplete cycle of production of products from raw materials to finished products;
- 4) lack of continuous rolling module;
- 5) lack of SAP production planning;
- 6) lack of market sales services;
- 7) high ecological burden on the region.

As a result of the SWOT-analysis, hidden opportunities and potential threats of the enterprise were revealed.

The hidden capabilities of the enterprise include the following:

- 1) a modern management system using the best global practices;
- 2) availability of repair of the material base;
- 3) a developed system of professional training;
- 4) availability of a scientific and technological knowledge base, a scientific library;
- 5) the possibility of working with an incomplete production cycle;
- 6) production of the workpiece;
- 7) redistribution of the customer billet;
- 8) the possibility of realizing excess thermal energy;
- 9) possibility of production of medical oxygen;
- 10) close cooperation with the municipality;
- 11) systematic work on expanding the product line.

Among the potential threats are highlighted:

- 1) disruption of logistics in a crisis situation;
- 2) the presence of competitors with higher quality products;
- 3) dependence on external energy resources (electricity, gas, coke);
- 4) outflow of professional personnel/staff;
- 5) outsourcing of system services:

- repair;
- cleaning;
- accounting department;
- information support services.

So, as a result, further planning and development of activities based on competitive advantages was carried out at PJSC “Zaporizhstal”:

1. Expansion of the assortment line of products for delivery to export orders (mastering the production of commercial slabs and thick sheet in the range of 8–20 mm).

2. Improving the quality of the produced metal due to the use of raw materials with stricter requirements, as well as testing and introducing into the production of new materials that allow to improve quality (slag thinners in the furnace to ensure the possibility of increasing the number of fluxes and increasing the reactive refining capacity of the melt, synthetic slags for processing metal in a ladle for the purpose of additional desulfurization outside the steelmaking unit, testing new types and increasing the specific consumption of heat-insulating and slag-forming mixtures for ingots, using heat-insulating plates to improve the quality of the ingot internal structure, preventing deep-seated shrinkage defects).

3. Development and improvement of the technology of production of hot rolled products and slabs to meet the growing demands of consumers for surface quality and internal structure of rolled products.

As a result of the research, we conclude that competitiveness is specific data about enterprises that we calculate, and, accordingly, based on this, we evaluate enterprises. When studying the characteristics of an enterprise [13], which give an advantage over others, one should take into account the fact [14] that it is not the enterprises that compete, but rather the products manufactured by them [15]. Therefore, in order to implement the system of ensuring the appropriate level of competitiveness of the enterprise, it is necessary to make changes in the constructive direction and adapt the enterprise, that is, to create certain management measures in order for the enterprise to be competitive [16].

In the context of the studied direction, a constant restoration of the base of competitors is required [17]. It should be taken into account that after overcoming competitors, new ones may appear [18]. Therefore, it is as a result of constant struggle and control that development and a constant high level of competitiveness take place [19]. It is necessary to evaluate your enterprise every certain period (for example, every month) [20]. A constant dynamic analysis (SWOT-analysis) of the enterprise’s evaluation efficiency is required [21]. For this, the author of the article developed a system for ensuring the appropriate level of competitiveness of the enterprise (Fig.1) [22–27].

### Conclusions

Summing up, it can be noted that the successful development of a metallurgical enterprise is possible only under the condition of a developed system for ensuring the appropriate level of competitiveness of the enterprise. We also note that the technological competitiveness of an industrial enterprise can reach a high level only if an

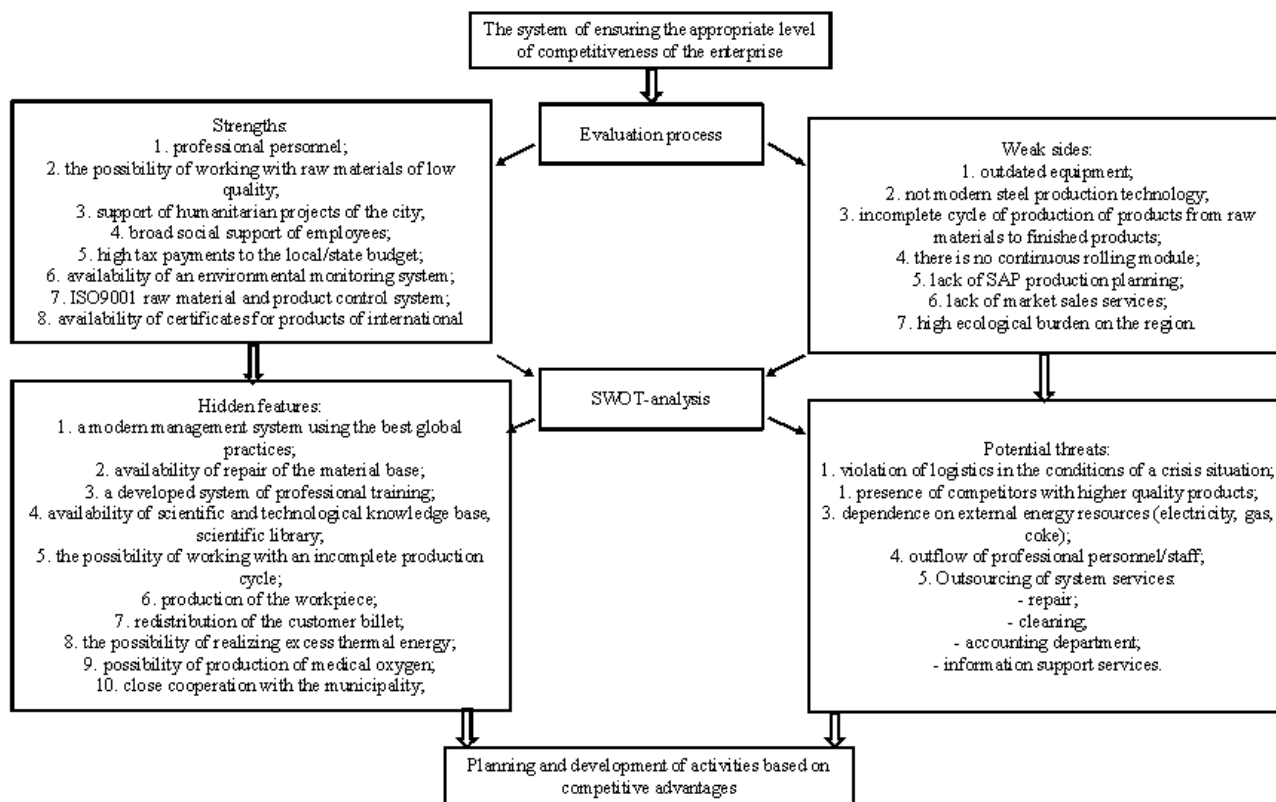


Fig. 1 – The system for ensuring the appropriate level of competitiveness of the enterprise

Source: developed by the author based on [12–27]

effective management system is formed and operates, namely: improvement of the enterprise evaluation process; determination of the company's strengths and weaknesses; carrying out a SWOT-analysis; detection of hidden opportunities and potential threats of the enterprise. The construction of such a system is impossible without using the principles of strategic management of an industrial enterprise.

On the basis of the conducted research, further planning and development of activities based on competitive advantages at PJSC “Zaporizhstal” was carried out:

1. Expansion of the assortment line of products for delivery to export orders (mastering the production of commercial slabs and thick sheet in the range of 8–20 mm).

2. Improving the quality of the produced metal due to the use of raw materials with stricter requirements, as

well as the testing and introduction into production of new materials that allow to improve quality (slag thinners in the furnace to ensure the possibility of increasing the number of fluxes and increasing the reactive refining capacity of the melt, synthetic slags for processing of metal in a ladle for the purpose of additional desulfurization outside the steelmaking unit, testing of new types and increasing the specific consumption of heat-insulating and slag-forming mixtures for the ingot, the use of heat-insulating plates to improve the quality of the ingot internal structure, prevention of deep shrinkage defects).

3. Development and improvement of the technology of production of hot rolled products and slabs to meet the growing demands of consumers for surface quality and internal structure of rolled products.

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# ECONOMIC AND MATHEMATICAL MODELING AND INFORMATION TECHNOLOGIES IN ECONOMICS

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## MODELING OF BUSINESS PROCESSES OF THE SUPPLY DEPARTMENT OF AN INDUSTRIAL ENTERPRISE

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industrial enterprise,  
supply department

The article is devoted to the study of issues related to the modeling of business processes of the supply department of an industrial enterprise. A study of the stages of organization of business processes at the enterprise, in particular the supply department, was conducted. Business processes are considered as a way of organizing enterprise management. Scientific works investigating the modeling of business processes were analyzed. It has been established that the supply department is one of the most important links of the enterprise, the task of which is to provide the necessary materials and components for smooth and successful functioning, as well as to reduce costs and risks. In order to achieve these goals, the supply department must have a clearly coordinated sequence of actions performed by it. To formalize the actions that take place in the supply department, it is worth presenting them in the form of a business process, which will avoid unnecessary expenditure of time and resources. A number of stages of modeling business processes of the supply department are proposed, which are consistent and interconnected. The stages of modeling include the identification of the entire set of processes occurring in the department, their current analysis and the sequence of execution of all operations. The next step is the design and creation of a model, which involves a structural analysis of the business process, the formation of regulations for each of its components, and establishing their sequence. And the last stage is the analysis of the effectiveness of the proposed solutions and their implementation. A model of the business process of the supply department of an industrial enterprise was built, which provides an analysis of production needs, based on which a production plan is formed. On the basis of this plan, the purchase of material resources and the quality control of purchased components take place. The implementation of the developed model will allow the enterprise to reduce the time spent on the purchase and manufacture of finished products, thereby increasing the efficiency of its activities.

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## МОДЕЛЮВАННЯ БІЗНЕС-ПРОЦЕСІВ ВІДДІЛУ ПОСТАЧАННЯ ПРОМИСЛОВОГО ПІДПРИЄМСТВА

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**Ключові слова:**

моделювання, модель,  
бізнес-процеси,  
промислове підприємство,  
відділ постачання

Стаття присвячена дослідженню питань щодо моделювання бізнес-процесів відділу постачання промислового підприємства. Проведено дослідження етапів організації бізнес-процесів на підприємстві, зокрема відділу постачання. Розглянуто бізнес-процеси, як спосіб організації управління підприємства. Проаналізовано наукові праці, які досліджують моделювання бізнес-процесів. Встановлено, що відділ поставок є однією із найважливіших ланок підприємства, завданням якого є забезпечення необхідних матеріалів і компонентів для безперебійного та успішного функціонування, а також зменшення витрат та ризиків. З метою досягнення цих цілей, відділ постачання

повинен мати чітко скоординовану послідовність дій, які ним виконуються. Для формалізації дій, які протікають у відділі постачання варто представити їх у вигляді бізнес-процесу, що дозволить уникнути зайвих витрат часу та ресурсів. Запропоновано ряд етапів моделювання бізнес-процесів відділу постачання, які є послідовними та взаємопов'язаними між собою. Етапи моделювання включають ідентифікацію усієї множини процесів, що відбуваються у відділі їх поточний аналіз та послідовність виконання усіх операцій. Наступним кроком є проектування та створення моделі, що передбачає структурний аналіз бізнес-процесу, формування регламенту кожної його складової та встановлення їх послідовності. І останнім етапом є аналіз ефективності запропонованих рішень та їх реалізацію. Побудовано модель бізнес-процесу відділу постачання промислового підприємства, яка передбачає аналіз потреб виробництва на основі якого формується план виробництва. На основі даного плану відбувається закупівля матеріальних ресурсів та контроль якості покупних комплектуючих. Впровадження розробленої моделі дозволить підприємству скоротити витрати часу на закупівлю та виготовлення готової продукції тим самим підвищити ефективність своєї діяльності.

### Statement of the problem

The procurement department is a key element of any business, responsible for supplying the necessary materials for its successful operation. The activities of the department depend on many internal and external factors, such as price fluctuations, transport problems, changes in the terms of agreements with suppliers, etc. All these factors need to be monitored, controlled as well as taken into account in the management process. The enterprise management process requires the introduction of new approaches to improve the efficiency of its operations by upgrading business processes based on the principles of cost reduction and savings. Improvement of business processes is aimed at establishing coordination and interrelationships between individual structural units of the enterprise. That is why business process modeling is an important scientific and practical task, the solution of which allows for an increase in the efficiency of not only a single department but also the enterprise.

### Analysis of recent studies and publications

The study of issues related to the modeling of business processes of an enterprise is covered in many scientific works by Shepilenko. V. [1] systematized theoretical approaches to the peculiarities of the organization of business processes, and allocated methods of their optimization, considering foreign experience. However, the issue of the structure of hierarchical business processes of an enterprise is not sufficiently covered.

Paper [2] considers the possibilities of using methods of structural modeling of business processes to formalize the processes taking place at an industrial enterprise. Also, the author proposed a conceptual model for solving the problem of multi-criteria selection of instrumental technologies for the structural modeling of business processes. However, the issue of the structure of business processes and information flows between them is not considered.

Larina R.R. and Lukianova O.Y. in their work [3] substantiated the feasibility of modeling the business processes of an enterprise and developed several recommendations for logistics management. The article

also provides an example of a model of business processes of an enterprise in logistics management and considers the stages of logistics management, which made it possible to form a holistic view of the logistics processes taking place at the enterprise.

In [4], the authors consider the features, principles, and goals of business process optimization, formulate recommendations for improving the modeling of enterprise business processes, and substantiate their feasibility and economic efficiency for the enterprise. Ilchenko N.B. [5] studied the features of functional and process approaches to the formation of an enterprise business model. The author proves the effectiveness of combining functional and process approaches when creating a business model. An example of the process approach of a business process is also given.

Thus, because of the analysis of literature sources, it is found that many problematic issues regarding the modeling of business processes of enterprises, in particular the supply department, remain unresolved.

### Objectives of the article

The article is aimed at analyzing the stages of the organization of business processes at an enterprise, modeling the business process of the supply department of an industrial enterprise, developing a model, and evaluating its efficiency.

### The main material of the research

In today's conditions, the successful functioning of an industrial enterprise requires the supply department to provide production with the necessary materials and inventory in a timely and efficient manner. For this purpose, it is important to organize business processes correctly, which will reduce costs, improve product quality, and ensure the rational use of material and technical resources and inventory. The business process model reflects all stages of the resource flow from procurement to the manufacturing of finished products. This model defines the sequence of actions that contribute to the achievement of the goal and allows you to predict the time and resources required

to complete each stage. Thus, the process of modeling business processes is an important stage in the management of an enterprise and allows it to improve its efficiency, reduce costs and improve product quality. The process of modeling the business processes of the supply department can be represented in several successive stages (Fig. 1).

Each of the stages (Figure 1) performs an important function in the management of business processes and contributes to the efficiency of the enterprise. Maximum efficiency from the implementation of a business process model is achieved through effective communication between individual departments of the enterprise and cooperation between them.

The first step in modeling the business processes of the supply department is to identify all the processes that take place. Next, each process is analyzed and its critical points and possible problems that hinder their effective execution are identified. At this stage, the time requirements for each process are also determined.

The next stage is the selection of modeling methods and tools. There are many different tools available for building a business process model, such as ARIS Express, Microsoft Visio, IDEF0, BPwin, and others. With the help of these software products, you can describe in detail the business processes that take place at the enterprise in the form of graphical diagrams. The choice of tools depends on the specific tasks and purpose of modeling. In this study, to build a model of the business process of the supply department, the software product Microsoft Visio is used, which allows creating of diagrams of business processes based on the BPMN2.0 (Business Process Model and Notation) modeling standard and visual checking the correctness of building these diagrams.

The third stage is the actual development of the business process model. At this stage, a detailed diagram is drawn

up that reflects all the stages of the department’s work. Next, the model is designed and created. When creating the model, business processes are optimized to reduce the time required for their execution and reduce the number of possible errors.

The fourth stage is to analyze the model and evaluate its effectiveness. At this stage, it is determined how effective the modeling was and what opportunities there are for improvement. Quantitative and qualitative analysis of the business process, analysis of costs, time of operations, and product quality are carried out. The model is also tested to identify shortcomings, improve its efficiency, and ensure the accuracy and validity of the proposed solutions. The last stage involves the actual implementation of the business model in the company’s operations and monitoring its effectiveness.

The proposed stages of modeling the business processes of the supply department are tested on the example of Metinvest Business Service Limited Liability Company. The author has analyzed the activities of the supply department and identified the main stages of its activity, analyzed, and identified problem areas. Based on the information obtained, the author developed a business process model of the supply department using the Microsoft Visio software product, which is a powerful graphic tool. When creating the model, a standard business process design module was used, which provides opportunities for its improvement and optimization (Fig. 2).

According to the developed model (Fig. 2), the business process begins with the receipt of an order. Based on the order received, a production plan is formed, which includes detailed planning of the required amount of material resources and components. The production plan is signed by the deputy head, approved by the CFO, and commercial director, and approved by the first deputy CEO.

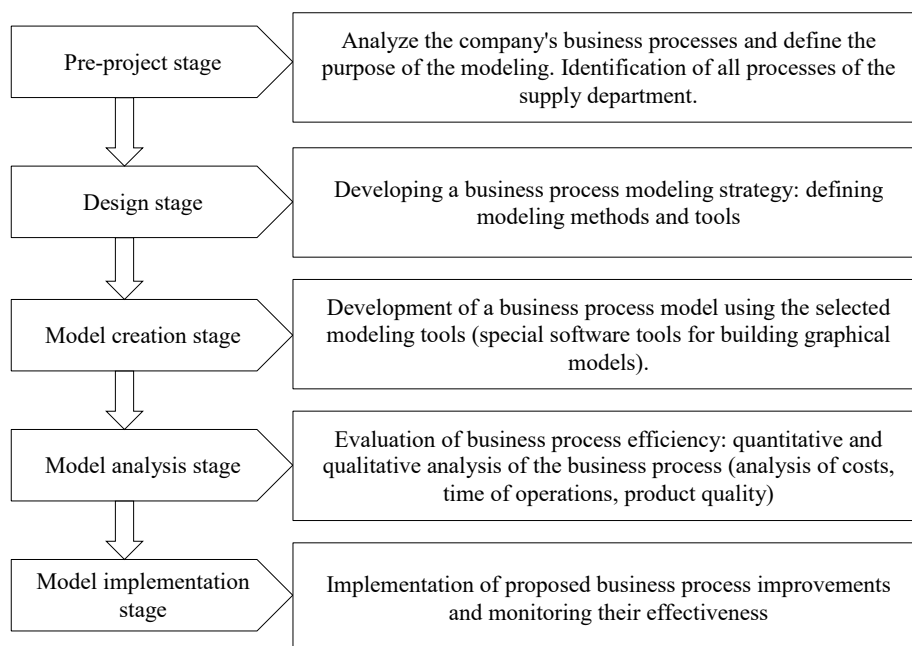


Fig. 1 – Stages of business process modeling for the supply chain department

Source: built by the authors

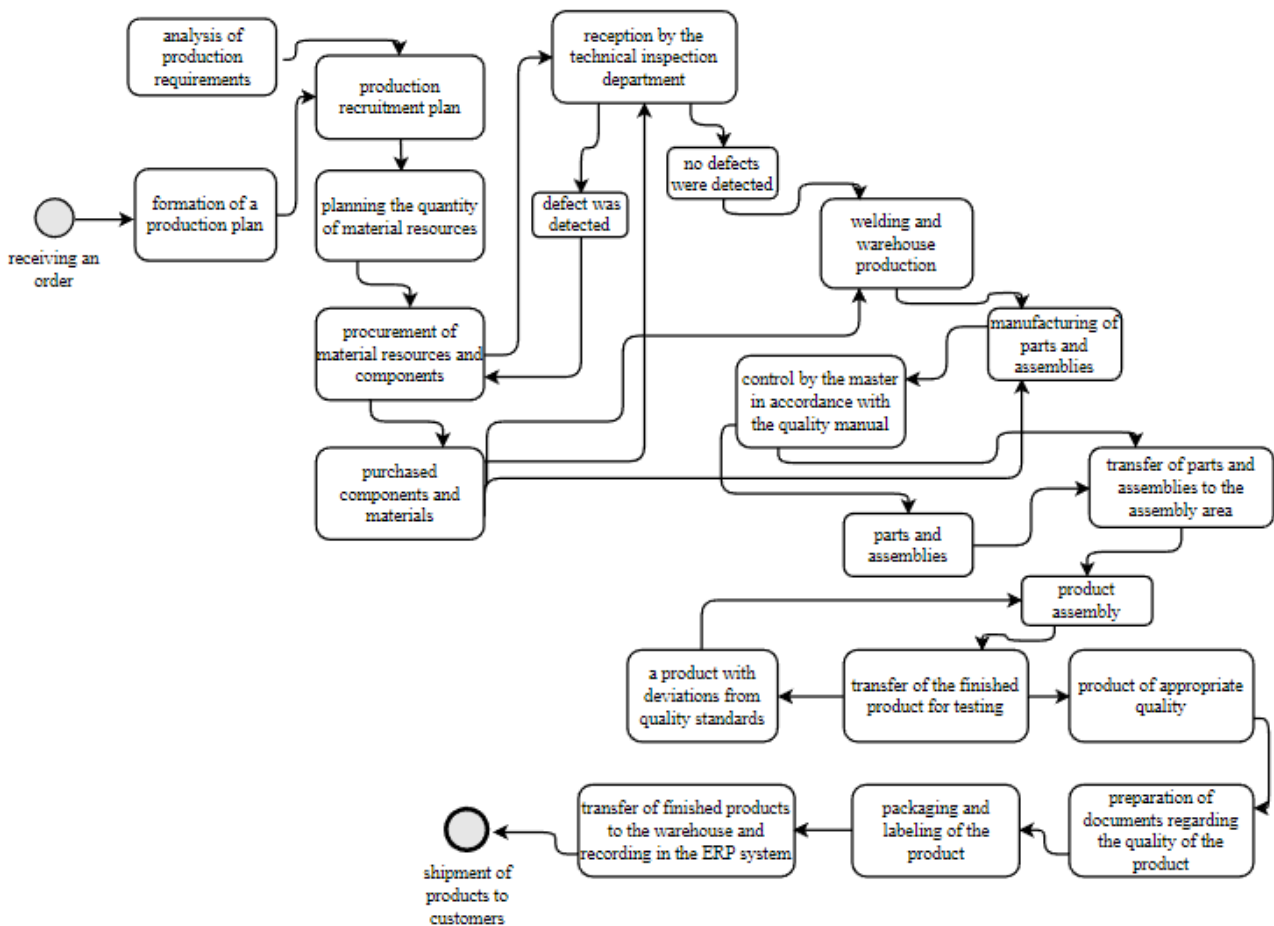


Fig. 2 – A business process model of the supply department of a manufacturing enterprise

Source: built by the authors

Guided by the «Production Plan Set», the production plan calculation, and the factory order, the engineer generates an application in electronic form using an automated document management system for the receipt of material resources and components by the master. Based on the plan, the materials and components are directly purchased. The purchased material and technical resources are checked for defects by the technical inspection department. All resources of the appropriate quality are transferred to the next logistics operation, namely welding and assembly production. The manufactured parts and assemblies are subjected to quality control in accordance with established standards and transferred to the assembly shop.

The lead engineer sends the «Plan for the production of assembly units and parts for the product» to the assembly shop foreman using the internal document management system. The assembly shop manufactures the required number of products (finished goods) and submits them to the quality control department, where they are checked in accordance with the instructions. Finished products must meet the requirements of regulatory, design, and technological documentation.

Finished products of the appropriate quality are transferred to the next stage – packaging and labeling. At the same time, all the relevant documentation is prepared in the ERP system, including information on finished

parts and products. After that, the finished products are shipped and sold.

All the processes described in the model are automated using the corporate automated ERP system, which allows the department to automate its work and promptly formulate production plans, and conclude contracts with suppliers, which reduced the time for some operations and ensured more accurate planning of inventory purchases. In addition, the ERP system controls the supply processes and automates the ordering process, which simplifies control processes and ensures the stable operation of the supply department.

The next stage of business process modeling is to assess their effectiveness. As a result of the qualitative analysis of the developed business process model, it was found that all the described processes are clearly structured, and logistics operations are performed on time and in a coordinated manner. The quantitative analysis was carried out in accordance with [7; 8] and found that the time spent on manufacturing products was reduced by 5% due to the reduction of downtime while waiting for the transfer of material resources from one operation to another. The level of business process regulation and controllability increased.

The last stage of modeling involves the process of implementing the proposed measures and monitoring their effectiveness. The developed business process model helped to improve the efficiency of the supply department

by eliminating problem areas related to the reduction of costs for warehousing and transportation of material resources. Thus, modeling the business process of the supply department helped to increase the efficiency of its work, reduce costs, improve the quality of supplies, and optimize the procurement management system through continuous analysis of production needs.

### Conclusions

Business process modeling is an important element of enterprise management that helps to increase the efficiency of its operations and reduce costs. In addition, it helps to identify possible problems and shortcomings in the work of both individual departments and the enterprise as a whole and develop effective measures to address them. One of the most important divisions of an enterprise is the supply department, which meets the needs for raw materials and supplies for production. In this regard, modeling the work of the supply department is particularly important for ensuring the stable operation of the enterprise.

Our proposed stages of business process modeling include preparation for modeling, namely, analysis of all operations and processes that take place in the supply department, model design, model creation, analysis of the effectiveness of the proposed solutions, and their implementation. The successful implementation of the developed model is based on a corporate automated ERP system that ensures instant interaction of all logistics operations, continuous improvement, and updating of the model, considering emerging problem situations. The proposed business process model allowed us to reduce the time spent on manufacturing products and increase the level of business process regulation and control.

However, it is worth remembering that business process modeling is a dynamic process, so it requires constant updating and improvement. Therefore, the proposed model takes into account the possibility of tracking changes in production and the market to respond in a timely manner and adapt the business process of the supply department to new conditions.

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## FEATURES OF MANAGING BUSINESS PROCESSES IN THE PROJECT OFFICE OF AN OUTSOURCING COMPANY

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**Key words:**

business process management,  
project office,  
outsourcing company,  
clarity of processes and roles,  
communication,  
employee satisfaction,  
adaptation to changing customer  
requirements, content analysis,  
questionnaires,  
statistical analysis,  
regression analysis

This study is devoted to the analysis of the features of business process management in the project office of outsourcing companies. The study focuses on the identification of factors affecting the effectiveness of business process management and considers three hypotheses: the presence of clear processes and roles that contribute to the improvement of the effectiveness of business process management; the level of communication between project participants, which affects employee satisfaction with business process management; adaptation to changing customer requirements, on which the success of projects depends. Methods of quantitative data analysis, content analysis, questionnaire survey and statistical analysis were used to achieve the research goal. According to the results of the study, it was found that the presence of clear processes and roles really contributes to increasing the efficiency of business process management in the project office of outsourcing companies. In addition, the level of communication between project participants has a great impact on employee satisfaction with business process management. The consequence of this is the need to ensure proper communication and communication between project participants. Regarding adaptation to changing customer requirements, it was found that this is a key factor in the success of projects in outsourcing companies. The results of the study showed that increasing the level of adaptation to changing customer requirements contributes to more successful implementation of projects and increased customer satisfaction. The obtained results are of practical importance for the management of business processes in outsourcing companies, helping to understand how to improve the efficiency of processes and ensure more successful implementation of projects.

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## ОСОБЛИВОСТІ УПРАВЛІННЯ БІЗНЕС-ПРОЦЕСАМИ ПРОЄКТНОГО ОФІСУ АУТСОРСИНГОВОЇ КОМПАНІЇ

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**Ключові слова:**

управління бізнес-процесами,  
проектний офіс,  
аутсорсингова компанія,  
чіткість процесів та ролей,  
комунікація,  
задоволеність співробітників,  
адаптація до змінюваних  
вимог клієнтів, контент-аналіз,  
анкетування,  
статистичний аналіз,  
регресійний аналіз

Дане дослідження присвячене аналізу особливостей управління бізнес-процесами у проектному офісі аутсорсингових компаній. Дослідження зосереджується на виявленні факторів, що впливають на ефективність управління бізнес-процесами та розглядає три гіпотези: наявність чітких процесів і ролей, які сприяють підвищенню ефективності управління бізнес-процесами; рівень комунікації між учасниками проекту, що впливає на задоволеність співробітників від управління бізнес-процесами; адаптація до змінюваних вимог клієнтів, від якої залежить успішність проєктів. Для досягнення мети дослідження використовувалися методи кількісного аналізу даних, контент-аналізу, анкетного опитування та статистичний аналіз. Відповідно до результатів дослідження було виявлено, що наявність чітких процесів і ролей дійсно сприяє підвищенню ефективності управління бізнес-процесами в проектному офісі аутсорсингових компаній. Крім того, рівень комунікації між учасниками проекту має великий вплив на задоволеність співробітників від управління бізнес-процесами. Наслідком цього є необхідність забезпечення належної комунікації та зв'язку між учасниками проекту. Щодо адаптації до змінюваних вимог клієнтів виявлено,

що це є ключовим фактором успішності проєктів в аутсорсингових компаніях. Результати дослідження показали, що підвищення рівня адаптації до змінюваних вимог клієнтів сприяє більш успішному виконанню проєктів та підвищенню задоволеності клієнтів. Отримані результати мають практичне значення для управління бізнес-процесами в аутсорсингових компаніях, допомагаючи зрозуміти, як покращити ефективність процесів та забезпечити більш успішне виконання проєктів.

### Statement of the problem

Business process management in the project office of an outsourcing company has some features that differ from business process management in other types of organizations.

First of all, in the project office of the outsourcing company, many projects are conducted simultaneously, so the business process management system must be flexible enough to meet the requirements of each project.

The second important aspect is interaction with external customers and partners. Management of business processes in the project office of the outsourcing company must take into account the requirements of customers and guarantee their satisfaction.

Also, when managing business processes, it is important to take into account the possibility of changes in the project that may affect the planning and management of business processes. This requires the project office of the outsourcing company to advocate flexibility and the ability to adapt to changes.

In addition, it is important to take into account the effective management of resources, which include information technology, personnel and financial means. This allows to ensure the efficiency and economy of business process management in the project office of the outsourcing company.

Therefore, management of business processes in the project office of an outsourcing company requires flexibility, efficiency, effective resource management, interaction with external customers and partners from the organization. It is also important to take into account the needs of each project and the ability of the staff to respond to the requirements of the clients and the project, taking into account their professional skills and experience. All this together will help to ensure the successful implementation of projects, satisfaction of customer requirements and maintaining a competitive advantage in the market.

Management of business processes in the project office of an outsourcing company requires an analyzed approach, taking into account all requirements and factors that may affect the implementation of the project, as well as the use of modern technologies and resources to ensure maximum efficiency and economy of business process management, which ultimately leads to to increase the efficiency and competitiveness of the organization.

### Analysis of recent studies and publications

The study of the features of business process management of the project office of the outsourcing company is devoted to the work of many researchers who cover various aspects of project management, organizational culture,

international standards, innovative methods and tools for optimizing business process management.

In the Project Management Handbook, Harold Kerzner [1] provides a comprehensive overview of the basic principles, methods, and tools used in project management. The author considers a systematic approach to planning and control, which is relevant for the analysis of the project office of outsourcing companies.

One of the most important sources of project management knowledge used in outsourcing companies is the PMBOK® Guide from PMI [2], which includes a description of processes, essential tools and techniques.

The key principles, topics and processes that help ensure effective project management are presented in the PRINCE2® international project management standard [3], which is used by many outsourcing companies.

A comprehensive approach to risk management in projects using international standards ISO 31000 and IEC62198 is provided in the Project Risk Management Manual [4], in which the author discloses the methods of identification, analysis and response to risks, as well as provides recommendations for the implementation of an effective risk management system in outsourcing companies.

The analysis of the influence of organizational culture on the management of business processes in the project office of outsourcing companies examines Edgar Shane [5], who reveals the influence of organizational culture on the success of companies, as well as the role of leadership in the formation and development of such culture.

In his work [6], Thomas Davenport considers the possibilities of using information technologies to optimize business processes. The work reveals strategies and approaches to the reengineering of work processes through the introduction of the latest technologies, which is an important aspect for research in the context of the project office of outsourcing companies. In the article [7], the authors present a model of the success of information systems, which considers critical success factors for the implementation and evaluation of the effectiveness of information systems in various organizational contexts. The model can be used to analyze the impact of information technology and automation on business process management of the project office of outsourcing companies.

In the studies of Kaplan and Norton [8], the concept of a balanced system of indicators is presented, which helps organizations to translate their strategy into concrete actions, which allows to develop methods of measuring the effectiveness of business process management in the project office of outsourcing companies.

In their work, Jeff Sutherland and Ken Schwaber offer a deep understanding of the Scrum methodology – an agile approach to project management that can be applied

in the project office of outsourcing companies to increase flexibility and adaptability in managing business processes and resources.

Despite the large number of scientific works devoted to the peculiarities of business process management of the project office of the outsourcing company, several problems remain unsolved, namely: the issue of distribution of roles and responsibilities to improve the efficiency of the project office of outsourcing companies; communication and coordination practice for the project office; effective adaptation of the project office of outsourcing companies to changing customer requirements without losing control over resources and the quality of project execution.

### **Objectives of the article**

The purpose of this article is to study the peculiarities of business process management of the project office of an outsourcing company in order to develop methods and recommendations for improving the efficiency of project management.

### **The main material of the research**

The business process management of the project office of the outsourcing company has its own characteristics related to the provision of services to clients with different requirements and the remote location of the team. A careful analysis of the features of these processes made it possible to put forward the following hypotheses:

1. The presence of clear processes and roles helps to increase the efficiency of business process management in the project office of outsourcing companies.

In project offices of outsourcing companies, it is important to have clearly defined processes that meet customer requirements and can be easily adapted to different situations. A clear definition of the roles of employees allows responsible distribution of tasks and facilitates a quick response to changes in the project. This may include development of documentation, allocation of roles and responsibilities, monitoring of work progress and implementation of control points, which will contribute to increasing the efficiency and success of projects.

2. The level of communication between project participants affects employee satisfaction with business process management.

Analysis of scientific literature and practical experience indicate that effective communication between project participants plays an important role in ensuring quality management of business processes. The different communication channels used in outsourcing companies, such as e-mail, phone calls, video conferencing and collaborative work platforms, how often employees interact with each other and with clients, and the quality and timeliness of information shared between them were investigated. Based on this analysis, it was established that a high level of communication between project participants can increase employee satisfaction and contribute to the effective management of business processes. Good communication allows teams to quickly respond to changes and solve problems, which contributes to the successful completion of projects.

3. Adaptation to changing customer requirements affects the success of projects in outsourcing companies.

Outsourcing companies adapt to changing customer requirements, which requires flexibility and the ability to quickly switch between different projects and tasks. Planning, risk assessment, quality control, and reporting practices that can facilitate adaptation to changing customer requirements were reviewed. On the basis of this analysis, the hypothesis was put forward that companies that successfully adapt to changing customer requirements achieve greater success in their projects.

To achieve the goal of the research and to test the proposed hypotheses, the study used a combination of several methods of data collection, which made it possible to obtain a comprehensive and objective analysis of business process management in the project office of outsourcing companies. Data collection methods include:

- analysis of documents, such as: project management procedures, descriptions of processes and work instructions, the structure of the project office, reporting templates, other materials characterizing the organization's business process management;

- structured interviews with key employees of the project office of outsourcing companies, such as: project managers, analysts, coordinators, customer representatives, who helped to collect primary data about the experience and impressions of the participants regarding business process management; the problems they face; proposals for optimization of business processes;

- a survey that included questions aimed at measuring the level of satisfaction of project office employees of outsourcing companies with business process management and the influence of various factors on their effectiveness. The questionnaire was sent anonymously to all employees of the project office of outsourcing companies, which made it possible to collect data from a larger number of participants and obtain a more representative sample.

To ensure the representativeness of the study, a random sample was formed. This means that the target group was divided into several categories according to their roles in the project office of outsourcing companies. Thus, representatives of various levels of management and functional units responsible for project implementation were involved.

The categories into which the target group was allocated include:

- project managers;
- analysts;
- coordinators;
- quality specialists;
- developers;
- testers;
- representatives of customers.

For each category, participants were randomly selected to conduct structured interviews and fill out questionnaires. As a result, data was collected that reflect different perspectives and experiences of the participants, which helped to obtain a more detailed and objective understanding of business process management in the project office of outsourcing companies.

After the data were collected, they were analyzed using different methods depending on the type of data and research questions. Content analysis was used to analyze the documents, which helped to highlight key topics and problems related to the management of business processes in the project office of outsourcing companies. Content analysis also made it possible to compare the internal procedures and practices of companies with the norms and standards described in [2; 3].

During the content analysis, the internal documents of the project office of outsourcing companies were reviewed, such as: project management procedures, process descriptions, work instructions, the structure of the project office, reporting templates, etc. The content analysis procedure was divided into the following stages:

Stage 1 – Data collection. At this stage, internal documents of various outsourcing companies related to the management of business processes in the project office were collected. The materials included documentation related to various aspects of project management, such as: planning, resource allocation, quality management, risk control, and reporting.

Stage 2 – Data preparation. During this stage, the collected documents were systematized and divided into categories: types of processes, roles of participants, stages of projects, etc. This simplified further analysis and comparison of documents.

Stage 3 – Coding. During the third stage, a coding manual was developed [10], which included several categories of codes related to various aspects of business process management in the project office, namely: project goals, key performance indicators, communication between project participants, resource allocation, quality control and others.

Stage 4 – Analysis and interpretation. During the fourth stage, documents were coded according to the coding manual, identifying general trends, relationships and patterns in business process management. For example, it was found that some companies actively use project management methodologies such as Scrum or PMBOK, while others develop their own approaches adapted to their organizational culture and customer needs.

Based on the analysis, key challenges and problems faced by project offices of outsourcing companies in the process of business process management were identified. These include: insufficient standardization of processes, problems with communication between project participants, misallocation of resources, as well as the difficulty of adapting to changing customer requirements and market conditions.

Thematic analysis method was used to analyze data from structured interviews. This method consists in coding

the responses of the participants and grouping them according to common themes or patterns. The thematic analysis helped identify common problems, challenges and proposals for business process management, as well as understanding the specifics of the experiences of different groups of participants.

Statistical methods were used to analyze the data from the questionnaires, such as: descriptive statistics, correlation analysis, regression analysis. These methods made it possible to assess the level of employee satisfaction with the management of business processes, determine the factors affecting the efficiency of processes, and test the proposed hypotheses.

Statistical indicators were calculated: average values, medians, standard deviations and other characteristics for answers to questionnaire questions (Table 1), which made it possible to assess the overall level of employee satisfaction with business process management.

Table 1 – Statistical characteristics for answers to questionnaire questions

Correlation analysis was used to determine the relationships between various factors that can affect the effectiveness of business process management, such as:  $x_1$  – the presence of clear processes and roles,  $x_2$  – the level of communication between project participants,  $x_3$  – adaptation to changing customer requirements. As a result of the correlation analysis, the following correlation coefficients were obtained:

$$r(x_1; x_2) = 0.65;$$

$$r(x_1; x_3) = 0.55;$$

$$r(x_2; x_3) = 0.60.$$

According to the obtained correlation analysis values, the presence of clear processes and roles  $x_1$  positively correlates with the level of communication between project participants  $x_2$ . With a correlation coefficient of 0.65, indicating a moderately strong linear relationship between these variables. Having clear processes and roles  $x_1$  is also positively correlated with adapting to changing customer demands  $x_3$  with a correlation coefficient of 0.55, indicating a moderate linear relationship between these indicators. A positive correlation is also observed between the level of communication between project participants  $x_2$  and adaptation to changing customer requirements  $x_3$ . A correlation coefficient of 0.60 indicates a moderately strong linear relationship between these variables.

Several regression models were built to test the proposed hypotheses. The first hypothesis stated that the presence of clear processes and roles positively affects the effectiveness of business process management. A regression model was built with the effectiveness of

Table 1 – Statistical characteristics for answers to questionnaire questions

Statistical indicators	Availability of clear processes and roles	Level of communication between project participants	Adaptation to changing customer requirements
Average value	3.75	4.1	3.9
Median	4	4	4
Standard deviation	1.2	1.1	1.3

business process management as the dependent variable  $y_1$  and the presence of clear processes and roles  $x_1$  as the independent variable:

$$y_1 = 2.5 + 0.8 x_1. \quad (1)$$

The results of the regression analysis showed that the presence of clear processes and roles has a positive effect on the effectiveness of business process management, confirming our hypothesis.

A regression analysis was also conducted for other proposed hypotheses, such as the impact of the level of communication  $x_2$  on employee satisfaction  $y_2$ :

$$y_2 = 3 + 1.2 x_1. \quad (2)$$

and the impact of adapting  $x_3$  to changing customer requirements on the success of projects  $y_3$ :

$$y_3 = 4 + 0.9 x_1. \quad (3)$$

As a result of testing these hypotheses, statistically significant results were obtained, which made it possible to identify factors that affect the effectiveness of business process management.

Based on the analysis of the data from the questionnaires, the main factors influencing the level of employee satisfaction with business process management and the efficiency of the processes were determined, namely:

*Clarity of processes and roles* – Companies with clearly defined business processes and employee roles have more effective business process management. The project offices of the outsourcing company, which define the responsibilities and duties of each employee, can better control the work process and ensure a high level of productivity. A company that develops and implements clear rules and procedures for project management, team coordination, communication with clients, achieves more effective project management and increases the overall efficiency of business processes.

*Communication level* – Effective communication between all stakeholders is an important factor for successful business process management. A high level of communication ensures quick identification and resolution of problems, as well as increases employee satisfaction. The project office, which practices regular meetings, ensures quick resolution of problems and conflicts, timely transfer of information, allows employees to be informed about the status of projects and tasks.

*Adaptation to changing customer requirements* – The ability of an outsourcing company to quickly adapt to new customer requirements and changes in market conditions is a key factor in the effectiveness of business process management. Adapting processes and structures can improve a company's ability to respond to customer needs and ensure project success. A company that uses Agile methodologies in its projects provides more flexible processes and can respond more quickly to changes in customer requirements, which provides better management of business processes and increases the success of projects.

*Training and development of employees* – Investments in training and development of employees increase their competence and efficiency in managing business processes. Training can help open up new opportunities for improving

processes and developing employee competencies. The company, which regularly conducts trainings and educational activities for its employees, ensures constant updating of knowledge and skills, which allows to increase the efficiency of business process management and ensure high quality of services.

*Use of technology* – The use of modern technologies, such as automation, project management systems and communication tools, can improve the effectiveness of business process management. Innovative solutions can provide better planning, control and monitoring of projects, as well as improve communication between stakeholders. A company that implements project management systems such as Trello or Asana can see improvements in team coordination, task control, and reporting. It helps to monitor the progress of projects, ensure timely response to problems and ensure a high level of efficiency of business process management.

*Internal company culture* – A corporate culture that promotes openness, cooperation and support among employees can create an environment conducive to effective business process management. Support from management and mutual assistance between colleagues create the basis for successful work. A company that supports a culture of openness and cooperation, where employees can freely exchange ideas and openly discuss possible problems, ensures the stability of business processes and increases the efficiency of their management.

All these factors interact to improve the efficiency of business process management in the project office of the outsourcing company. Understanding and optimizing these factors will help companies succeed in managing their projects and meeting the needs of their customers. It can also increase employee satisfaction, improve overall productivity, and strengthen a company's competitive advantage in the marketplace.

To further improve the efficiency of business process management, outsourcing companies can consider the following additional steps:

- deeper customer involvement, constant feedback from customers can help the project office better understand their needs, improve processes and adapt their strategies;
- assessment and monitoring of project success, the use of performance indicators (KPI) and project metrics will allow the project office to monitor the success of projects, identify problems and make timely corrections;
- ensuring continuous improvement of processes using Lean or Six Sigma methods can help the project office systematically optimize its business processes, reduce costs and increase the quality of work;
- a focus on innovation, the development of innovative solutions and the support of a culture of innovation can help the project office remain competitive and progressive in the market, as well as open up new opportunities for improving the efficiency of business processes. Taking into account these factors and recommendations will help the project office of the outsourcing company to increase the efficiency of business process management, as well as to ensure the stability, success and growth of its business. Focusing on continuous improvement, innovation,

adaptation to changes and ensuring customer and employee satisfaction will allow the company to establish itself as a leader in the outsourcing market and create a sustainable competitive environment.

The effectiveness of business process management in an outsourcing company depends on a combination of various factors that require an individual approach and analysis. Regularly reviewing and evaluating these factors, as well as providing resources to improve them, will help the outsourcing company succeed in its business and meet the needs of its customers at the highest level.

### Conclusions

The effectiveness of business process management in the project office of an outsourcing company depends significantly on a number of factors, the main ones of which are: the presence of clear processes and roles, the quality of communication, adaptation to changing customer requirements, a culture of continuous learning and innovation.

The level of employee satisfaction with the management of business processes in the project office correlates with the effectiveness of the processes. This study confirmed some of the hypotheses concerning the influence of various factors on the effectiveness of business process management.

The use of statistical methods made it possible to better understand the interrelationships between factors that affect the effectiveness of business process management. The results of data analysis helped to confirm the proposed hypotheses, which, in turn, can contribute to the development of effective business process management strategies in the project office of outsourcing companies.

The results of the study can be useful for practitioners who work in the field of project and business process management.

Therefore, taking into account the results of the study, which provide an additional understanding of the peculiarities of business process management in the project office of the outsourcing company, it is recommended for project managers, managers and other specialists in this field:

- ensure clear definition and documentation of business processes and roles in the project office to increase efficiency and employee perception of responsibilities and duties;

- maintain active and effective communication between all project participants, in particular, taking into account the needs of various departments, parties and interests, to increase the level of employee satisfaction;

- to develop a culture of adaptation and flexibility in project management, ensuring the company's ability to quickly respond to changing customer requirements and market conditions, by implementing flexible project management methodologies (Agile, Scrum or Lean) and developing internal employee training and development programs;

- to conduct regular monitoring and analysis of business process management efficiency indicators in the project office, in particular using statistical methods to identify correlations and cause-and-effect relationships between various factors.

These practical recommendations will be able to help managers and specialists monitor current trends, successful approaches, innovative solutions that can be adapted and applied in their own practice of managing business processes in the project office of outsourcing companies.

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# NATIONAL ECONOMY'S MARKET MECHANISMS OF ACCOUNTING, ANALYSIS AND AUDIT

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## FEATURES OF ACCOUNTING OF FINISHED PRODUCTS AT AGRICULTURAL ENTERPRISES

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### Key words:

finished products, production,  
crop production,  
material costs, mechanism,  
agricultural enterprises

The article is devoted to the study of the meaning of “finished products”, since it occupies a significant share in the structure of working capital of enterprises. The variety of approaches of modern scientists and economists to the essence of the studied category, which is caused by different interpretations in the current P(S)BO and other normative documents, is considered, analyzed and systematized. Variations of interpretations of the term “finished product” according to regulatory documents were analyzed. The theoretical basis for the recognition of finished products as an accounting object is outlined, the main categories and concepts are investigated. The category “agricultural production products”, which is provided for by the instruction on the application of the plan of accounting accounts, was studied. The essence of the concept of “agricultural production” is defined. Progressive scientific and methodological developments and practical experience of using separate methodological techniques for adapting domestic accounting practice to modern requirements, as well as further development and improvement of accounting for finished products, as one of the foundations of information support for agricultural enterprise management, are summarized. In our opinion, the cited author’s definition will influence the improvement of the methodical approach to the accounting of finished products and the objective display of information in the reporting of enterprises. The main principles of the organization and methods of accounting and analysis of finished products of an agricultural enterprise are studied, which reveals the main aspects: accounting objects, information sources, methodological techniques, methods of summarizing results. Considered economic operations on accounting for the movement of finished products. The existing method of accounting for the cost of manufactured and shipped products was studied. The purpose of keeping records of finished products and production costs is determined. Approaches to the organization of management accounting for the sale of products of agricultural enterprises are formulated.

## ОСОБЛИВОСТІ ОБЛІКУ ГОТОВОЇ ПРОДУКЦІЇ НА СІЛЬСЬКОГОСПОДАРСЬКИХ ПІДПРИЄМСТВАХ

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### Ключові слова:

готова продукція, виробництво,  
продукція рослинництва,  
матеріальні витрати, механізм,  
сільськогосподарські  
підприємства

Стаття присвячена дослідженню значенню «готова продукція», оскільки вона займає вагомий частку в структурі оборотного капіталу підприємств. Розглянуто, проаналізовано та систематизовано розмаїття підходів сучасних науковців та економістів до сутності досліджуваної категорії, що зумовлено відмінними тлумаченнями у чинних П(С)БО та інших нормативних документах. Проаналізовано варіації трактувань терміну «готова продукція» згідно нормативно-правових документів. Окреслено теоретичний базис визнання готової продукції як об'єкта бухгалтерського обліку, досліджено основний категорії та поняття. Досліджено категорію «продукція

сільськогосподарського виробництва», яка передбачена інструкцією про застосування плану рахунків бухгалтерського обліку. Визначено сутність поняття «продукція сільськогосподарського виробництва». Узагальнено прогресивні науково-методичні напрацювання та практичний досвід використання окремих методичних прийомів для адаптації вітчизняної облікової практики до сучасних вимог, а також подальшого розвитку та вдосконалення обліку готової продукції, як однієї з основ інформаційного забезпечення управління сільгоспідприємством. Приведене авторське визначення, на нашу думку, впливатиме на удосконалення методичного підходу до бухгалтерського обліку готової продукції та об'єктивне відображення інформації у звітності підприємств. Досліджено основні засади організації та методики обліку і аналізу готової продукції сільськогосподарського підприємства, яка розкриває основні аспекти: об'єкти обліку, інформаційні джерела, методичні прийоми, методи узагальнення результатів. Розглянуто господарські операції з обліку руху готової продукції. Досліджено існуючу методику обліку собівартості випущеної та відвантаженої продукції. Визначено мету ведення обліку готової продукції та витрат виробництва. Сформульовано підходи до організації управлінського обліку реалізації продукції сільськогосподарських підприємств.

### Statement of the problem

The development of Ukraine's economy necessitates radical changes in the system of organization and accounting. The main content of these changes is to bring all elements of the system in line with the new economic realities. This process is carried out by a set of measures to ensure the adequacy of the accounting of the economic activity of enterprises – a market transformation, which involves the emergence and wide spread of a number of new aspects of the study of the activities of enterprises, organizations, and institutions. In agriculture, accounting must ensure the provision of reliable data on the results of activities, the assessment of which is possible only with the help of financial accounting data. In order to create an attractive investment climate and establish foreign economic relations, domestic enterprises should bring their accounting principles as close as possible to the requirements of international standards. The performance of each enterprise largely depends on the management system that ensures the economic independence of the enterprise, its competitiveness and stable financial position on the market. Solving the problem of effective development and economic growth of industrial enterprises of Ukraine is possible thanks to the improvement of the management system of costs and the cost of production of finished products.

In the production management system of finished products, the accounting of production costs and calculation of the cost of products has an important place. On the basis of data on the amount and types of expenses, the employees of the management apparatus of the enterprise receive information about the use of resources, as a result of which it becomes possible to control quantitative and qualitative indicators, regulate the production process, and make optimal management decisions.

Today, there are quite wide opportunities for enterprises to comply with the defined accounting rules, since the new accounting system gives the enterprise the right to develop its own accounting policy, to independently determine specific methods, forms, accounting techniques and organization,

based on specific business conditions. Considering the field of industry, it should be noted that the most important thing for enterprises of this sector is to ensure rational accounting and analysis of the movement of products.

The topic of accounting for agricultural products remains acute in connection with its features. First of all, agricultural products are the product of a natural process that determines the presence of both main and secondary products. In addition, production in agriculture is seasonal. Territorial dispersion and heterogeneity can also be attributed to the peculiarities of most enterprises in the industry. All these features leave an impression on the accounting process in agricultural enterprises in general and on the accounting of finished products in particular.

Accounting for agricultural products is a difficult and time-consuming process. One of the reasons is that every household has a large list of products produced, both primary and secondary. The movement of finished products is very heterogeneous.

### Analysis of recent studies and publications

A significant contribution to the development of the theory and practice of accounting for finished products of crop production, including grain crops, belongs to the works of domestic scientists: M.Ya. Demyanenko, V.M. Zhuka, V.B. Mossakovsky, P.T. Sabluka, L.K. Suka, M.G. Chumachenko, V.O. Shevchuk et al. However, the analysis of a number of literary sources in this direction allowed us to conclude that the organization of accounting and internal control over finished products in agricultural enterprises requires more thorough further research.

### Objectives of the article

In order to make reasonable management decisions, users of accounting information need to know the composition of expenses, the cost of consumed means and items of work, labor, the amount of other expenses; have a well-founded methodology for calculating the cost of finished products and determining financial results. Agriculture, in particular the crop sector, is a dynamic



system that is in a constant process of development, and it is characterized by such special features as the use of land as the main means of production; the dependence of the production process on natural processes, which involves the seasonality of the use of means of labor and labor resources during the performance of agricultural work and the allocation of costs according to production cycles; simultaneous output of several types of products, etc. The purpose of the article is research and substantiation of theoretical provisions and current practice of accounting for finished products of crop production and development of methodical approaches to improvement of these processes on this basis.

### The main material of the research

With the implementation of national accounting standards, business entities have been given significant rights and opportunities in the realization of their economic interests, the choice of methods of organizing production and sales of products, the organization and methodology of its accounting.

In the reporting of each agricultural enterprise, the dominant position in the composition of current assets is occupied by the article «finished products», because the profit indicator depends on the volume of production and sale of products. The action of the National accounting regulations (standards) significantly affected the accounting aspects of agricultural enterprises, it became necessary to reflect business operations related to the production and sale of finished products in a new way.

Enterprises of Ukraine, regardless of their forms of ownership and types of activity, made the transition to national and international accounting standards, which led to certain problems of their application in practical activities. Among the main tasks and areas of study of the problems of accounting for finished products in accordance with national accounting standards, the following can be distinguished:

- study of setting and organization of accounting policy of the enterprise;
- determining the correctness of formation of production costs;
- investigation of the correctness of the assignment of assets to the composition of finished products in accordance with national standards;
- determination of the correctness of the formation of income from the sale of products;
- research on the documentation of business operations;
- study of accounting for production, receipt and sale of finished products;
- research on the correctness of displaying information in reporting.

The importance of this study is evidenced by the fact that finished products occupy a significant part of the working capital of enterprises.

Finished products are the result of production. For some enterprises it will be food products, for others – tables, chairs, for others – tractors, cars, etc. As for agricultural enterprises, their activities are related to the production and sale of agricultural products.

To reveal the purpose of the research, we will consider scientific approaches to substantiating the essence of the concept of «finished products». Modern economists interpret finished products as products that have been fully processed at a specific enterprise, have passed all stages of technical testing, acceptance, assembly in accordance with the terms of contracts with customers and meet standards or approved technical conditions, do not require further processing at this enterprise and are handed over to warehouse or transferred to the customer.

F.F. Butynets in his works, he described finished products as those that have completely finished processing, are fully equipped and have passed all the necessary tests [1, p. 324].

A similar opinion is held by V.L. Voronin and V.V. Chernysh, who also believe that finished products are allowed only when all the technological stages of its processing are completed, the products meet the established regulatory standards and are accepted by technical control in this farm [3, p. 75].

V.M. Glybko and O.P. Bushchan describe the finished product as a material result of the production activity of the enterprise, when the stocks acquire a new quality. In addition to the production of tangible products, the enterprise can perform work for other enterprises or provide services. In contrast to the one that is recorded as finished products in the accounting, this type of products is called «completed works and services». Therefore, the company's products consist of finished products and completed works and services [4, p. 112].

According to V.V. Sopko «finished products are a product (or semi-finished product), service, work that has undergone a production technological cycle in accordance with the specified standard norms of the final contract, is stored in storage and intended for sale to consumers» [10, p. 152].

Having analyzed the views of modern economists on the economic category of finished products, it can be confirmed that in the work of Oglobin A.A. finished products are considered from the point of view of the enterprise's costs for replenishment of production stocks for the future transformation into products that equalize the characteristic feature of the products, as part of the current assets of the enterprise.

Therefore, it should be noted that the authors can be grouped by groups based on the fact that each author focuses on a certain aspect of the term «finished product». Thus, F.F. Butynets and V.L. Voronina note the belonging of finished products to the finished production process and V.V. Chernysh; intended for sale – V.V. Sopko, T.S. Yarovenko and A.S. Chernova; compliance with standards – V.A. Voronina, V.V. Chernysh, V.V. Sopko, R.L. Khomyak, L. Slyusarchuk; definition of directions and terms of application – T.S. Yarovenko and A.S. Chernova, Slyusarchuk L.; sources and channels of reimbursement of the cost of production stocks for the production of finished products – M.I. Dolzhanskyi and A.M. Dolzhansky, A.A. Oglobin

Summing up all the definitions given by scientists, we can come to the conclusion that finished products are material products, works performed and services provided.

However, according to the Methodological recommendations for drawing up a capital account by institutional sectors of the economy, finished products include goods stored at enterprises that produce them and use them for supply to other institutional units and that are not intended for further processing at this enterprise [9].

Also, in Accounting Regulation (Standard) (P(S)BO) 9 «Inventories», products manufactured at the enterprise, in the institution, and intended for sale and meeting the technical and quality characteristics stipulated by the contract or other legal act are considered ready-made [7]. Accordingly, in regulatory documents, work and services are not included in the composition of finished products.

As for the services provided by the company or the works performed, we consider it appropriate to attribute them to the composition of production and reflect them on account 23 «Production». Our opinion is confirmed by the norms of P(S)BO 9 that for enterprises, expenses for the performance of unfinished works (services), in respect of which the enterprise has not yet recognized income, are unfinished production.

If we take into account the sectoral specificity of the functioning of agricultural enterprises, then their activity is related to the concept of agricultural activity, which includes a number of specific statements.

Thus, P(S)BO 30 «Biological assets» stipulates that agricultural activity is the process of managing biological transformations with the aim of obtaining agricultural products or additional biological assets. At the same time, biological transformations are the process of qualitative and quantitative changes in biological assets.

Note that a biological asset is an animal or plant that, in the process of biological transformations, is capable of producing agricultural products or additional biological assets, as well as bringing economic benefits in another way.

Agricultural products – an asset obtained as a result of separation from a biological asset, intended for sale, processing or intra-farm consumption. Additional biological assets are biological assets obtained in the process of biological transformations [8]. Variations in interpretations of the term «finished product» according to regulatory documents are shown in Table 1.

The instruction on the application of the accounting plan of accounts provides for the category «agricultural production products» (PSV), which includes products obtained from the company’s own plant-growing, livestock-breeding and industrial divisions, which are

intended for sale to the side and for other non-production consumption (issuance and sale to employees, transfers to the non-production sphere, for example, to kindergartens, canteens, etc.); products that are intended for consumption in livestock units as fodder or for fodder production in feedlots; products that are grown for livestock feeding, such as green mass, fodder, fruits, etc., as well as by-products and waste obtained during the bringing of marketable products and seeds to proper conditions; seeds and planting material, including seedlings, intended for planting and repairing own plantations [5].

We believe that the performed works (provided services) are not finished products, they are the actions of the performer, the result of which is aimed at meeting the needs of the customer regarding the change of the object.

Judging by the above material, the studied category is characterized from different positions. Therefore, this concept needs clarification from the point of view of systematic definition and practical use.

Yes, finished products, in our opinion, are part of stocks and agricultural products manufactured by the enterprise, which are intended for further sale, internal use and do not require technical and biological transformations.

The chart of accounts provides for two accounts for the accounting display of transactions regarding the availability and movement of finished products: 26 «Finished products» and 27 «Agricultural production products» [6].

Synthetic accounting of costs for production and output of crop production at the agricultural enterprise is kept on account 23 «Production», to which sub-account 231 «Crop production» is opened.

Sub-account 231 is active at the beginning of the year, active-passive during the year. Direct material costs, labor and other direct costs, as well as production overhead costs and losses due to defects are reflected in the debit of account 23 «Production» in the section of sub-accounts by cost accounting objects; on credit is receipt of products, completed works and services [5].

Production costs are the sum of the costs of live labor and labor embodied in the means of production at all stages of production. The classification of production costs determines the organization of accounting. To account for each production, the chart of accounts provides for a separate synthetic account, the debit of which reflects direct costs during the year, and the credit shows production output.

The organization of cost accounting by economic elements is of great importance for the preparation of

Table 1 – Variation of the interpretations of the term "finished products" according to accounting regulations

	<b>Definition of the term</b>	<b>Basis</b>
Finished products is	products, the processing of which is completed and which has passed testing, acceptance, and completion in accordance with the terms of contracts with customers and meets technical conditions and standards	Instructions regarding application of the Plan accounts of assets, capital, liabilities and business operations of enterprises and organizations
Finished products is	products manufactured at the enterprise are intended for sale and meet technical and quality characteristics, stipulated by the contract or other legal act	P(S)BO 9 “Stocks”
Finished agriculture products is	an asset obtained as a result of separation from a biological asset intended for sale, processing or domestic consumption	P(S)BO 30 “Biological assets”

financial statements. The list of costing items is established by the enterprise independently, based on the peculiarities of the technology and organization of production. On its basis, the forms of calculation calculations, estimates and internal reporting are compiled. All data on the production costs of the enterprise must be reflected in the Report on financial results (Report on total income).

The purpose of accounting for production costs is the formation of a system of interrelated indicators simulating the cost price. Therefore, constant control should be established over the method of assigning costs and forming the cost price.

Management accounting is not regulated by law, therefore there is no officially approved concept that would reproduce the content of the «production costs» category in the management aspect [11].

The accounting of business operations related to the production and sale of finished products is presented in Table 2.

According to P(s)BO 30 «Biological assets», agricultural products are assets obtained as a result of separation from a biological asset, intended for sale, processing or domestic consumption.

Agricultural products are recognized as assets if there is a possibility that the enterprise will receive economic benefits related to its use in the future, and its value can be reliably determined.

According to Accounting Regulation (Standard) 30 «Biological Assets», agricultural products during their

initial recognition are valued at fair value, reduced by expected costs at the point of sale or at production cost (or cost of direct costs) in accordance with Accounting Regulation (Standard) accounting 16 «Expenses». The initial recognition of agricultural products is reflected in the reporting period in which it is separated from the biological asset. Agricultural products, after their initial recognition, are assessed and reflected in accordance with Accounting Regulation (standard) 9 «Inventories».

The initial recognition of agricultural products is reflected in the accounting in the accounting period in which it is separated from the biological asset.

### Conclusions

The conducted studies confirm the importance of understanding the essence of the «finished products» category, since it occupies a significant share in the structure of the working capital of enterprises. For agricultural enterprises, ready-made products are not only products of processing (processing), brought to the proper state of use, but also products of agricultural production (grain, grain waste, straw, fruits, berries, milk, etc.). The variety of approaches to the essence of the researched category is caused by different interpretations in the current P(S) BO and other normative documents. In our opinion, the cited author's definition will influence the improvement of the methodical approach to the accounting of finished products and the objective display of information in the reporting of enterprises.

Table 2 – Business operations on accounting for the movement of finished products

#	The content of the business transaction	Correspondence of accounts	
		Debit	Credit
1.	Sold products of our own production	27	23
2.	Waste is written off after sorting and drying the grain	27	23
3.	Commercialized grain waste (used)	27	23
4.	Products are written off for sale	901	27
5.	Released agricultural products to employees of the enterprise at the expense of labor (in the amount of the cost of the products)	901	27
6.	Agricultural products were transferred free of charge to other organizations: - for the cost of the products	949	27
	- for the amount of VAT	949	641
7.	Own-produced seeds for sowing, own-produced fodder for feeding were written off	23	27
8.	Stockpiled balances discovered during the inventory	27	719
9.	A shortage of finished products was found to be written off	947	27
10.	Agricultural products were handed over for processing	206	27

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## DETERMINATION OF THE ACCOUNTING OF THE COST OF AGRICULTURAL PRODUCTION AND WAYS OF ITS REDUCTION

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### Key words:

cost price, internal control, production, crop production, material costs, mechanism, agricultural enterprises, organizational model of control

The article is devoted to a critical analysis of the current state of accounting of agricultural products through the prism of the inconsistency of the economic practices of agricultural enterprises with the existing and effective methodical provision of accounting in the agrarian sphere. Conceptual disagreements have been established, which are primarily related to the widespread use of customary law in the accounting of the agricultural sector and taking into account the specifics of land relations. The variety of approaches of modern scientists and economists to the essence of determining the cost of production is considered, analyzed and systematized. The theoretical basis for the recognition of agricultural products as an accounting object is outlined, the main categorical and conceptual apparatus is investigated. Progressive scientific and methodological developments and practical experience of using separate methodical techniques (estimation and calculation, accounts and double entry) for adaptation of domestic accounting practice to modern requirements, as well as further development and improvement of accounting of agricultural products, as the basis of information support for agricultural enterprise management, are summarized. Legislative documents and regulations regulating the accounting of production costs were studied. The basic principles of organization and methods of formation of material costs and cost of production were considered, an organizational model of control of material costs of an agricultural enterprise was formed, which reveals the main aspects: objects of control, information sources, methodological techniques, methods of summarizing results. The classification and grouping of types of costs by separate characteristics is the basis of accounting, analysis and calculation of the cost of production. The main reserves for reducing the cost of production of agricultural products are considered. Ways to reduce the cost of production have been studied and systematized, and a number of measures and proposals have been proposed to optimize costs and increase the profitability of the enterprise.

## ОСОБЛИВОСТІ ОБЛІКУ СОБІВАРТІ ВІРОБНИЦТВА СІЛЬСЬКОГОСПОДАРСЬКОЇ ПРОДУКЦІЇ ТА ШЛЯХИ ЇЇ ЗНИЖЕННЯ

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### Ключові слова:

собівартість, внутрішній контроль, виробництво, продукція рослинництва, матеріальні витрати, механізм, сільськогосподарські підприємства, організаційна модель контролю

Статтю присвячено критичному аналізу сучасного стану бухгалтерського обліку сільськогосподарської продукції через призму невідповідності господарської практики сільгосп підприємств існуючому та діючому методичному забезпеченню обліку в аграрній сфері. Встановлено концептуальні розбіжності, які пов'язані передусім з широким поширенням в обліку сільськогосподарської галузі звичаєвого права та з врахуванням специфіки земельних відносин. Розглянуто, проаналізовано та систематизовано розмаїття підходів сучасних науковців та економістів до сутності визначення обліку собівартості виробництва. Окреслено теоретичний базис визнання сільськогосподарської продукції як об'єкта бухгалтерського обліку, досліджено основний категоріально-понятійний апарат. Узагальнено прогресивні науково-методичні напрацювання та практичний досвід використання окремих методичних прийомів (оцінка і калькуляція, рахунки та подвійний запис) для адаптації вітчизняної облікової

практики до сучасних вимог, а також подальшого розвитку та вдосконалення обліку сільськогосподарської продукції, як основи інформаційного забезпечення управління сільгосп підприємством. Досліджено законодавчі документи та нормативні акти, які регулюють облік витрат виробництва продукції. Розглянуто основні засади організації та методики формування матеріальних витрат та собівартості продукції, сформовано організаційну модель контролю матеріальних витрат сільськогосподарського підприємства, яка розкриває основні аспекти: об'єкти контролю, інформаційні джерела, методичні прийоми, методи узагальнення результатів. Проведено класифікацію та групування видів витрат за окремими ознаками є основою обліку, аналізу та калькулювання собівартості продукції. Розглянуто основні резерви зниження собівартості виробництва сільськогосподарської продукції. Досліджено та систематизовано шляхи зниження собівартості продукції та запропоновано ряд заходів та пропозицій, щодо оптимізації витрат та підвищення прибутковості підприємства.

### Statement of the problem

The economic crisis that is present in our country requires the solution of many issues that arise in various sectors of the economy. The main tasks of economic development at the current stage are the comprehensive increase in production efficiency, as well as the occupation of unshakable positions of agricultural enterprises in the domestic and international markets.

Agriculture is one of the main areas of material production, which provides the population with food, and industry with raw materials. This vital branch is the basis of the agricultural sector of the country. At its expense, 75% of the population's demand for consumer goods is provided.

The main goal of agriculture is to preserve stability and further increase production of products with a constant reduction of labor, material and monetary resources for its production, comprehensive improvement of its efficiency in agriculture and animal husbandry, to meet the needs of the population in products provided for by consumption norms, and industry in raw materials, creating necessary reserves of agricultural products.

One of the most important indicators of the economic activity of agricultural enterprises is the cost price, since it shows exactly what it costs the economy to produce the corresponding type of product and how economically profitable it is in specific natural and economic conditions of management. Calculating the cost of production of crop production is extremely important, because crop production is one of the most important branches of production of most agricultural enterprises, without which the normal functioning of the livestock industry is impossible.

The urgency of studying the cost of agricultural products and ways to reduce it is that in the system of indicators characterizing the efficiency of production, one of the leading places belongs to the cost of products. It reflects all aspects of the production and financial and economic activity of the enterprise: the level of use of material, labor and financial resources, the quality of work of individual employees and management as a whole.

The main tasks of economic development at the current stage are the comprehensive increase in production efficiency, as well as the occupation of stable

positions of enterprises in the domestic and international markets. The cost of production reflects all aspects of the economic activity of enterprises, their achievements and shortcomings. A systematic reduction in the cost of agricultural products is one of the main conditions for increasing production efficiency. It has a direct impact on the amount of profit, the level of profitability, as well as on the budget.

### Analysis of recent studies and publications

Theoretical and methodological issues of crop production accounting and the organization of internal control of production costs at the enterprise, as well as the search for ways to reduce the cost of production are constantly in the field of view not only of scientists, but also of practicing accountants. Scientists such as G.V. Savytska, F.F. Butynets, E.V. Mnykh, Yu.S. Tsal-Tsalko, O.V. Isai, and V. Polishchuk dealt with the problem of reducing production costs and the cost of agricultural products. I.V. Lobastov, A.I. Moroz, V.P. Savyn, as well as other scientists. However, the analysis of a number of literary sources in this area allowed us to conclude that the question of the cost of agricultural products and ways to reduce it requires more thorough further research.

### Objectives of the article

The urgency of studying the cost of agricultural products and ways to reduce it is that in the system of indicators characterizing the efficiency of production, one of the leading places belongs to the cost of products. It reflects all aspects of the production and financial and economic activity of the enterprise: the level of use of material, labor and financial resources, the quality of work of individual employees and management as a whole. The purpose of the research is the analysis of the cost of production as an indicator of the production and economic activity of the enterprise, as well as the development of proposals for reducing costs under modern economic conditions.

### The main material of the research

Cost as an economic category appeared in 1912 in the works of A.P. Rudanovsky, M.P. Ter-Davydov and M.F. Von Ditmar. Before that, the terms: "own cost", "total cost", "own cost" were used, "production cost", "factory

cost”, “cost”, “actual cost”, “productive cost”, “factory cost”, “actual cost”, “full price”, “true price” [1, p. 47]. In the economic literature, the concepts of “cost of production” and “production costs” are constantly equated. L.V. Napadovska notes that the cost of production includes all the costs of production and sale of products. According to V.V. Sopko, all the various substances and forces of nature used in the production process for the production of a new labor product form the concept of cost, and the monetary expression of the amount of costs for the production of a specific product is defined as the cost price. The essence of the above-mentioned terms of the cost category comes down to its interpretation as a monetary expression of the enterprise’s costs for the production and sale of products. However, the difference between production costs and cost price still exists and consists primarily in the fact that cost price is reflected only in monetary form, and production costs can be expressed both in money and in kind. Moreover, the cost price includes separate costs that are part of the added product.

In our opinion, “product cost” is an independent economic category that expresses a complex system of economic relationships between business entities in the process of production and circulation of products. At the same time, the cost price as an indicator of economic activity shows the costs of a specific enterprise for the production and sale of a certain type of product in monetary form, which gives grounds for drawing conclusions about the efficiency of using the production potential of the relevant business entity.

The analysis of the cost of production of agricultural products both in general and of its individual types determines the need for appropriate information support. The main sources of information support for analysis of production costs include: financial and statistical reporting, primary documents, accounting registers, cost estimates, audit materials, results of cost analysis for previous periods, etc.

The cost price, as one of the main economic indicators, is used in planning, analysis and control, which form the general accounting and analytical management system of the production enterprise. When planning, the cost of costing objects in the process of economic activity under various alternative conditions is calculated in order to choose the most optimal option with the maximum result, as well as the formation of planned costings [12, p. 78].

Various types are used for planning purposes, accounting for the cost of production and analysis of its level. For example, M.I. Skrypnyk proposes to classify the cost according to the following characteristics: according to the complete coverage of costs (full, production, technological); for the needs of planning, accounting and analysis (individual, industry, company); depending on the time and purpose of the calculation (planned, actual, provisional (expected), normative); depending on the calculation time (annual, quarterly, monthly).

Taking into account the specifics of agricultural production, most often the cost price is divided into production and total, individual and industry, planned and actual. In order to more fully provide the management of

enterprises with information at all stages of management decision-making, it is proposed to supplement this classification. Yes, depending on the composition of costs that are included in the cost price, it is necessary to separate the cost price of finished products. And if the production cost is formed from costs directly related to the production of products, their finishing and transportation to the place of storage, and the full cost includes all costs related to the production, storage and sale of products, then to the cost of finished products will include production costs, operating and financial costs that can be directly attributed to a certain type of product (costs for interest on loans, interest and fees for financial leases, costs for storing products) [1, p. 46].

The need to allocate this type of cost of production is due to the fact that a significant share of crop production is not sold immediately and is stored in warehouses for a certain time, and the management of the enterprise needs information about the cost of production, which was at the time of its sale. Depending on the purpose and terms of determining the cost price, it is advisable to separate the normative cost price, which in modern economic literature is often considered as a remnant of the planned and administrative economy. However, the use of scientifically based standards for the use of resources when determining the cost is a guarantee of their more rational use. So, the cost classification, taking into account the proposed additions, looks like this (see Figure 1).

The individual cost price is determined at the enterprise level. Its level for individual types of products depends on local agronomic, technical, zootechnical, organizational, economic and natural conditions.

The industry cost price shows the total cost of production and sale of products of all enterprises of the industry, that is, it is the average cost price of products in the industry.

Zonal cost is the average cost of enterprises engaged in the production of homogeneous products in a certain territory.

The standard cost price consists of costs for production and sale of products, determined on the basis of current norms of resource costs.

The planned cost price is calculated before the beginning of the planned period, which makes it possible to organize control over the expenditure of funds, over the economic activity of enterprises and their production units during the planned period.

The actual cost price is calculated based on the results of economic activity on the basis of actual costs and the volume of products received. It makes it possible to determine the profit of the enterprise and the economic efficiency of the production of each type of product (works, services), to find the reasons for low profitability or unprofitability of certain industries, to determine reserves for reducing costs per unit of production.

The production cost consists of the costs associated with the production of products and their transportation to the place of storage. The cost of finished products includes production costs, operating and financial costs that can be directly attributed to a certain type of product. The full cost

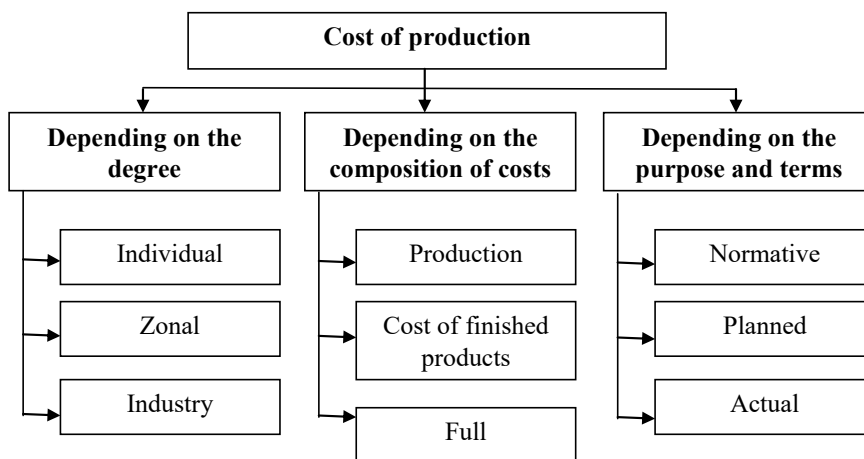


Fig. 1 – Classification of the cost of agricultural products

consists of the cost of finished products and the enterprise’s costs for sale.

According to the Methodological recommendations for planning, accounting and calculating the cost of production of agricultural enterprises, the cost of sold products is formed from the production cost of products that were sold during the reporting period, distributed general production and over-standard production costs. In turn, production costs include: direct material costs, direct labor costs, other direct costs, general production costs [7].

At the same time, administrative expenses, sales expenses, other operational and financial expenses, losses from equity participation and from extraordinary events are not included in the cost of manufactured and sold products and are covered by other sources. But according to the Instructions for filling out the state statistical observation form No. 50-sg “Main economic indicators of the work of agricultural enterprises”, the full cost of sold products consists of production cost, administrative costs, sales costs, other operating and financial costs, which can be reasonably attributed to production and sale of produced

agricultural products [6]. In this regard, we offer the following procedure for including costs in the types of cost depending on the composition of costs (Table 1).

The classification of expenses is of great practical importance. The grouping of types of costs by separate characteristics is the basis of accounting, analysis and calculation of the cost of production. In addition, the grouping of costs helps to find solutions in non-standard situations, in new areas of activity. Classification of costs is necessary for determining the cost of products and, accordingly, for pricing, and determining the unit cost of production. The grouping of costs is valuable not only for calculating the cost price, but also for establishing a certain relationship between them for the purpose of mutual control and coordination.

Material costs, wages, complex costs (costs of operation and maintenance of equipment, general production costs), as well as losses due to shortages and downtimes are subject to analysis [3, p. 37].

When conducting a factor analysis, it is necessary to take into account the production structure of the enterprise,

Table 1 – The procedure for including costs in cost types

Type of cost			Articles of expenditure
Full cost of sold products	Cost of finished products	Production cost	Salary expenses
			Seeds and planting material
			Fuel and lubricants
			Manure
			Means of protection of plants and animals
			Fodder
			Raw materials and materials (without returnable waste)
			Works and services
			Costs for repairing non-current assets
			Other expenses for maintenance of fixed assets
			Other expenses
			Unproductive costs
			Total expenditures
			Administrative expenses
		Other operating expenses	
Financial expenses			
	Selling expenses		



because its construction determines the components of control and analysis. The activity of the enterprise and its divisions, which is reflected in the system of indicators, most objectively characterizes the daily work results. The analysis is carried out in order to timely identify the causes of deviations from the planned parameters in order to make appropriate management decisions.

In order to achieve success in the future and not to waste extra time on identifying reserves for increasing the volume of products (services) and reducing the cost price for past periods, it is necessary to systematically conduct operational, intra-economic and comparative analysis.

Product cost analysis is carried out in the following stages:

- general assessment of the implementation of planned (estimated) tasks to reduce the unit cost of production, which includes: calculation of the total amount of fixed costs for the production of all products;
- calculation of variable costs per unit of production;
- calculation of unit cost of production;
- comparison of the actual cost with the planned cost, detection of deviation and the influence of factors on this deviation;
- study of individual costing articles of a certain type of product;
- decoding of material costs is an analysis of the costs of certain types of materials that are spent on the production of a certain type of product [4, p. 255].

In general, the change in the unit cost of production is influenced by such factors as: a change in the volume of production; change in the amount of fixed costs; change in production volume; change in the amount of variable costs. The most important method of identifying unused cost reduction reserves is comparative analysis. Clarifying the reasons for failure to implement the cost reduction plan helps management find the right solution for mobilizing unused reserves.

The main reserves for reducing the cost of production are an increase in the volume of production due to more efficient use of the company's production capacity; reduction of production costs by increasing the level of labor productivity, saving the use of raw materials, materials, electricity, fuel, equipment, preventing non-production costs, etc.

An increase in production volumes and a decrease in the cost of production of an agricultural enterprise can be

achieved by increasing yields, which, in turn, is possible by increasing costs per 1 ha. First of all, this concerns the increase in the specific weight of fertilizer costs. Optimizing the size of sown areas makes it possible to reduce the cost of crop production as much as possible.

In addition, optimization of the level of cost of production is an important condition for improving the financial result of the enterprise and ensuring expanded reproduction, which involves increasing the production of agricultural products and reducing the cost of labor and production resources per unit.

Taking this into account, the following measures can be taken to optimize costs and increase the profitability of the enterprise:

- 1) increasing the technical level of production: the introduction of new, progressive technology, the use of new types of raw materials and materials;
- 2) using innovative technology and equipment; automation and mechanization of production processes;
- 3) improvement of the organization of production and work due to changes in forms and methods of work, improvement of the management apparatus, reduction of its costs, as well as reduction of transport costs;
- 4) changing the volume and structure of products, reducing the material and labor intensity of products;
- 5) improvement of the use of natural resources, use of cheaper materials, their reuse, waste-free production technologies;
- 6) studying the causes of defects and reducing cost by reducing losses from defects and other non-productive costs, which will make it possible to reduce and more rationally use production waste.

### Conclusions

In market conditions, the role of the cost price of products and the formation of prices for products increases significantly. Effective management of the cost of production should be focused on ways to reduce it, and for this it is necessary to choose the best method of displaying costs in accounting, which creates the necessary information base for carrying out factor analysis of costs, which will allow it to be carried out in an operational manner. So, the scientific result of this study is the systematization of ways to reduce the cost of production, and the prospect of further scientific research is the development of information and analytical support for estimating the cost of production.

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## MANAGEMENT OF THE EFFICIENCY OF THE USE OF THE PRIVATE ASSETS OF ENTERPRISES OF THE AGRICULTURAL SECTOR AND DETERMINATION OF THE DIRECTIONS OF ITS INCREASE

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### **Key words:**

fixed assets, efficiency of use, material assets, accounting, analysis, agriculture, management

The article examines and analyzes the works of domestic scientists who studied the problems of effective use of fixed assets. Information about the concept of «main assets» is summarized and their features are indicated. It has been proven that the continuous process of functioning of any enterprise is achieved thanks to scientific and technical progress, and the main means are its material embodiment. It is noted that the level and rates of growth of agricultural products, increasing the economic efficiency of production in agriculture depend on the industry's provision of basic resources. The low supply of the economy with basic means leads to untimely execution of the most important technological operations, an increase in labor intensity and an increase in material and monetary costs for the production of a unit of production. It was determined that increasing the efficiency of the use of fixed assets of agricultural enterprises in Ukraine, first of all, requires the existence of a long-term action plan, which should be aimed at expanding the material and technical composition and improving the structure of fixed assets, increasing the profitability of their use. The indicators that characterize the efficiency of the use of fixed assets are determined and the characteristics of each of them are given. The relationship between the rate of return on capital and capital intensity is indicated. The conditions affecting the efficiency of the use of fixed assets at agricultural enterprises have been determined. It was revealed what data are used to calculate the production capacity of the enterprise and branches, planning the production program, reserves for increasing production on equipment, drawing up the equipment balance sheet. It has been established that the study of the state and use of the main means of production of agriculture makes it possible to carry out effective management of the main means of production, which will ensure the stable development of the industry as a whole. The state and efficiency of use directly affect the final result of the economic activity of enterprises in the agrarian sector and contribute to the improvement of all indicators: the growth of labor productivity, the increase of production output, and the reduction of the cost price. It has been proven that the effective use of fixed assets contributes to the acceleration of turnover of current assets. The better the fixed assets are used, the faster the current assets go through the production phase and the less need there is for their increase. Directions for improving the efficiency of the use of fixed assets are given. Groups of reserves, as well as measures of extensive and intensive improvement of the efficiency of the use of fixed assets, were considered. It has been revealed, thanks to which the development rates and increase in production efficiency are achieved.

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## УПРАВЛІННЯ ЕФЕКТИВНІСТЮ ВИКОРИСТАННЯ ОСНОВНИХ ЗАСОБІВ ПІДПРИЄМСТВ АГРАРНОГО СЕКТОРУ ТА ВИЗНАЧЕННЯ НАПРЯМІВ ЇЇ ПІДВИЩЕННЯ

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У статті досліджено та проаналізовано праці вітчизняних науковців, які вивчали проблеми ефективного використання основних засобів. Узагальнено інформацію про поняття «основні засоби» та зазначено їх особливості. Доведено, що безперервний процес функціонування будь-якого підприємства

**Ключові слова:**

основні засоби,  
ефективність використання,  
матеріальні активи, облік,  
аналіз, сільське господарство,  
управління

досягається завдяки науково-технічному прогресу, а основні засоби є його матеріальним втіленням. Зазначено, що рівень і темпи зростання сільськогосподарської продукції, підвищення економічної ефективності виробництва в сільському господарстві залежать від забезпеченості галузі основними засобами. Низька забезпеченість господарства основними засобами призводить до несвоєчасного виконання найважливіших технологічних операцій, росту трудомісткості і збільшенню матеріально-грошових витрат на виробництво одиниці продукції. Визначено, що підвищення ефективності використання основних засобів сільськогосподарських підприємств в Україні, перш за все, передбачає наявність довгострокового плану дій, що має бути спрямований на розширення матеріально-технічного складу та вдосконалення структури основних засобів, підвищення рентабельності їх використання. Визначено показники, які характеризують ефективність використання основних засобів та наведена характеристика кожного з них. Зазначено залежність між показником фондівдачі та фондомісткості. Визначено умови, що впливають на ефективність використання основних засобів на сільськогосподарських підприємствах. Виявлено, які дані використовують для розрахунку виробничої потужності підприємства і галузей, планування виробничої програми, резервів підвищення виробництва на обладнанні, складання балансу обладнання. Встановлено, що дослідження стану і використання основних виробничих засобів сільського господарства дає можливість здійснювати ефективне управління основними виробничими засобами, що дозволить забезпечити стабільний розвиток галузі в цілому. Стан і ефективність використання безпосередньо впливають на кінцевий результат господарської діяльності підприємств аграрного сектору і сприяють поліпшенню всіх показників: зростанню продуктивності праці, збільшенню випуску продукції, зниженню собівартості. Доведено, що ефективне використання основних засобів сприяє прискоренню оборотності оборотних засобів. Чим краще експлуатуються основні засоби, тим швидше оборотні засоби проходять фазу виробництва і тим менше потреба в їх прирості. Наведено напрями підвищення ефективності використання основних засобів. Розглянуто групи резервів, а також заходи екстенсивного та інтенсивного підвищення ефективності використання основних засобів. Виявлено, завдяки чому досягається забезпечення темпів розвитку та підвищення ефективності виробництва.

**Statement of the problem**

Depending on one or another organizational and legal form, enterprises have basic means that characterize its material base and determine the technical level of production. The general result of the enterprise's activity depends on how effectively the means of labor available at the enterprise are used, on their condition, and is an important prerequisite for the development of the agricultural sector.

Today, one of the urgent tasks of modern enterprises that have expensive equipment at their disposal is the need to ensure its safety and efficient operation. Important in solving this task is the implementation of a management system for fixed assets, which make up the main part of the production process and allow to increase the production capacity of the enterprise due to the use of modern information technologies, without resorting to the purchase of new equipment. Today, there are a large number of indicators of the efficiency of the use of fixed assets, methods of assessing their condition and models. In order to solve the problem of effective management of fixed assets, we suggest considering directions for managing the efficiency of the use of fixed assets at agricultural enterprises.

**Analysis of recent studies and publications**

The subject of in-depth research by domestic and foreign economists is the theoretical aspects of the essence of fixed assets, aspects of formation, increasing the efficiency of their use and their reproduction, since the activities of enterprises are inextricably linked with their availability, condition and use for the production process. The problems of effective use of fixed assets were studied in their works by such scientists as I.A. Blank [1], V.M. Boyko, P.G. Vashkiv [2], F.F. Butynets [3], N.V. Dovhalyuk [4], I.O. Budishcheva, I.G. Ustinova [5], A.G. Zahorodniy, and G.L. Voznyuk [6] and others.

**Objectives of the article**

The purpose of the article is to determine the efficiency of the use of fixed assets of agricultural enterprises and to identify directions for its improvement, since thanks to the effective use of fixed assets and the study of factors influencing its change, the competitiveness of the enterprise is ensured, its functioning and the production process are supported.

**The main material of the research**

The economic essence of fixed assets is that they repeatedly participate in the production process, transfer

part of their value to finished products; in the process of selling products, depreciation of fixed assets accumulates at the enterprise in the form of a depreciation fund, the funds of which are directed to the restoration of existing (current and major repairs) or the purchase of similar new types (investments) of fixed assets [7].

Each of the scientists interpreted the concept of «main means» in their own way in their works. Table 1 shows the characteristics of fixed assets:

Summarizing the interpretation of scientists, we can come to the conclusion that fixed assets are tangible assets that the enterprise keeps for the purpose of using them in the process of its activity, the expected period of operation of which is more than one year (or the operating cycle, if it exceeds one year), and its the cost is transferred to the finished product in parts.

The continuous process of operation of any enterprise is achieved thanks to scientific and technical progress, and fixed assets are its material embodiment, therefore, analyzing their condition and efficiency of use is one of the most important aspects. The level and rates of growth of agricultural products, increasing the economic efficiency

of production in agriculture depend on the industry's supply of basic resources. The low supply of the economy with basic means leads to untimely execution of the most important technological operations, an increase in labor intensity and an increase in material and monetary costs for the production of a unit of production [8].

Increasing the efficiency of the use of fixed assets of agricultural enterprises in Ukraine, first of all, requires the existence of a long-term action plan, which should be aimed at expanding the material and technical composition and improving the structure of fixed assets, increasing the profitability of their use.

Special indicators are used to analyze the provision of the enterprise and the state of fixed assets, to determine the effectiveness of their use. The main ones are: return on capital, capital intensity, capital adequacy and profitability of fixed assets. In the table 2 gives the characteristics and calculation formulas for each indicator of availability, condition and efficiency of the use of fixed assets:

It should be noted that under normal operating conditions of the enterprise, the return on capital tends to increase, and the capital intensity tends to decrease.

Table 1 – Characteristics of fixed assets

Source	Definition
Blank I.A. [1]	Fixed assets are a set of material assets in the form of labor tools, which repeatedly participate in the process of production and commercial activity and transfer their value to products in parts.
Boyko V.M., Vashkiv P.G. [2]	Fixed assets are a set of means of labor that function in the field of material production in an unchanged natural form for a long time and transfer their value to a newly created product in parts as they wear out
Butynets F.F. [3]	Fixed assets are tangible assets that the company holds for the purpose of using them in the process of production or supply of goods, provision of services, leasing to other persons or for the implementation of administrative and socio-cultural functions, the expected period of useful use (exploitation) of which is more than one year (or operating cycle if it exceeds one year).
Dovhalyuk N.V. [4]	Fixed assets are the tangible assets of an enterprise of any form of ownership, which are repeatedly used in production cycles, retain their natural form, transferring their value to manufactured products in parts, the term of which exceeds one year (or operating cycle), intended for operation by the enterprise itself, for leasing to other individuals or legal entities, which in aggregate makes it possible to receive economic benefits for the enterprise.
Zahorodniy A.G., Voznyuk G.L. [6]	Fixed assets are material assets that the company forms with the purpose of using them in the process of production or supply of goods, provision of services, leasing to other persons or for the implementation of administrative and socio-cultural functions and the expected useful life of which exceeds one year.

Table 2 – Indicators of the condition and efficiency of the use of fixed assets

Indicator	Characteristic	Calculation formula
Fund return	It characterizes the efficiency of the use of fixed assets. It reflects the amount of manufactured products per one hryvnia of fixed assets	$V_p / F_k$
Fund capacity	It characterizes the security of the enterprise's fixed assets	$F_k / V_p$
Armed forces	Shows the amount of fixed assets per employee	$F_k / Ch$
The coefficient of real value of fixed assets in the property of the enterprise	Reflects the specific weight of the residual value of fixed assets in the total value of the enterprise's property	$F_z / M$
Coefficient of wear of fixed assets	Shows the degree of depreciation of fixed assets	$Z_o / F_k$
Coefficient of suitability of fixed assets	Shows part of fixed assets suitable for operation	$1 - K_z$
The rate of renewal of fixed assets	Shows the share of introduced fixed assets in their total cost	$F_u / F_k$
The coefficient of disposal of fixed assets	It characterizes the intensity of disposal of fixed assets	$F_v / F_k$
The coefficient of growth of fixed assets	Shows the degree of increase in fixed assets in the reporting period compared to the previous period	$(F_v - F_u) / F_k$
Profitability of fixed assets	Determines the degree of use of fixed assets	$P_b / F_k \times 100\%$

**Note:**  $F_k$  is the balance sheet value of the main means of production;  $V_p$  – cost of manufactured products;  $F_z$  – the residual value of the main means of production;  $M$  – the value of the enterprise's property;  $Z_o$  – the amount of wear and tear of the main means of production;  $Ch$  – average number of employees;  $F_u$  – the cost of the main production assets introduced;  $F_v$  – the cost of removed main production assets;  $K_z$  – coefficient of wear of the main means of production;  $P_b$  – is the total profit of the enterprise.

For effective management of fixed assets, their evaluation is of great importance. In the practice of accounting and analysis of fixed assets, in-kind and monetary forms are used. When evaluating fixed assets in kind, the number of machines, their productivity, power, the size of production areas and other quantitative values are established. These data are used for calculating the production capacity of the enterprise and industries, planning the production program, reserves for increasing production on equipment, drawing up the equipment balance sheet. For this purpose, inventory and certification of equipment, accounting for its disposal and receipt are carried out. Objects of fixed assets form the basis of any production, in the process of which products are created, services are provided and work is performed.

The efficiency of agricultural production is largely determined by the structure of the main means of production. The activity of agricultural enterprises is possible only if the objects of fixed assets form a complex, organized, coordinated structure as a whole.

The study of the state and use of the main means of production of agriculture makes it possible to carry out effective management of the main means of production, which will ensure the stable development of the industry as a whole. The state and efficiency of use directly affect the final result of the economic activity of enterprises in the agrarian sector and contribute to the improvement of all indicators: the growth of labor productivity, the increase of production output, and the reduction of the cost price.

The efficiency of the use of fixed assets is based on the strategy of machine-technological support for the production of agricultural products and gradual technical rearmament and increasing the competitiveness of products. The introduction of new intensive resource-saving, soil-protecting technologies makes it possible to increase crop yields, animal productivity, increase labor productivity, but at the same time minimize fuel and fertilizer consumption. However, the production potential of agriculture continues to decline. This is evidenced by the high degree of wear and tear of the main production facilities, the significant exceeding of the standard service life of the equipment, and the reduction of the volume of investments in fixed capital [7].

Agriculture is a fairly capital-intensive sector of the economy. Due to the brevity of the working period of its active funds and the seasonality of production, it cannot function properly and develop in the absence of the necessary investments.

The conditions of the market economy encourage the constant search for reserves to increase the efficiency of the use of fixed assets. More complete and rational use of fixed assets and production capacities of the enterprise contributes to the improvement of all its technical and economic indicators: increase in labor productivity, increase in return on capital, increase in production output, reduction in its cost price, savings in capital investments. Effective use of fixed assets helps to accelerate the turnover of current assets. The better the fixed assets are used, the faster the current assets pass the production phase and the less need there is for their increase [2, 405].

Reserves for improving the efficiency of the use of fixed assets can be divided into two groups – intensive and extensive.

The intensive directions of increasing the efficiency of the use of fixed assets include the automation and mechanization of production, technical rearmament, modernization of the enterprise, improvement of technological processes, reduction of the duration of the operational cycle of production, the use of progressive forms of organization and production management; increasing the educational and qualification level of industrial and production personnel [9].

Extensive directions for increasing the use of fixed assets include the following: reduction of equipment downtime due to timely provision of raw materials, materials, semi-finished products, etc., improvement of the quality of equipment repairs and maintenance; increasing the number of machine-changes of equipment operation and reducing the number of non-working equipment, introduction of additional equipment [9].

It should be noted that one of the most effective directions for improving the efficiency of the use of fixed assets is their renewal. Today, Ukrainian enterprises face a number of problems regarding the introduction of new equipment, since the domestic industry is in a rather difficult financial situation, which has affected the increase in the number of unprofitable enterprises. In crisis conditions, to solve these problems, enterprises need effective support from the state, namely the establishment of export-import relations, the creation of a favorable investment climate in the country.

Ensuring the pace of development and increasing the efficiency of production is achieved under conditions of intensification of reproduction and rational use of existing fixed assets and production capacities of enterprises. These processes contribute to the constant maintenance of the appropriate technical level of each enterprise, and also allow to increase the volume of production without additional investment resources, to reduce the cost of products due to the reduction of specific depreciation and costs of maintenance of production and its management, to increase return on capital and profitability.

### Conclusions

Therefore, based on the above, it can be stated that increasing the efficiency of the use of fixed assets is one of the leading tasks of agricultural enterprises and is a significant reserve for optimizing production, which consists in achieving certain results at the appropriate level of development of productive forces compared to labor costs used for creation of products. Areas of increasing the efficiency of the use of fixed assets must be chosen independently by the enterprise, based on its condition, functioning and the influence of external and internal environmental factors.

The work on managing the efficiency of the use of fixed assets should be carried out regularly and in stages, which involves assessing the state of fixed assets, developing a long-term action plan taking into account the situation at the enterprise at the time of the analysis, monitoring timeliness and, if necessary, adjusting the strategy chosen by the enterprise.

In order for the use of fixed assets to be economically profitable, it is necessary not only to monitor its technical condition, but also to attract specialists, to study production markets, to attract specialists from the marketing department, to increase the level of production specialization.

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# THEORETICAL AND APPLIED ASPECTS OF ECONOMIC PROCESSES IN UKRAINE AND IN THE WORLD ECONOMY

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## THE STRATEGY DIRECTION FOR THE DEVELOPMENT OF UKRAINIAN-TURKISH RELATIONS IN CONTEXT OF UKRAINE'S PRIORITY TASKS

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**Key words:**

economy, Turkey, Ukraine, globalization, integration

Modern foreign economic relations play an important role in the process of globalization, which directly affects the development of the state and its subjects, which, in turn, shapes the organization, management and directions of foreign trade. The economy of Ukraine during the war is in a state of stagnation, which becomes a problem that will need to solve after the end of the hostilities. Ukraine and Turkey are close neighbours and remain strategic partners in many fields, including military and maritime. Turkey was at least one of the ten countries to which Ukraine exports. A free trade zone has created, which will expand the possibilities of Ukrainian export and import from the Republic of Turkey. Therefore, the study of Ukrainian-Turkish economic and political relations is relevant today. Now the Ukrainian economy is in a state of stagnation. In the post-war period, we will need to establish or restore economic relations with countries. Ukraine and Turkey are close neighbours and strategic partners in many areas of industry and trade. Cooperation with the Republic of Turkey (TR) is of particular importance for Ukraine's self-assertion at the regional and global levels. In recent years, Turkey has been one of the largest trading partners of Ukraine, and the turnover has had a stable tendency to increase. Turkey was the least among the top ten countries where Ukraine exports. A free trade zone has created, which will expand the possibilities of Ukrainian exports and imports from the Republic of Turkey. Therefore, the study of Ukrainian-Turkish economic and political relations is currently relevant. Bilateral relations between Ukraine and Turkey based on the principles of equality and distinguished by their flexibility. Both countries have no mutual claims, unlike other countries neighbouring Ukraine. Regional cooperation is especially important, because these countries are regional leaders in the Black Sea-Caspian region. Cooperation in the defence industry plays an important role: there is a tendency to form new agreements. The object of the study is the foreign economic activity of the countries. The subject of the study is the strategic directions of the development of Ukrainian-Turkish foreign economic relations. The purpose of the article is to investigate and summarize the strategic directions of Ukraine's development from the Republic of Turkey. The practical significance of the obtained results of the diploma research consists in the development of scientific and practical recommendations for improving the foreign economic relations of Ukraine and Turkey in the conditions of the expansion of the Middle Eastern market.

## СТРАТЕГІЧНІ НАПРЯМКИ РОЗВИТКУ УКРАЇНСЬКО-ТУРЕЦЬКИХ ВІДНОСИН У КОНТЕКСТІ ПРІОРИТЕТНИХ ЗАВДАНЬ УКРАЇНИ

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**Ключові слова:**

економіка, Туреччина, Україна, глобалізація, інтеграція

Сучасні зовнішньоекономічні зв'язки мають важливу роль у процесі глобалізації, що безпосередньо впливає на розвиток держави та її суб'єктів, що в свою чергу, формує організацію, управління і напрями ЗЕД.



Економіка України у воєнний час знаходиться у стані стагнації, що постає проблемою, яку потрібно буде вирішувати після закінчення воєнних дій. Україна і Туреччина близькі сусіди та досі залишаються стратегічними партнерами у багатьох галузях, зокрема військової та морської. Туреччина була як мінімум однією з десяти країн, куди експортує Україна. Створено зону вільної торгівлі, що розширить можливості українського експорту та імпорту з Турецької Республіки. Тому дослідження українсько-турецьких економічних і політичних відносин сьогодні є актуальним.

### Formulation of the problem

The Middle East is a promising region, but it needs increased attention, which Ukraine has not paid to it. Therefore, the results of relations with these countries are far from optimistic. The absence of a unified foreign policy strategy of our country in this direction and a high level of competition, the absence of a coordinated order of activities of state authorities united by one idea, the definition of timely and non-specific tasks for responsible persons. As a result, Ukrainian diplomacy have inhibited and delayed, which reduces Ukraine's competitiveness in the region. Both political and economic interests of the country are affected.

Now the Ukrainian economy is in a state of stagnation. In the post-war period, we will need to establish or restore economic relations with countries. Ukraine and Turkey are close neighbors and strategic partners in many areas of industry and trade. Cooperation with the Republic of Turkey (TR) is of particular importance for Ukraine's self-assertion at the regional and global levels. In recent years, Turkey has been one of the largest trading partners of Ukraine, and the turnover has had a stable tendency to increase. Turkey was the least among the top ten countries where Ukraine exports. A free trade zone has been create, which will expand the possibilities of Ukrainian exports and imports from the Republic of Turkey. Therefore, the study of Ukrainian-Turkish economic and political relations is currently relevant.

Bilateral relations between Ukraine and Turkey based on the principles of equality and distinguished by their flexibility. Both countries have no mutual claims, unlike other countries neighboring Ukraine. Regional cooperation is especially important, because these countries are regional leaders in the Black Sea-Caspian region. Cooperation in the defense industry plays an important role: there is a tendency to form new agreements.

Among the countries of the Middle East, Ukraine considered only Turkey as a key economic partner and strategic ally.

Turkey and Ukraine carried out active trade and economic cooperation in many areas. At the same time, Turkey itself acts as a "hub" for the development of Ukraine with the countries of the Middle East, Africa

and cooperation with international organizations. Turkey actively participates in tenders for the construction of infrastructure facilities in Ukraine, took an active part in "big construction".

Highlighting previously unresolved parts of the overall problem. At the current stage, it is important to find out more deeply the specifics of the development of relations between the Republic of Turkey and Ukraine, and to define priority industries.

### Formulation of the goals of the article (statement of the task)

The purpose of the article is to research and generalize the strategic directions of the development of Ukraine from the side of the Republic of Turkey.

### Presentation of the main research material

According to the state statistics of Ukraine [2], the amount of FDI in the economy of Ukraine for the last year amounted to 64 million dollars USA. Turkey ranks 15<sup>th</sup> among foreign investors (Table 1).

Against the background of the negative trend of investment inflows from Ukraine in 2016–2018, the volume of Turkish capital increased. According to official data, Turkey's credit ranks 14<sup>th</sup> among foreign investors with an indicator of almost 0.5 billion dollars. USA. According to experts, the total volume of Turkish investments in Ukraine, taking into account the resources attracted through a third country, amounts to about 3 million hryvnias, throughout the entire territory of the United States. The importance of Turkey as an investor have confirmed and included in the National Investment Board of the main executive company "Turkcell Iletisim Hizmetleri A.S.". The neighborhood with Ukraine (with available labor resources and raw materials), its territorial and trade proximity to the EU, the combination of Turkish technical and technological, managerial and marketing experience attract Turkish corporations to the Ukrainian "greenfield investment" sector. Although they have a more positive impact on the development of the recipient's economy compared to "brownfield", the largest part of which is accumulated in professional, scientific and technical activities and trade.

Table 1 – Volumes of Turkish FDI in the economy of Ukraine

Investments/ Years	2015	2016	2017	2018	2019	2020	2021
FDI	317.5	326.6	263.2	333.3	454.7	561.5	615.2
Equity instruments	173.6	211.4	190.2	240.8	282.8	255.6	296.2
Debt instruments	143.9	151.1	73.1	92.5	172	305.9	320.1

Source: compiled from data [1]

Ukraine is more interested in the participation of Turkish investors in infrastructure projects (roads, road infrastructure, energy infrastructure, communal facilities, airports, hotels, destroyed buildings in Luhansk and Donetsk regions), especially since Turkish investments are concentrated in the construction sector.

Before the beginning of the full-scale invasion of the Russian Federation, 700 people of Turkish companies worked in Ukraine. Turkish construction companies have already built more than 200 in the region. The total cost of the project is more than 8 billion dollars. USA, including roads, trams, cars, hotels and shopping centers. Onur Road Company – the most famous Turkish construction company in Ukraine – the second place in terms of turnover among all road construction companies in the country, worked on large sections of Kyiv-Odesa roads. Lifecell, the third largest telephone network operator in Ukraine, which companies belong to the telecommunications giant Turkcell, also the largest Turkish business in Ukraine [2].

Experts believe that Ukraine's bet on Turkey as a strategic ally made correctly, because only through TR Ukraine has a chance to create a certain geopolitical balance in the Middle Eastern region.

The countries of the Middle East are interested in Ukrainian raw materials and food products (mainly metallurgical and agricultural). Arab countries are also interested in cooperation with us in the field of military-technical cooperation and aircraft construction. In addition, we also have a solid scientific base, technology, fertile land and skilled personnel. The Middle East region, which has great economic potential, was not defined as a priority area of Ukraine's foreign policy, with the exception of Turkey. Interest in him on the part of the Ukrainian authorities is episodic. In most of the strategic documents defining Ukraine's foreign policy, the Middle East is still not mentioned, which indicates the absence of a strategic dimension in relations with these countries. This, in turn, affects the work of Ukrainian diplomats in the Middle East region, leads to the untimeliness of their rotations, underfunding of embassies and the setting of non-specific tasks.

The Middle Eastern region is interesting for Ukraine not only as a market for metal and agricultural products. This opens up opportunities to diversify the supply of Arab energy resources, as well as interesting and significant investment potential. In countries such as Egypt, Iraq, Iran, Qatar, Kuwait, the United Arab Emirates, Saudi Arabia, the main industries are oil, petrochemical and gas production. In the conditions of the Ukrainian crisis, this region could become an invaluable partner for us.

For Ukraine, taking into account the rapid change in the world situation and the emergence of new regional and global interests, as well as the establishment of new priorities in the foreign policy course of TR, the activation and development of relations with TR:

- Development of existing relations and their transfer to the strategic level, revival of a priority collaborate in the Black Sea region;
- Cooperation using experience and support on the way to European structures and cooperation with Euro-Atlantic structures;

- Creation of prerequisites for cooperation and standardization of sources and methods of energy supply, determination of Ukraine's active role in the formation of a new system of transport communications in the European space and the transit of energy carriers from the Middle East and the Caspian Sea to Europe.;

- Investments in Ukraine, significant investments on favorable terms and investments in Turkey, opening sales for many types of the possible market of Ukrainian offers, including military-technical, agricultural and other types of products;

- Creation of a new security system in the waters of the Black, Caspian and Mediterranean seas, cooperation in resolving regional conflicts;

- The use of the Crimean Tatar factor as a motive for strengthening cooperation in the field of development of the Crimean peninsula, solving the situation of the Crimean Tatars and developing civil dialogue;

- Promotion of Ukrainian economic projects with the cooperation or support of TR in the countries of Asia, the Balkans, the Middle and the Middle Boom;

- Cooperation with the aim of entering the markets of third countries, such as Iraq, Ukraine and Turkey, cooperation in the following directions is possible:

- a) Construction and supply works (cooperation with a Ukrainian company can resolve the situation in Ukrainian projects and similar ones against offers in tenders);

- b) Reconstruction of old cement plants;

- c) For production, rental of enterprise products (petrochemicals, fertilizers, etc.);

- d) Partnerships for joint participation as general contractors or subcontractors in international tenders;

- e) Research of compensatory loan funds of Ekimbank and other international credit organizations with the aim of using them for export to Iraq or for economic enterprises;

- f) Creation of a joint database for the exchange of information on the reconstruction of Iraq and tenders and companies;

- g) Contribution to the reconstruction of power plants, oil pipelines and gas pipelines;

- g) Deliveries from Ukraine of basic goods, gas pipelines, oil pipelines, fittings and metal structures, cement, wood, glass, etc.;

- h) Use of Ukrainian transport aviation;

- i) Deliveries of Ukrainian-made tankers for the transportation of gray oil. In addition, the possibility of leasing Ukrainian railway rolling stock to Turkish companies was excluded.

A promising direction of further development is possible, given the significant experience of the Turkish side in this area.

It is in Ukraine's interest to continue cooperation with Turkey in the humanitarian sphere. It should be noted that as of February 24, 420,000 people are producers of Ukraine in Turkey, and about 40,000–50,000 in their territory [1]. Due to the large number of migrants from Syria, Turkey was unable to organize serious financial assistance to Ukrainian refugees.

The following steps considered appropriate for the development of the strategic partnership between Ukraine and Turkey:

1. Obtaining the OKT program to create the possibility of providing Turkey with autonomous trade preferences for Ukraine.

2. Regarding the economic consequences of the war in Ukraine and the long process of post-war restoration of cooperation with the Turkish side:

– Vulnerable sectors of the economy;

– The possibility of compensation for the application of the customs tariff of Ukraine due to the extraordinary business situation in Ukraine and the need to restore export-oriented sectors of the Ukrainian economy.

3. Develop with the Turkish side a set of measures necessary to ensure stable and safe shipping in the Black Sea region (especially in the field of production of sea traps of Ukrainian products);

4. Promotion of the image of Ukraine in the Turkish media, reflection of real events taking place in Ukraine against the background of the collapse of Russia, total war against the Ukrainian people, aimed at Russian border propaganda and narrative;

5. Open a business representative office of Ukraine in Turkey to support Ukrainian business;

6. To propose a plan for the creation of joint enterprises of Ukrainian and Turkish companies in the field of agriculture, industry, tourism, etc.

In recent years, Ukrainian-Turkish cooperation in the field of the defense-industrial complex has come to the fore, which is noticeably developing with the same prospects for production and cooperation thanks to the common interest of the state, the possibility of financing, the exchange of experience and high technologies on mutually beneficial terms. Both countries need to calculate the current security situation in the region and balance their interests, because Turkey focused on strengthening its own defense capabilities by “taming” foreign technologies on the border of the West and the Russian Federation, and Ukraine is working to preserve its potential in the field of

the defense complex through a partnership with Turkey. Ukraine should also consider the risks of tensions between its strategic partner the US and Turkey.

Today, Ukrainian companies cooperate with Turkish companies in such directions as: supply of a wide range of spare parts and components for weapons and military equipment; overhaul of helicopters, training and professional development of specialists; equipping modules of Turkish-made combat aircraft with missile launchers with cover; production and procurement of turboprop engines; production of active protection complexes. Ukrainian industry actively cooperates with such Turkish companies as “Aselsan”, “Rocketsan”, “Havelsan”, “MKEK”, “Delta Defense”, “Baykar Makina” and many others. In 2019 and the first year of 2020, the total export of Ukrainian goods with military recognition to Turkey is 40 million dollars. USA [1]. Instead, in recent years, Ukraine has invested heavily in the purchase of Turkish drones (almost \$70 million) and military radio stations on credit from the Turkish side (several hundred million euros).

### Conclusions

Ukrainian-Turkish relations have been developing with a positive trend in recent years. There is a lot of promising cooperation in the defense sphere, which is currently helping Ukraine. Turkey is a promising partner for Ukraine, in 2018, it ranked third among trading partners of Ukraine in the export of goods and services. The Free Trade Agreement signed in 2022 was supposed to accelerate this dynamic even more.

Economic cooperation between the two countries has quite a significant potential, interest in Ukraine on the part of Turkey was positive, and it is possible that it will increase after the end of hostilities. Turkish government and business structures are ready to develop specific recovery projects and provide consulting and technical assistance.

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## THE INFLUENCE OF OFFSHORE ZONES ON THE GLOBAL ECONOMY

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### **Key words:**

offshore zones (jurisdictions),  
free economic zones, taxes,  
international business,  
banking system

The article reveals the concept of offshore zones (offshores), considers the modern mechanism of state (administrative and legal) regulation of their activities, as the steady growth of market relations causes a dynamic growth of entrepreneurial activity, which, in turn, results in a significant complication of financial and economic relations between the subjects of business turnover. The goal of any entrepreneur is, of course, to minimize costs, so he strives to carry out his commercial activities in those regions and countries with the most favorable tax and legal regime. All this resulted in the emergence of such an economic phenomenon as the "offshore zone". Attention is drawn to the fact that the offshore zone refers to the country or territories that register companies, which will be subject to preferential taxation. The company itself, from the moment of registration, falls under the jurisdiction of the host country and from then on shall strictly comply with the rules and regulations of local legislation. The reasons for the emergence of offshores and their modern territorial and functional dislocation are being analyzed. In particular, it was found that services provided in offshore areas are often driven by demand and financial instability. Innovation and necessity are thus important conditions for their emergence. Nevertheless, these elements are of no importance without the consent of legislative bodies to introduce laws for forward-thinking offshore companies. The special administrative and legal regime applied in their territory, the main benefits granted to investors in offshore zones are considered. The reasons for the underdevelopment of offshore business in Ukraine were studied and a solution to the problem of improving the activity of offshore zones in the territory of our country was proposed.

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## ВПЛИВ ОФШОРНИХ ЗОН НА СВІТОВУ ЕКОНОМІКУ

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### **Ключові слова:**

офшорні зони (юрисдикції),  
вільно-економічні зони,  
податки, міжнародний бізнес,  
банківська система

У статті розкривається поняття офшорних зон (офшорів), розглядається сучасний механізм державного (адміністративно-правового) регулювання їхньої діяльності, оскільки неухильне зростання ринкових відносин спричиняє динамічне зростання підприємницької діяльності, що, у свою чергу, призводить до значного ускладнення фінансово-економічних взаємин між суб'єктами ділового обороту. Метою будь-якого підприємця, безумовно, є мінімізація витрат, тому він прагне здійснювати свою комерційну діяльність у тих регіонах та країнах, що відрізняються найбільш сприятливим податковим та правовим режимом. Все це в результаті і спричинило виникнення такого економічного явища як «офшорна зона». Акцентується увага на тому, що під офшорною зоною мають на увазі країну або території, що реєструють фірми, на які поширюватиметься пільговий режим оподаткування. Сама компанія з моменту реєстрації підпадає під юрисдикцію країни перебування і з цього часу має суворо дотримуватись норм і правил місцевого законодавства. Аналізуються причини виникнення офшорів та їхньої сучасної територіально-функціональної дислокації. Зокрема, виявлено, що послуги, які надаються в офшорних зонах, часто обумовлюються попитом на них та фінансовою нестабільністю. Інновації та необхідність таким чином є важливими умовами їх виникнення. Але ці елементи не мають жодного значення без згоди законодавчих органів запровадження законів для

інноваційних офшорних компаній. Розглянуто особливий адміністративно-правовий режим, що застосовується на їх території, основні пільги, надані інвесторам в офшорних зонах. Вивчено причини нерозвиненості офшорного бізнесу в Україні та запропоновано вирішення проблеми вдосконалення діяльності офшорних зон на території нашої країни.

### Problem statement

Due to large tax payments in most countries, various businesses are increasingly forced to look for ways to reduce the tax burden. Tax mitigation by means of transferring capital to so-called offshore zones is a popular way in the world. An offshore company is a great way to do business with significant tax savings.

Not only the owner of a large business, but also an ordinary freelancer is able to register a company in an offshore zone. The preferential tax treatment and the wide geography of offshore jurisdictions provide ample opportunity for efficient business management. Any part of the world can be chosen for registration or re-legalization of a limited liability company offshore.

It is only important to realize special aspects of offshore zones of different types. The issue of the use of offshore zones in foreign economic activity has become particularly urgent for Ukraine at present.

### Recent research and publications analysis

The problems of offshore zones are highlighted in the works of many domestic and foreign scientists, such as V.A. Vergun [4], O.I. Stupnytskyi, N. Shakson [1], B. Harrington [3] and others. Although the contribution of these scientists to the study of offshore zones is very important, however with the development of the economy, certain changes and improvements constantly appear, which determines the relevance of the study.

**The purpose of the article** is the analysis, generalization and improvement of theoretical provisions regarding the essence and content of the use of offshore zones.

### Basic material statement

The word «offshore» has its roots in the history of Great Britain and comes from the English expression «off-shore», which literally means «outside the coast», i. e. not on the territory of the metropolis. An offshore zone is a state or part of its territory where non-resident companies have special conditions for registration, activity licensing and taxation. The offshore zone receives its benefits in the form of fees for registration and re-legalization of companies, tax revenues, development of construction and telecommunications networks. In exchange, it offers:

- simple and inexpensive process of registration of non-resident companies;
- non-availability or low rates of income tax and profit;
- exemption from state currency control;
- business confidentiality;
- non-availability of duties on machinery, materials and equipment imported for the company's needs.

According to various estimates, there are 50 to 80 offshore zones in the world. There is no exact number, as there is still no single definition of offshore and the

legislation of different countries uses different criteria for assigning jurisdictions to such territories. These are mostly small third world countries, administrative units of the United Kingdom or the USA, and even island states, in which the offshore services sector is a significant and sometimes the basic source of revenue.

Offshore zone registration and annual company maintenance costs will mostly be only a few hundred dollars. A special aspect of the offshore zone is the forbiddance on conducting business activities on its territory for a non-resident company registered here, which is carried out for the purpose of protecting national business.

Some offshore zones are not politically independent. For example, the Cayman Islands is an overseas territory of Great Britain and is governed by a governor appointed by the constitutional monarch – King Charles III – for a four-year term.

Types of offshore zones. Conventionally, offshore jurisdictions are divided into three groups: classic offshore, also called island offshore; European offshore territories with low taxation; administrative-territorial offshores with a special tax treatment.

Classic offshore areas. According to the scheme used here, a non-resident company pays a certain fee to the fiscal authorities annually, while no taxes are collected from it and no accounting reports are required from it. Such zones are characterized by the highest possible level of confidentiality that beneficiaries of non-resident companies can expect. A disadvantage is the lack of trust of reputable companies and banks in a business with a similar registration.

The most popular representatives of this are: Belize; Seychelles; Isle of Man, Guernsey, Jersey; Dominican Republic. These territories cannot display a high level of economic development, however, like all offshore zones, they are characterized by political stability. But in many offshore companies, it is mandatory for registered companies to employ local residents in the secretarial office of the company: in this way, the state contributes to solving the problem of employment on its territory.

Offshore zones with low taxation. These are jurisdictions where income tax exists but it is paid at a much lower rate than in neighboring states. An example can be Cyprus, in which since its entry into the EU, the corporate income tax is 10%.

Some territories provide tax advantages concessions. They cannot be called offshore in the literal sense: the state of Delaware in the USA, Ireland, Great Britain and others. Companies registered in these jurisdictions are exempt from local taxes in the absence of operations, and therefore of income received in the country of registration.

Offshore zones are scattered all over the world, which allows entrepreneurs to choose not only the best conditions for doing business, but also the most convenient

geographical location. Popular global offshore zones have distinctive features. Let's consider some of them.

**Belize.** This is a classic type offshore zone included in the List of states (territories) that do not provide exchange of information for taxation purposes with Ukraine, and is a recognized offshore center in the world, where conditions of heightened confidentiality have been created for business. Taxation is a fixed annual fee. Belize is a politically stable country that is part of the British Commonwealth and the United Nations. It is located on the Caribbean coast of Central America, on the Yucatan Peninsula, a two-hour flight from Miami. Based on British law, the legislation of Belize has been specially developed to protect investors. Buying offshore in Belize means acquiring the right to conduct any activity that is not related to the ownership of real estate in the country or agreements with residents. The prohibition does not apply to the ownership of vessels registered in Belize.

**Seychelles Islands.** This is also a classic type offshore. A stable jurisdiction with a high reputation. The islands are located in the Indian Ocean, south of Madagascar, and are conveniently located at the crossroads of major sea trade routes and air routes. Seychelles is included in the list of countries that do not provide information exchange for tax purposes with Ukraine, this is a jurisdiction whose main priority is the confidentiality of client information. Taxation is presented in the form of a fixed annual duty. The opportunity to buy offshore in the Seychelles is considered by thousands of businessmen every month. Only the passport of the company owner is required for registration. There are no requirements for minimum authorized capital. A company registered in the Seychelles has the right to issue registered shares, but it cannot issue registered shares. You can own planes and ships registered here although you are not allowed to own real estate. The property of Seychelles companies is protected from confiscation and seizure by foreign countries.

**Hong Kong.** Hong Kong is an island in Southeast Asia located not far from Taiwan, which is an administrative region of China. It is one of the world's most important financial centers. Hong Kong is not included in the FNP blacklist, which indicates the existence of an exchange of information between this jurisdiction and Ukrainian tax administration. Companies registered in Hong Kong have the right to carry out any activity that does not require a special license. In the case of receiving profits from sources in Hong Kong, the company pays a corporate tax of 16.5%. A company registered in Hong Kong that receives income from sources outside the territory of the island do not subject to tax. However, it shall have a secretary who lives or conducts business in Hong Kong itself. His or her responsibilities include preparing annual reports and keeping records of the company's directors and shareholders. It is mandatory to keep accounting records for seven years in paper or electronic form. The company name shall be registered in English and Chinese.

**Cyprus.** This offshore is the Greek part of the island in the Mediterranean Sea west of Syria and south of Turkey. Cyprus is a member of the European Union, a well-known financial center in the world. It has an agreement with

Ukraine in the field of avoidance of double taxation. In 2013, Cyprus experienced a financial crisis during which unprecedented events took place: funds were withdrawn from the accounts of Bank of Cyprus (BoC) and Cyprus Popular Bank (Laiki) depositors in an amount that exceeded the insured part of the deposit (deposits up to €100,000). Despite the fact that in the course of this reform part of the large depositors were transferred to the shareholders of the bank, this did not provide full compensation for their losses.

Cyprus is not included in the list of offshore jurisdictions; accordingly, it exchanges information with the tax administration of Ukraine. Buying offshore in Cyprus is buying a fully-featured European company with the lowest taxation in Europe.

Offshore in Cyprus can be used as a resident or non-resident company. Companies without an operational office in Cyprus are allowed to have a minimum authorized capital of 1,700 euros. If there is an operational office, this amount increases tenfold. A special permit is issued for conducting banking, financial, and insurance activities. There are a number of restrictions on choosing a company name.

**British Virgin Islands (BVI).** An archipelago in the Caribbean Sea under the control of the British Crown located not far from Puerto Rico. A politically stable area with a high standard of living, one of the first and most prestigious classic offshore zones in the world. In 2018, the British Virgin Islands were excluded from the list of the Tax Office of Ukraine, which indicates an established exchange of information between tax services. In the same year, a law providing for the creation of a register of beneficial owners of companies entered into force in BVI. About 41% of all offshore companies are registered in BVI. Only one shareholder and one director, which can be the same person, are sufficient for registration. The registers of shareholders and directors shall be kept at the registered office of the company. There are no obligations to submit accounting statements, they just shall exist and can be stored in any country. Taxation is a fixed annual fee. There are some requirements for company names: they shall not evoke associations with the British Crown, government, ministries and departments.

A company that conducts banking, trust, insurance or reinsurance activities is required to have a license.

### Conclusions

Having studied the origin of offshore zones, we can conclude that this is one of the types of free economic zones. Which, in fact, has common features, for example, the establishment of a preferential treatment for attracting capital.

A feature that distinguishes offshore zones from others is that only foreign capital is attracted to these territories, and the owners of companies registered in offshore zones shall operate only outside the offshore zone. The choice of an offshore zone can be made according to a number of classification criteria, therefore, when creating an offshore company or communicating with foreign counterparties with offshore status, it is necessary to analyze in detail all possible factors and goals that the company intends to achieve and derive a benefit from such activities and cooperation.

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## THE ROLE OF PERSONNEL POTENTIAL IN GROWING THE COMPETITIVENESS OF AGRICULTURAL ENTERPRISES UNDER GLOBALIZATION

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### Key words:

personnel potential,  
competitiveness of the enterprise,  
management of the personnel  
potential of the enterprise

The article pays attention to the role of personnel potential in the growth of competitiveness of agricultural enterprises in the conditions of globalization. In today's conditions of globalization of the world economy, sharp increase in competition, the attitude towards the main productive force of society – man – has changed. Deep transformations occur not only in the political and economic structures of society, but also in the value and motivational spheres of human life. Successful, competitive activity of an agricultural enterprise is impossible without a strategic and holistic approach to the management of the most valuable assets, and, first of all, human capital. In addition, as shown by research in recent years, the most effective investments are investments in people. Therefore, a highly effective complex system of labor and production organization is necessary, which provides not only for the rational use of limited economic resources, but also for the development of production and labor capital. The model of the human resources management system of the agricultural enterprise has been improved. The principles of managing the personnel potential of a modern agricultural enterprise and the methods and tools of managing the personnel potential of the organization are summarized. The main measures and recommendations regarding the program for managing the personnel potential of agricultural enterprises of Ukraine in the conditions of globalization have been supplemented. Personnel potential is considered as the most important resource of an agricultural enterprise.

## РОЛЬ КАДРОВОГО ПОТЕНЦІАЛУ В ЗРОСТАННІ КОНКУРЕНТОСПРОМОЖНОСТІ АГРАРНИХ ПІДПРИЄМСТВ В УМОВАХ ГЛОБАЛІЗАЦІЇ

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### Ключові слова:

кадровий потенціал,  
конкурентоспроможність  
підприємства,  
управління кадровим  
потенціалом підприємства

У статті приділено увагу ролі кадрового потенціалу в зростанні конкурентоспроможності аграрних підприємств в умовах глобалізації. У сучасних умовах глобалізації світової економіки, різкого посилення конкуренції, змінилося ставлення до головної продуктивної сили суспільства – людини. Глибокі трансформації відбуваються не тільки в політичній та економічній структурах суспільства, а й у ціннісній та мотиваційній сферах життя людини. Успішна, конкурентоспроможна діяльність аграрного підприємства не можлива без стратегічного і цілісного підходу до управління найціннішими активами, і, насамперед, людським капіталом. Крім того, як показують дослідження останніх років, найефективніші інвестиції – вкладення в людину. Тому, необхідна високоефективна комплексна система організації праці та виробництва, яка передбачає не тільки раціональне використання обмежених економічних ресурсів, а й розвиток виробничого і трудового капіталу. Удосконалено модель системи управління кадровим потенціалом аграрного підприємством. Узагальнено принципи управління кадровим потенціалом сучасного аграрного підприємства та методи і інструменти управління кадровим потенціалом організації. Доповнено основні заходи та рекомендації щодо програми управління кадровим потенціалом аграрних підприємств України в умовах глобалізації. Розглянуто кадровий потенціал як найважливіший ресурс аграрного підприємства.



### Formulation of the problem

The role of human resources in the growth of competitiveness of agricultural enterprises in the context of market relations, globalization, European integration, and war is becoming an indispensable condition for gaining a stable and leading position in the market. The quality of labor resources directly affects the competitive capabilities of agricultural enterprises, which is one of the most important areas of competitive advantage, given that the agricultural sector is one of the most promising for our country. Human resource potential can be generally characterized by the number of employees and the quality of their professional and qualification training. The human resource potential of an agricultural enterprise has integrity properties that are fundamentally different from those of each employee individually. Strategic directions in the agricultural sector of human resources management are the maximum use of technical capabilities and the comprehensive development of employee initiative. A critical factor for agricultural enterprises to overcome the crisis is the development of human resources.

The level of education of managers and specialists with secondary specialized education is of strategic importance, determining the position of an enterprise in the context of globalization. Over time, agricultural enterprises have paid less and less attention to improving their educational potential. As a rule, in our country's agricultural enterprises, the professional development of the working staff is not carried out mainly due to lack of funds, while in developed countries, including in the context of globalization, much more attention is paid to the issue of professional development of the working agricultural staff. It is known that the available knowledge in any field of agricultural activity becomes outdated and needs to be updated every 5 years. One of the important tasks of restructuring the work with human resources and increasing its human resources potential is to create the material, technical, economic, social and psychological conditions necessary to solve these problems.

In the market, the success of agricultural enterprises, including in the context of globalization, largely depends on the effectiveness of its personnel management, which, using its abilities, knowledge, skills and abilities, ensures the realization of reputational, quality, production, marketing, financial and other goals of the enterprise. The individual abilities of agricultural employees shape the performance of the agricultural enterprise as a whole and are the key to its development. In such conditions, the problem of competent use and development of human resources becomes a priority. This can be achieved by implementing an integrated approach to managing the human resources of an agricultural enterprise. Therefore, the process of managing and building an effective human resource management system, its role in ensuring the competitiveness of an agricultural enterprise in the context of globalization is becoming increasingly important.

### Analysis of recent research and publications

The role of human resources in the growth of competitiveness of enterprises in the context of globalization

is studied by many scientists and scholars, including: O.V. Arzamasova [1], S.K. Bogomolova, O.V. Podolska [2], T.V. Bilorus [3; 4], V.A. Gontiuk [5], O.M. Kovaleva [6], O.A. Nosyk [7], O.V. Skoruk [8], O.G. Cherep, O.I. Gaidai [9], L.V. Shostak, E.O. Boloban [10].

### Formulation of goals

The purpose of the article is to improve the model of managing the human resources of an agricultural enterprise in the context of globalization, and to summarize the principles of managing the human resources of a modern agricultural enterprise, including the mechanisms for increasing the competitiveness of enterprise functioning.

### Presentation of the main research material

The current stage of development of global thought is characterized by a holistic vision of the system of managing the human resources potential of an agricultural enterprise, the accumulation of a fairly large arsenal of technologies for its formation and development, which have been adapted to the modern realities of enterprise functioning. Therefore, the process of human resources management cannot be recognized as systemic, which reduces its effectiveness. This problem fully applies to the research article in the work of agricultural enterprises, including in the context of globalization. It is possible to support the opinion of economists that it is the systematic management of the human resources potential of an agricultural enterprise that is a determining condition for the growth of its competitiveness and efficient operation. At present, a large number of agricultural enterprises in Ukraine, including those in the world, face the problem of building an effective human resource management system that would enable rapid adaptation to environmental conditions. Human resource management should be aimed at the strategic development of an agricultural enterprise. The task of enterprise human resources management is to ensure the stability of its work in the conditions of war, high competition, and focus on the introduction of innovations in production and management activities. For this reason, it is necessary to develop an efficient model of human resources management. Under the category of «model» we understand a system of interrelated actions and operations that underlie the process of human resources management. This understanding of the model corresponds to the views of many economists in the field of management. International modern management theory identifies the model of human resource management with the management system of an agricultural enterprise, the choice of tools, methods and mechanisms for solving management tasks. Building a model makes it possible to visually display the impact of organizational, economic and managerial relations, to reveal the basic principles of using the selected set of methods to build the right set of managerial influences on the staff in order to ensure the effective functioning of the organization and the comprehensive development of the employees employed in it. Thus, the model of human resources management is theoretically

substantiated and implemented in the practical activities of the human resources management system, which includes the procedure for the formation and evaluation of human resources, the main tasks and directions of personnel development, forms and types acceptable for development, as well as actions related to the evaluation of personnel performance and an effective set of measures taken in the process of its management.

The main purpose of modeling the human resource management system in a global perspective should be to develop and define a set of optimal methods and tools

for its management aimed at improving the efficiency of the personnel of an agricultural enterprise and building its potential.

The model of managing the human resources potential of an agricultural enterprise includes: clearly defined goals, common principles of building the entire system, a description of its structure, the mechanism of the system (methods, means) Fig. 1. The key concept in the model of human resource management of an organization is the management mechanism, which is a set of laws, rules and procedures for making management decisions. The mechanism of human

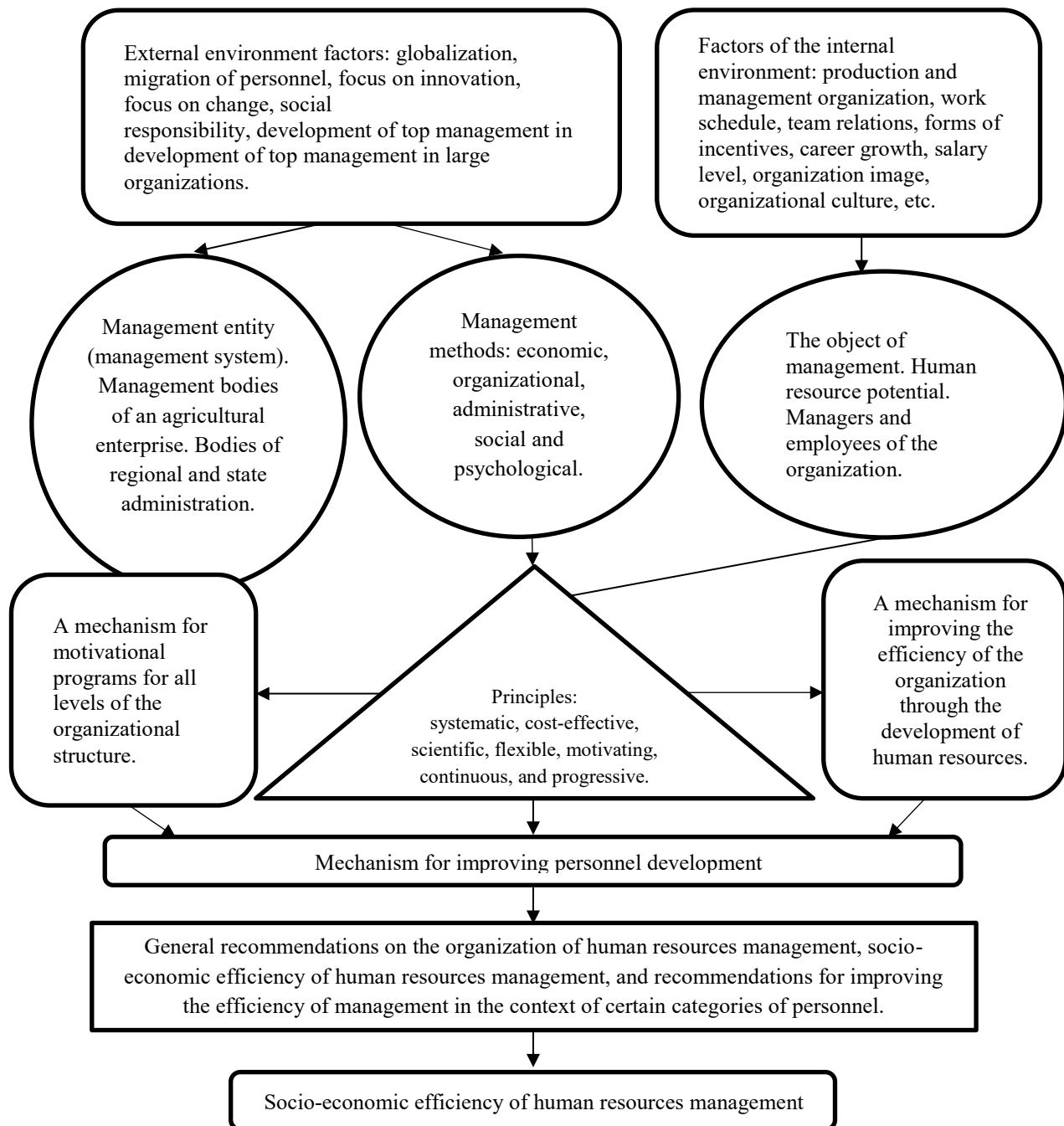


Fig. 1 – Model of the human resources management system of an agricultural enterprise

Source: improved by the authors

resources management regulates the dynamic development of labor potential through management actions aimed at reducing the risks of its management and achieving the goals of the production system.

The study allowed us to develop a model for managing the human resources potential of an agricultural enterprise, which is presented in Fig. 1. The proposed model reflects the interconnection of factors of the external and internal environment that affect the process of managing the human resources potential of an enterprise and the final results of management activities, which can be achieved taking into account the effective implementation of management functions through a system of links and relations between the subject and object of the analyzed management system.

With the help of a set of specific methods and tools for managing human resources, it is possible to influence the mechanisms, ensuring the required level of socio-economic efficiency and competitiveness. The mechanisms of human resources management presented in the model are the main levers that influence the management system in order to increase efficiency. The development of mechanisms to increase the competitiveness of agricultural enterprises in the context of globalization and recommendations for the efficiency of human resources management should be carried out taking into account the basic principles (Table 1).

The considered principles of human resource management should be implemented systematically and in cooperation. Let us consider the mechanisms of the model of the system for managing the human resources potential of an agricultural enterprise. The mechanism for increasing the competitiveness of the enterprise's functioning through the development of human resources is focused on increasing the level of:

- productivity;
- labor;
- by means of;
- development;
- personal;
- professional and creative characteristics of employees.

The mechanism for improving staff development is focused on the integration of education, scientific

achievements and technical innovations and aims to reduce staff turnover and increase their qualifications.

The mechanism of motivational programs for all levels of the organizational structure is aimed at increasing the efficiency of the agricultural enterprise by managing the development of human resources in the form of motivation. Specific measures for the formation and development of human resources, including in the context of globalization, should be aimed at implementing the components of these mechanisms. For this purpose, it is recommended to use a set of management methods that are standard for HR management:

- economic management methods;
- organizational and administrative management methods;
- social and psychological management methods.

Within the framework of the presented methods of human resource management

of an agricultural enterprise, it is recommended to use a certain set of management tools (Fig. 2).

The results of the study indicate the need to develop and implement a program of measures to manage human resources at agricultural enterprises in Ukraine. The study revealed a number of problems, such as: lack of a systematic approach to managing the human resources of an agricultural enterprise; lack of provisions regulating the process of personnel development, and in particular the process of training and professional development of personnel; insufficiently effective training methods are used; no assessment of the human resources of the organization as a whole and no comprehensive assessment of employees to analyze the needs for training and development of personnel, as well as for career development; low level of organization Taking into account the recommended model and the highlighted principles of human resource management of the organization, as well as the proposed algorithm for implementing a managerial approach to improving the mechanism of human resource management, which were presented, we will determine a set of recommendations and measures of the program for managing the human resource potential of an agricultural enterprise (Table 2).

Table 1 – Principles of human resource management of a modern agricultural enterprise

The principle	The content of the principle
The principle of motivation	is to develop and implement systems of remuneration and incentives that influence the motivation of an employee of an agricultural enterprise to make fuller use of personal potential and is aimed at increasing the competitiveness of the use of human resources, including in the context of globalization
The principle of motivation	carrying out business activities without interruptions and reducing the time for preparing documents, etc., aimed at creating flexibility and efficiency in making management decisions on the development of the management system
The principle of science	carrying out business activities without interruptions and reducing the time for preparing documents, etc., aimed at creating flexibility and efficiency in making management decisions on the development of the management system
The principle of flexibility	is to develop alternative development plans related to the consideration of personnel risks, aimed at forming readiness for management optimization due to the influence of internal and external environment factors
The principle of profitability	is to determine the economic effect of the implementation of the management process and is associated with determining the efficiency of the entire agricultural enterprise as a whole
The principle of progressiveness	personnel in accordance with the best practices of foreign and domestic agricultural enterprises in order to use innovative approaches to human resources management

Source: generalized by the authors

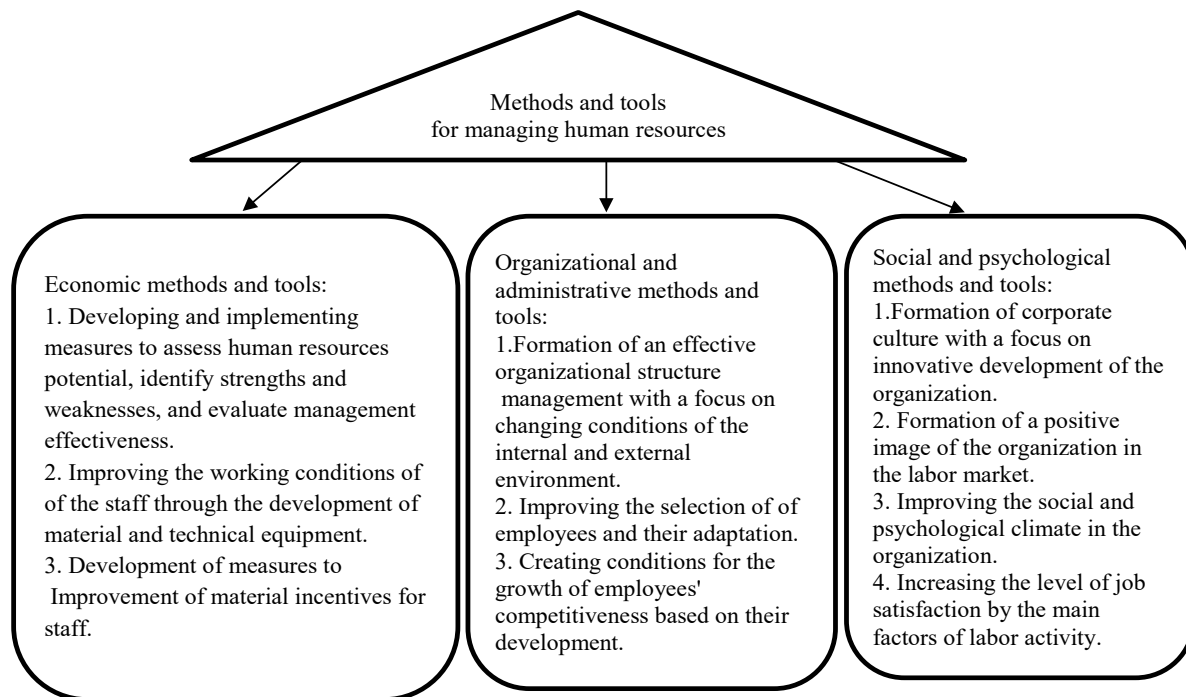


Fig. 2 – Methods and tools for managing the organization’s human resources potential

Source: generalized by the authors

Table 2 – Main measures and recommendations for the program of human resources management of agricultural enterprises of Ukraine in the context of globalization

№	Characterization of the main measures and recommendations	Result
1	Developing a program for the development of human resources of enterprises. The goal is to increase the efficiency of an agricultural enterprise by unlocking the potential of its employees and their involvement in the implementation of operational and strategic tasks of enterprise development. Tasks: providing enterprises with qualified personnel; involving personnel in the effective implementation of enterprise tasks; continuous development of personnel; increasing personnel satisfaction with their work	A program of for the development of human potential has been developed
2	Conducting an annual assessment of human resources, monitoring satisfaction indicators and monitoring the effectiveness of the human resources development program based on a set of diagnostic methods tested in the framework of the study	Data on staff evaluation, satisfaction, and program performance
<b>A SET OF MEASURES FOR STAFF DEVELOPMENT AND MOTIVATION</b>		
3	Implementation of a competent approach to personnel development in general based on the development of a model of corporate competencies	A model of corporate competencies
4	Developing indicators of the forecasted need for specialists and analyzing the possibility of meeting the need for personnel	Increase the efficiency of forecasting staffing needs
5	Developing tools for mobilizing the talent pool	Increase the efficiency of using the talent pool
6	Optimization of the process of managing the business career of staff	Optimization of the training planning process and training costs
7	Creation and implementation of individual development plans for specialists and managers of agricultural enterprises	Individual development plans
8	Development of a staff training and development plan (drawing up a training schedule, creating targeted training programs for different categories of staff)	An additional tool for retaining highly qualified employees
9	Involvement of employees in change management at the the company through their participation in business meetings and information sessions	Increasing the level of staff engagement
10	Involving employees in management by creating a "suggestion box" where employees can express their ideas that affect the existing management system of the agricultural enterprise	Finding new ways to improve the efficiency of the organization
11	Holding the Employee of the Month and Employee of the Year contests. Creating a “Showcase of Successes”	Improving the quality of work and labor productivity through competition

Source: supplemented by the authors

From the very first days of work, every specialist should know what competencies they need to develop in order to become a professional in this field. He or she should also understand what indicators he or she needs to achieve in order to climb the career ladder or develop linearly.

The competency model can serve as a basis for building a system of corporate training programs for different levels of positions, and the change in the severity of competencies after training can be one of the indicators of its effectiveness.

### Conclusions

This article discusses the model of the system and principles of managing the human resources of an agricultural enterprise. From the material presented, it can be concluded that no enterprise can ignore human resources. The value of this type of resource as a success factor is only increasing over time. Increasing the efficiency of agricultural enterprise management is directly dependent on how reasonably and at what level the human resources are used. The study of the system of human resource management in an agricultural enterprise was considered within the object and subject of comprehensive diagnostics and consisted of several areas: 1) studying the peculiarities of enterprises' activities and the personnel management system in the context of studying the personnel potential of enterprises; 2) studying the system of personnel potential management of an agricultural enterprise, which indicates the available potential reserves related to the formation and development of personnel potential, personnel training;

assessment of employees with a view to analyzing the needs for training and development of personnel, determining the level of organization of personnel assessment during their selection. Human resource management should be aimed at the continuous growth of competitiveness of agricultural enterprises and the strategic development of the industry both in the context of globalization and in times of war. The task of managing the personnel of an agricultural enterprise is to ensure the stability of its work in the conditions of high competition and globalization, including the focus on the introduction of innovations in production and management activities. For this reason, it is necessary to develop an effective model of human resource management. The carried out research allowed to improve the model of management of human resources of an agricultural enterprise. The proposed model reflects the existence of interconnection of factors of the external and internal environment that influence the process of managing the human resources potential of organization and the final results of management activities, which can be achieved taking into account the effective implementation of management functions through a system of links and relations between the subject and object of the considered management system. With the help of a set of specific methods, the potential can influence the mechanisms, ensuring the required level of socio-economic efficiency. The mechanisms of human resources management presented in the model are the main levers that influence the management system in order to increase efficiency. stages: diagnostics, planning, organization and motivation, coordination and control.

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## YOUTH ENTREPRENEURSHIP AS AN INVESTMENT ATTRACTIVE DIRECTION OF THE DEVELOPMENT OF THE NATIONAL ECONOMY

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### Key words:

youth, entrepreneurship,  
education, business, society,  
investment

The article discussed the importance of involving the young generation in the development of entrepreneurial activity. It is substantiated that the focus on creating conditions for the support of young entrepreneurs and the necessary guarantees of their activity will contribute to the self-realization of a young person, which is possible due to the identification of the indicated direction as a priority in investing. An analysis of statistical data was carried out, which showed that at the current stage there are negative trends in creating opportunities for youth development in general and private initiative in particular. Studies have shown that more than 40% of Ukrainian youth have a desire to get a job in other countries of the world due to the low level of wages and uncertainty about the possibilities of applying the acquired knowledge and acquired competencies. It was determined that the key problems are, firstly, the reduction of the share of representatives of the younger generation who start their own business, and secondly, a significant number of young entrepreneurs end their activities after the first year of operation, which is associated with an insufficient level of investment support and the inefficiency of the existing organizational and economic mechanism of youth entrepreneurship development. Obstacles to the realization of youth potential are identified, namely: low level of motivation and insufficient skills for independent learning; insufficient indicators of youth employment in the labor market based on acquired competencies and practical abilities and skills; insignificant rates of development of youth initiatives; lack of interest in obtaining additional skills in non-formal education. It is substantiated that today's realities have exacerbated the need to develop, stimulate and spread young entrepreneurship for the post-war recovery of the national economy. It has been proven that the peculiarities of youth entrepreneurship are due to initiative, adaptability and the ability to take risks, which is the engine of economic development and growth.

## МОЛОДІЖНЕ ПІДПРИЄМНИЦТВО ЯК ІНВЕСТИЦІЙНО ПРИВАБЛИВИЙ НАПРЯМ РОЗВИТКУ ЕКОНОМІКИ В КРАЇНАХ ЄС ТА УКРАЇНІ

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### Ключові слова:

молодь, підприємництво,  
освіта, бізнес, суспільство,  
інвестування

У статті розглянуто питання важливості залучення молодого покоління в розвиток підприємницької діяльності. Обґрунтовано, що орієнтація на створення умов підтримки молодих підприємців та необхідних гарантій їх діяльності будуть сприяти самореалізації молоді людини, що є можливим завдяки визначенню зазначеного напрямку як пріоритетного в інвестуванні. Здійснено аналіз статистичних даних, який показав, що на сучасному етапі спостерігаються негативні тенденції щодо створення можливостей розвитку молоді загалом та приватної ініціативи зокрема. Дослідження показали, що понад 40% української молоді мають бажання отримати роботу в інших країнах світу через низький рівень оплати праці та невизначеність щодо можливостей застосування набутих знань та отриманих компетенцій. Визначено, що ключовими проблемами є, по-перше, скорочення частки представників молодого покоління, котрі започатковують власну справу, по-друге – значна кількість молодих підприємців завершують свою діяльність після першого року функціонування, що пов'язано з недостатнім рівнем інвестиційної

підтримки та неефективністю існуючого організаційно-економічного механізму розвитку молодіжного підприємництва. Виокремлено перешкоди для реалізації молодіжного потенціалу, а саме: низький рівень мотивації та недостатність навичок для самостійного навчання; недостатні показники щодо зайнятості молоді на ринку праці за набутими компетенціями та практичними вміннями та навиками; незначні темпи розвитку молодіжних ініціатив; незацікавленість в отримання додаткових навичок у неформальній освіті. Обґрунтовано, що реалії сьогодення загострили необхідність розвитку, стимулювання та розповсюдження молодого підприємництва задля післявоєнного відновлення національної економіки. Доведено, що особливості молодіжного підприємництва обумовлені ініціативністю, адаптивністю та здатністю ризикувати, що є локомотивом економічного розвитку та зростання.

### Formulation of the problem

The importance of involving young people in the development of entrepreneurial activity has always been the subject of discussions at the international, national and regional levels of economic functioning. At the same time, attention is focused on the fact that youth entrepreneurship is one of the most important priorities of the socio-economic development of the country. The focus on creating conditions for supporting young entrepreneurs through investment and the necessary guarantees will contribute to the self-realization of young people in their activities, on the one hand, and ensure economic growth on the other.

At the current stage of development of the national economy, there are negative trends in investing in youth private initiatives. The indicated trends are, firstly, a decrease in the number of young people who start their own business, and secondly, a significant number of youth enterprises cease their activities after the first year of operation. In many cases, this is due to insufficiently effective functioning of the existing organizational and economic mechanism of investment support and development of young entrepreneurs.

### Analysis of recent research and publications

Problems involving youth in entrepreneurial activity are the subject of a number of studies by Ukrainian scientists, among whom it is worth highlighting T. Zbrytska, Yu. Shchotova, A. Levchenko, I. Dumanska and others.

E. Libanova, A. Kolot, I. Demchenko, M. Dolishniy, V. Petyukh, O. Grishnova, and others are studying the issue of increasing the level of employment and self-realization.

Despite the large number of scientific works, the study of youth entrepreneurship from the point of view of investment priority needs to be detailed.

### The purpose of the article

The purpose of the article is to study the peculiarities of the development of youth entrepreneurship as an investment-attractive direction of economic development, which is a prerequisite for the post-war revival of the national economy.

### Presenting main material

The potential development opportunities of any country depend on young people who possess knowledge and skills, the practical use of which can increase the level

of socio-economic development, preserve and revive the national spiritual values of Ukraine.

We note that the modern young generation, which is called to become agents of change in the future, experiences certain difficulties that do not allow them to fully realize their potential. According to the State Statistics Service, young people under the age of 35 make up 34% of the officially registered unemployed [1]. The reason for this is the lack of a clear employment mechanism and providing young professionals with their first workplace.

At the current stage, a significant problem is the high level of unemployment among young people. Studies have shown that more than 40% of Ukrainian youth have a desire to get a job in other countries of the world due to the low level of wages and uncertainty about the possibilities of applying the acquired knowledge and acquired competences [2].

At the current stage, there are a significant number of obstacles to the development of the national economy (Fig. 1).

To effectively solve the above-mentioned problems, it is advisable to use the positive experience of European countries, which create conditions for youth employment and maximum self-realization through the support of business initiatives, that is, the promotion of the development of youth entrepreneurship.

Studies concerning the values of Ukrainian youth indicate an insignificant level of development of youth entrepreneurship – only 5% of active businesses. Note that 38% intend to engage in this type of activity, but are dealing with significant obstacles, such as: insufficient level and quality of theoretical training and practical skills, unfavorable political and economic environment, burdensome tax system for youth entrepreneurship, lack of funds for starting a business etc. [3].

Support for the development of private youth initiatives by the state and society will allow to increase the level of employment, and, accordingly, solve the problem of unemployment due to the creation of new jobs.

It is important to have a positive attitude of young people towards such a direction of employment as «businessmen» and «entrepreneurs» (42.5% of young people), which belong to the TOP-5 professions that create opportunities for professional growth and life success that give the opportunity to achieve success in life [4].

In our opinion, it is possible to use the positive experience of the EU and the USA in supporting the

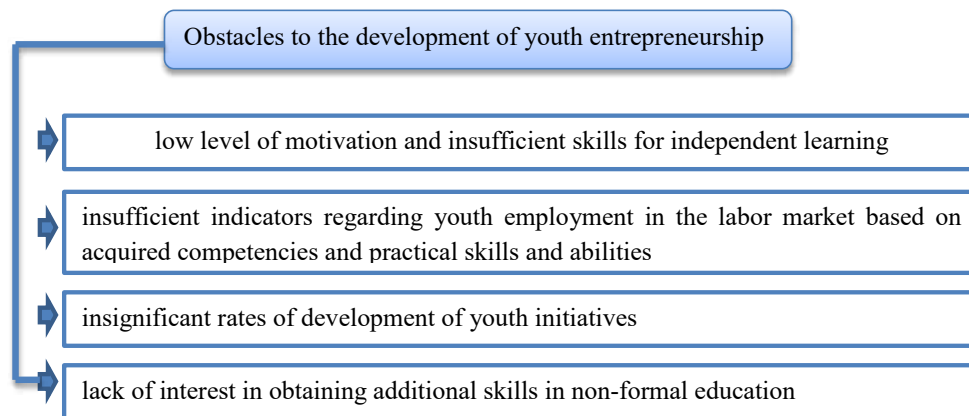


Fig. 1 – Obstacles to the development of youth entrepreneurship

Source: built by the authors themselves

development of youth private initiatives and creating favorable conditions for the activity of youth enterprises. We would like to emphasize that in these countries the share of small and medium-sized enterprises is about 95%.

If we talk about the EU countries, it should be noted that awareness of the importance of youth business development contributes to the formation of policies aimed at creating conditions for the development of entrepreneurship among representatives of the younger generation.

The USA has a special structure of the economy, which confirms a significant interest in the development and support of private initiatives. So, in the USA there are more than 28 million small businesses, which make up 99.7%. Labor compensation is 45% of the total wage fund. In addition, small businesses annually create 60–80% of new jobs, replenish budgets – 68 dollars in taxes for every 100 dollars of profit. About 24% of young people in the USA are employed in business, which is 24% of the economically active population. There are a significant number of programs to support private initiative among young people – training and business development programs (The Center for Entrepreneurship); creation of business space in universities (business campuses, discussion clubs, consulting organizations, etc.), support through various funds (corporate, venture, charitable, fundraising, crowdfunding) and business accelerators and incubators [4].

We emphasize that youth entrepreneurship is a prerequisite for increasing the level of employment among young people and creating additional jobs. That is why it is necessary to increase the amount of investment, implement more pragmatic programs for the development and support of youth entrepreneurship.

Note that the strategic guidelines for the development of the national economy determined the main directions of the country's development, among which it is necessary to highlight: the need for modernization, the construction of an innovative economy, and the creation of a favorable business infrastructure [5].

Today's realities prove that the issue of the development of youth entrepreneurship in Ukraine is becoming relevant, which is connected with the promotion and popularization of entrepreneurship among the modern young generation.

It is worth noting that the intensification of the development of private initiative is extremely important both from the point of view of creating new jobs and from the point of view of economic advantages that allow us to successfully compete with big business.

Based on the above, it can be stated that a special place in the country's economy is occupied by youth entrepreneurship as a tool for overcoming the global problem of youth unemployment, which is constantly worsening. Youth, in turn, is the main partner of the state, the potential of the country's economic and innovative development.

Empirical studies show low entrepreneurial activity among young people and a low level of income of young entrepreneurs. Therefore, it is necessary to focus attention on the identification of factors that affect the slowing down of the development of youth entrepreneurship and the drop in the profits of entrepreneurs [6].

In today's world, it is quite difficult to define a field of activity. Today, many young people are interested in opening their own business, engaging in entrepreneurship, but not many dare to do so, although it is quite promising. This social group is the most active in society, because it quickly reacts to any changes in life and effectively perceives their positive and negative effects. The phenomenon of youth entrepreneurship is proposed to be considered taking into account the peculiarities related to the age of entrepreneurs. Studying youth entrepreneurship in the context of a dynamic process aimed at the formation of new values in business indicates that the age group of youth should be up to 35 years old [7].

At the same time, it is necessary to remember the presence of problems that slow down the pace of youth entrepreneurship development, including: personal or motivational characteristics, lack of professional knowledge and experience, imperfect regulatory and legal regulation of youth entrepreneurship, insufficient level of investment support for youth, etc. Justifying the problem of the low level of motivation of young people to create enterprises, analysts emphasize risk aversion.

We emphasize that youth entrepreneurship can become a driver of economic development, a source of filling local



budgets due to investment in youth private initiatives and the implementation of innovative ideas. The specified segment of entrepreneurial activity is characterized by a higher innovative openness, the ability to adapt in unstable socio-economic conditions and the ability to make ambiguous decisions with a high level of risk in order to achieve defined goals.

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The problem can also be the lack or lack of professional and specific knowledge in the field of entrepreneurship, investment and experience. The lack of a clear legal definition of «youth entrepreneurship» leads to the impossibility of distinguishing its subjects for the purposes of accounting and analysis, which prevents an objective assessment of the effectiveness of legislative and executive measures [8].

Note that motivational and personal characteristics, a favorable investment environment, and state support are not always necessary and sufficient conditions for opening one's own business. Young people are ready to take risks, are highly motivated, and the role of the state is to support them through investment.

In our opinion, young people lack experience and knowledge not so much in universities, but in the real business environment. The development of youth entrepreneurship will be facilitated by the process of integrating the interests of educational institutions, entrepreneurs, the population and state authorities, which will allow to achieve a synergistic effect. The need to unite the interests of stakeholders to improve the effectiveness of various socio-economic systems. Only those organizations that do not perceive stakeholder interests as limitations can belong to stakeholders. First of all, interested parties are those who can influence the process directly or indirectly, the principle of interdependence applies to them.

Thus, the process of development of youth entrepreneurship must be considered in the system of relations between the main groups of stakeholders, namely: authorities, population and entrepreneurial structures and institutions of higher education.

Let's consider the first type of stakeholder relationship. So, for example, the process of interaction between authorities and business structures consists in ensuring the employment of the local population, the achievement of strategic goals and objectives, and the growth of revenues to the budget. And, on the contrary, on the part of the authorities, the interaction consists in reducing administrative barriers, increasing the level of funding for entrepreneurship support programs, and creating associations of entrepreneurs [7].

Interaction between the population and authorities will help ensure social stability, favorable living conditions and employment of the population. The population also plays an important role in this interaction – it contributes to the formation of a favorable climate and an increase in the number of people involved in work.

The interaction between the education system and business structures consists in increasing the effectiveness of interaction with business communities; in cooperation with the state to ensure the competitiveness of the educational services market. And the interaction of institutions of higher education and the population will contribute to the improvement of the quality of education. The second type of interaction is based on the interaction of the main groups of stakeholders and youth entrepreneurship. Authorities, taking part in the development of youth entrepreneurship, contribute to the development of infrastructure, create conditions for filling the budget, and organize centers of interaction with young people [8].

The interaction of business structures among themselves contributes to the increase of income, the expansion of the scope of activities, the diversification and modernization of production, the increase of investment, the use of the latest technologies.

The creation of additional jobs, the involvement of the population in entrepreneurial activities, the improvement of qualifications – all this can be the result of the interaction of such groups as the population and youth entrepreneurial structures.

The role of universities in the development of youth entrepreneurship will contribute to the improvement of the level of education of graduates and the creation of new innovative business projects.

### Conclusions and suggestions

On the basis of the conducted research, it is necessary to summarize that in order to solve the problems of youth entrepreneurship, the state should involve institutions of civil society, public and non-commercial organizations, and entrepreneurs themselves. At the same time, it is important to understand that young people should be a direct participant in solving regional problems and should not be only in the role of an object of education, training and socialization. These measures, in our opinion, will contribute to the development of youth entrepreneurship, creating favorable conditions for this; the state, in turn, initiates the involvement of young people in entrepreneurial activities.

Therefore, the national economy needs to use positive foreign experience to create favorable conditions for youth employment and self-realization of opportunities in Ukraine. After all, a significant level of entrepreneurship development indicates the level of development of the country and society. Each person is able to independently improve his well-being, but at the same time, it is necessary to create the most favorable conditions for the implementation of the initiative with the aim of achieving freedom and financial independence, which is an important aspiration of modern youth.

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## AN OVERVIEW OF THE TYPES AND METHODS OF FRAUD PREVENTION FOR ONLINE SMALL AND MEDIUM-SIZED BUSINESSES

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**Key words:**

fraud prevention,  
online commerce, recession,  
payment cards,  
payment transactions,  
profit, costing,  
small and medium businesses

This article aims to investigate fraud prevention practices for small and medium-sized businesses by e-commerce sellers in the United States. Small and medium-sized businesses are businesses that are often identified as having fewer than 500 employees, lower annual revenue than large businesses, and a less complex organizational structure. Small and medium-sized businesses play a vital role in the economy by creating jobs, driving innovation, and supporting local communities. Since the Internet provides a wide range of “contactless” business activities, the urgency of combating fraud in this area is very important. Currently, small and medium-sized businesses (SMBs) make up a huge segment of the U.S. economy – 44% of GDP, about half of all employment, and half of the roughly \$370 billion in total technology spending. Small and medium-sized businesses have been hit hard by the current economic difficulties and are now weighing every purchase more carefully. Recent research by consulting firm McKinsey found that 37 percent of small and medium-sized business owners cite inflation as their biggest concern – the highest percentage in 40 years. One in five expect growth to slow and talent a challenge amid the Great Attrition. Intense financial pressures during the economic crisis have led to an increase in fraud, according to a survey of fraud experts by the Association of Certified Fraud Examiners (ACFE). The ACFE report found a direct relationship between economic downturns and the increase in the intensity of fraudulent activity. Thus, based on the above, it can be concluded that the relevance of this research is very high. This article covers the following different types of scams, such as: Fraud with card testing; Account takeover fraud; Parcel interception fraud; Chargeback fraud; Refund fraud.

## ОГЛЯД ТИПІВ ШАХРАЙСТВА, ЩО ЗАГРОЖУЮТЬ МАЛОМУ ТА СЕРЕДНЬОМУ БІЗНЕСУ В США, ЯКІ ПРОВАДЯТЬ ДІЯЛЬНІСТЬ ОНЛАЙН

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**Ключові слова:**

запобігання шахрайству,  
онлайн-комерція, рецесія,  
платіжні картки,  
платіжні транзакції, прибуток,  
формування собівартості,  
середні і малі підприємства

Ця стаття спрямована на дослідження методів запобігання шахрайству для малого та середнього бізнесу продавцями електронної комерції (e-Commerce) в Сполучених Штатах. До середнього та малого бізнесу відносять підприємства, які часто ідентифікуються менш ніж 500 співробітниками, нижчим річним доходом, ніж великі підприємства, і менш складною організаційною структурою. Малий і середній бізнес відіграє життєво важливу роль в економіці, оскільки створює робочі місця, стимулює інновації та підтримує місцеві громади. Оскільки мережа інтернет надає широкий спектр на провадження підприємницької діяльності «безконтактно», актуальність боротьби з шахрайством в цій сфері є дуже важливою. Наразі малий і середній бізнес (SMBs) становить величезний сегмент економіки США – 44% ВВП, близько половини всієї зайнятості та половина з приблизно 370 мільярдів доларів загальних витрат на технології. Підприємства малого та середнього бізнесу сильно постраждали від нинішніх економічних труднощів і тепер ретельніше зважують кожну покупку. Недавні дослідження, проведені консалтинговою компанією «Мак Кінзі» показали, що 37 відсотків власників малого та середнього бізнесу називають інфляцію своєю найбільшою проблемою – це найвищий відсоток за останні 40 років. Кожен п'ятий

очікує, що зростання сповільниться, а талант є проблемою на тлі Великого виснаження. Інтенсивний фінансовий тиск під час економічної кризи призвів до зростання шахрайства, згідно з опитуванням експертів з шахрайства, проведеним Асоціацією сертифікованих експертів з шахрайства (ACFE). У звіті ACFE встановлено пряму залежність між економічними спадами та зростанням інтенсивності шахрайської діяльності. Таким чином, виходячи з вищевказаного можна зробити висновок, що актуальність цього дослідження є дуже високою. В цій статті розглядаються такі різні типи шахрайства, такі як: шахрайство з тестуванням картки; шахрайство з захопленням облікового запису; шахрайство з перехопленням посилки; шахрайство з поверненням платежу; шахрайство з поверненням коштів.

### Formulation of the problem

Let's take a look at why fraud prevention is so important to running a successful and profitable business.

The total cost of fraud to SMBs can vary significantly depending on the industry, size of the company and nature of the fraud. However, according to a 2020 study by the Association of Certified Fraud Investigators (ACFE), the average loss for small businesses with fewer than 100 employees was \$150,000. This amount can be devastating for small businesses and even lead to bankruptcy in extreme cases. Additionally, the cost of fraud is not limited to actual monetary losses, but can also include legal fees, reputational damage, and the time and resources required to investigate fraud and take steps to prevent future occurrences [3].

In addition to ACFE, the results of the "True Cost of Fraud" study for e-commerce and retail are also available, and what they reveal should be of concern to these companies. This year's results show a significant increase in both the value and volume of fraud.

Figure 1 shows that every \$1 of fraud now costs US retailers and e-commerce sellers \$3.75, up 19.8% from the pre-Covid 2019 study of \$3.13. This also represents a 4.2% increase from the 2021 survey, which was conducted during the pandemic [3].

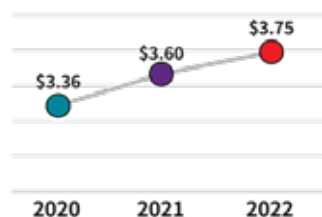


Fig. 1 – Trends in anti-fraud cost growth per US dollar earned

As can be seen from the above, fraud prevention is vital for small and medium-sized businesses.

### Analysis of recent research and publications

The interest of scientists is drawn to the study and systematization of online fraud prevention processes, several studies have been conducted by fraud experts conducted by the Association of Certified Fraud Examiners (ACFE). Research scientists emphasize the growing trend

of online payment fraud [2]. Researchers of the Anti-Fraud Research Center, Institute of Criminal Justice Studies, and the University of Portsmouth scientists Mark Button, Chris Lewis, and Jack Tapley emphasize the growth of types and types of fraud, which are aimed at small and medium-sized enterprises operating online [6]. Researchers from one of the leading anti-fraud service providers, Sift, emphasize the importance of fraud prevention and its impact on the costs of enterprises, both direct and indirect [8], researchers from Stripe [9], PayPal [10], and "Braintree" [11], devote their research to increasing the effectiveness of fraud prevention.

### Formulation of the goals of the article

The goal of the article is to investigate fraud prevention methods for small and medium-sized businesses and e-commerce sellers in the United States.

### Presentation of the main research material

There are various fraud types that small and medium-sized businesses may encounter. They might deal with fraud committed by their own employees or fraud committed by so-called "dummy" companies on the outside [6].

The most frequent instances of fraud against small and medium-sized businesses which accept electronic payments and offer services or sell goods online will be covered in this article. Here are a few of the most typical methods con artists use to target online retailers and suppliers.

**Card testing fraud.** A fraudster illegally obtains one or more credit card numbers when participating in card testing fraud. Scammers typically get hold of these numbers by either directly stealing them or buying them from specific websites. In order to avoid drawing too much attention to themselves, card verification fraud starts with the smallest purchases. The fraudster will attempt to make smaller purchases using each card number in order to determine which ones are valid. The credit card limits for each card are also determined in part by smaller purchases. Following the initial testing, fraudsters might start making more significant purchases. Many merchants are the victim of card-testing fraud, and by the time they realize it, the fraudster has probably had time to make several large purchases.

**Account takeover fraud.** Fraudsters can access customer accounts using several different techniques. Fraudsters can use a variety of strategies, including buying

stolen passwords and security codes, gathering customer information online, and using phishing scams.

Fraudsters can change account information, make purchases, withdraw money (if that function is available), and access other user accounts once they have control of the account. Identity theft takes the form of account takeover fraud. Account takeover fraud victims may never again trust the provider, and any previous customer relationships will be damaged, if not destroyed. As a result, one of the most harmful types of e-commerce fraud is account takeover fraud.

Figure 2 shows the account capture scheme.

**Parcel interception fraud.** With parcel interception fraud, a fraudster uses a stolen credit card to make purchases from a victim’s online store, but they get around some security measures by using real addresses for both shipping and billing. When placing an order, the objective is to stop the delivery before it gets to the requested address.

Fraudsters can accomplish this using one of three methods:

1. Stealing the package from the drop-off location if they know the victim and live nearby;
2. Contacting your company’s customer service representative to change the shipping address before the product is ready to ship;
3. Contacting the shipping company independently to re-route the package to their preferred location.

**Chargeback fraud.** When a customer makes a purchase before getting in touch with the credit card company to cancel it, this practice is known as “chargeback fraud”. Because it may result from a valid purchase that the customer is unaware of, chargeback fraud

is an interesting case. This specific situation is frequently referred to as “friendly fraud”. However, friendly fraud hurts e-commerce merchants just as much. Relationships with clients and customers may suffer as a result. Some con artists purposefully engage in chargeback fraud by abusing business policies to obtain items for free while knowing that the purchase will be reversed to their credit card.

Companies incur significant costs as a result of chargebacks, including

- Refund payments;
- Lost goods;
- Shipping costs;
- Fines, and administrative costs;

**Refund fraud.** In refund fraud, a fraudster buys a product or service using a stolen credit card and then makes a refund to their credit card. One of the most common tactics is to inform the merchant that the refund will need to be processed on a new credit card because the old one has been closed [7].

**Measuring the impact of fraud on enterprise costs.** Entrepreneurs must assess a wide range of factors in order to determine the overall cost of fraud to a business. The calculation of direct financial losses as a result of fraud is one method for estimating the effect of fraud on the cost of doing business. Chargeback fees lost revenue and the expense of detecting and stopping fraud are some examples of this. Businesses can evaluate the success of their fraud prevention efforts and modify their strategies by tracking the cost of fraud over time.

**Customer Retention Rate:** Fraud can lower customer retention rates by making customers doubt the company. Businesses can assess whether fraud prevention strategies

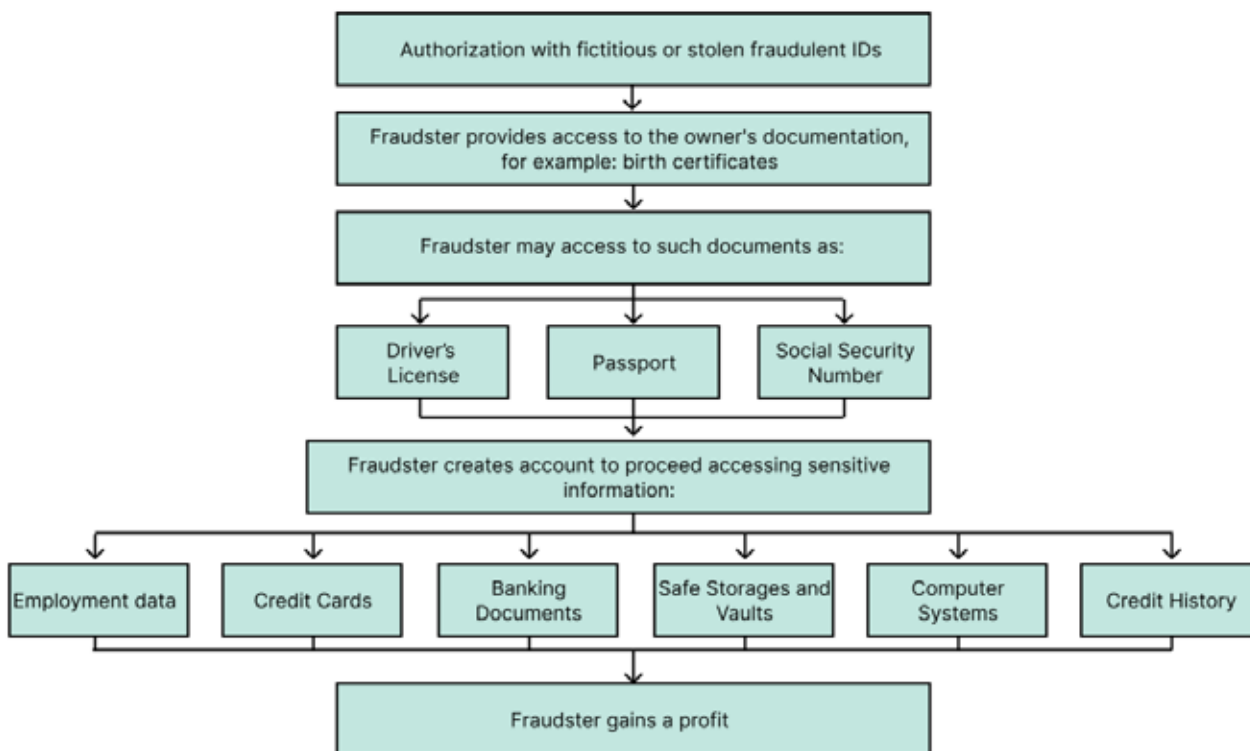


Fig. 2 – Account take-over scheme

are successful in preserving customer loyalty and trust by monitoring customer retention rates over time.

**Employee Engagement:** Employee involvement is frequently needed for fraud prevention initiatives, such as fraud awareness training and reporting suspicious activity. Businesses can evaluate the success of these steps in lowering the risk of fraud by measuring employee engagement and satisfaction. Fraud can harm a business's reputation and brand image, which can result in indirect costs like lost sales and decreased customer confidence. Businesses can assess the impact of fraud on their image and reputation and take action to mitigate any negative effects by tracking brand reputation and customer sentiment.

Businesses can identify potential fraud risks and ensure compliance with industry regulations by conducting routine audits. Companies can evaluate the success of their fraud prevention efforts and pinpoint areas for development by tracking audit results over time [8].

**Analysis of services and payment systems to prevent online payment fraud.** Here are some examples of companies that provide fraud prevention solutions that can integrate with small and medium-sized businesses (SMBs) and their pricing models.

Stripe offers many fraud prevention tools, including machine learning algorithms and analysis of buyer behavior. They have a calculated pricing model that charges 2.9% + \$0.30 per successful transaction [9].

PayPal offers several fraud prevention tools, including fraudsters and chargeback protection. They have a billing pricing model that charges 2.9% + \$0.30 per transaction [10]. Shopify: Shopify offers several fraud prevention tools, including machine learning algorithms and order risk analysis. They have a tiered pricing model with plans starting at \$29/month and transaction fees

ranging from 2.4% + \$0.30 to 2.9% + \$0.30 depending on the plan [11]. Braintree: Braintree offers a range of fraud prevention tools, including machine learning algorithms and behavioral analysis. They have a calculated pricing model that charges 2.9% + \$0.30 per successful transaction [12]. It is important to note that the cost of fraud prevention solutions can vary significantly depending on the specific needs and requirements of the business. Additionally, some companies may offer pricing models based on transaction volume or other metrics. Before making a decision, SMBs are advised to evaluate several different fraud prevention companies and compare prices, features, and integration options.

### Conclusion

The conducted research made it possible to reach the following conclusions. Fraud prevention is a critical issue for small and medium-sized merchants. The financial consequences of fraud can be significant, leading to increased costs and lost profits, as well as damage to a company's reputation. SMBs can use a variety of methods to prevent fraud, including self-education and staff training, fraud prevention software, advanced authentication procedures, and partnerships with third-party companies.

By implementing effective fraud prevention measures, small and medium-sized businesses can protect their business and customers from financial losses and maintain the trust of their customers. It is important for small and medium-sized businesses to constantly evaluate and update their fraud prevention strategies to stay ahead of new fraud methods and protect their business.

In addition, with the advancement of technology, small and medium-sized businesses can use the power of artificial intelligence and machine learning algorithms to prevent and predict fraud.

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# FINANCE AND MONEY TURNOVER

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## THEORETICAL AND METHODOLOGICAL APPROACHES TO THE DEFINITION AND IDENTIFICATION OF FINANCIAL CRISIS

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**Key words:**

crisis, financial crisis,  
external environment,  
internal environment,  
financial condition, bankruptcy,  
express analysis,  
/fundamental analysis, strategy,  
financial and economic security

The article determines that the financial crisis, depending on the stage it is in, is the main indicator that signals to the management of the enterprise about the troubles (problems) in the activity, the consequence of which is the deterioration of the financial and economic performance of the enterprise, namely indicators: revenue from sales of products (services), profit, reduced sales, increased costs, reduced innovation, partial or complete cessation of financing of costs in the information system, etc. The influence of the war on the efficiency of activity or the possibility of the very existence of enterprises, namely labor, material, intangible resources, fixed assets, partially or completely their suppliers and consumers, natural resources, that is, the deterioration of almost all factors of the exogenous and endogenous environment in the financial and economic system of the enterprise, is substantiated. It is established that in the conditions of military aggression against Ukraine, a big problem arose in the full or partial loss of economic ties; markets; resource markets; qualified personnel who were forced to leave Ukraine; the growth of currency risk, which led to an increase in costs, which resulted from the inability of some enterprises to continue their activities under such conditions. The scientific approaches to defining the essence of the crisis were further studied in the article and the author's definition of the essence of this process was provided. The methodical approaches to crisis identification are investigated taking into account fundamental analysis and use of factor methods and forecasting. The main methodological approaches to the analysis of the main indicators accompanying the process of the financial crisis are presented. For identification of financial crisis the structural scheme of stages of its diagnostics and prevention is developed.

## ТЕОРЕТИКО-МЕТОДОЛОГІЧНІ ПІДХОДИ ДО ВИЗНАЧЕННЯ ТА ІДЕНТИФІКАЦІЇ ФІНАНСОВОЇ КРИЗИ

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**Ключові слова:**

криза, фінансова криза,  
зовнішнє середовище,  
внутрішнє середовище,  
фінансовий стан,  
банкрутство, експрес-аналіз,  
фундаментальний аналіз,  
стратегія,  
фінансово-економічна безпека

В статті визначено, що фінансова криза в залежності в якій стадії вона знаходиться є головним індикатором, що сигналізує менеджменту підприємства про негаразди (проблеми) в діяльності, наслідком якої є погіршення фінансово-економічних показників діяльності суб'єкта господарювання, а саме показників: виручки від реалізації продукції (послуг), прибутку, зменшення обсягів продажів, зростання витрат, зменшення обсягів інноваційної діяльності, часткове або повне припинення фінансування витрат в інформаційну систему та ін. Обґрунтовано вплив війни на ефективність діяльності чи можливості самого існування підприємств, а саме трудових, матеріальних, нематеріальних ресурсів, основних фондів, частково або повністю своїх постачальників та споживачів, природних ресурсів, тобто погіршення одночасно майже всіх чинників екзогенного та ендогенного середовища в фінансово-економічній системі підприємства. Встановлено, що в умовах військової агресії проти України, виникла велика проблема в повній або частковій втраті господарських зв'язків; ринків збуту; ринків ресурсів; кваліфікованих кадрів, що вимушені

були покинути Україну; зростання валютного ризику, що призвів до зростання витрат, які стали наслідком неможливості частині підприємств продовжувати за таких умов свою діяльність. В статті набули подальшого дослідження наукові підходи до визначення сутності кризи та надано авторське визначення сутності даного процесу. Досліджено методичні підходи до ідентифікації кризи з урахуванням фундаментального аналізу та використання факторних методів та прогнозування. Представлено основні методичні підходи до аналізу основних індикаторів, що супроводжують процес настання фінансової кризи. Для ідентифікації фінансової кризи розроблено структурну схему етапів її діагностики та попередження.

### Statement of the problem

Military aggression, the growth of crisis phenomena, uncontrolled inflationary processes, the growth of currency risk, the decline in business activity, the deterioration of the financial results of business entities worsen the conditions for the functioning of business activity. Therefore, it is important to develop a unified approach to the interpretation of the concept of crisis, to systematize methodological approaches, measures to prevent, identify and overcome the financial crisis in modern conditions.

### Analysis of recent studies and publications

The problems of studying the essence of the crisis, methodological approaches to the identification and prevention, elimination of financial crises are considered in the works: I.O. Akhnovska [1, p. 27–35]; A.I. Gizun [5, p. 99–108]; O.V. Guk [2, p. 193–198]; N.I. Demchuk [3, p. 36–41]; O.O. Drobysheva [4, p. 87–92]; Kalinichenko Z. [7, p. 90–100]; R.P. Kirilyuk [2, p. 104–128]; I.L. Lozova [5, p. 99–108]; V.M. Melnyk [3, p. 178–182].

### Objectives of the article

The purpose of the article is to study the theoretical aspects of the formation of approaches to the definition of the concept of crisis in different historical epochs, to substantiate methodological approaches to the development of a system of indicators, methods, measures that make it possible to prevent and overcome the crisis in the early stages of its manifestation.

### The main material of the research

The global financial crisis that began in February 2020, triggered by COVID-19, has turned into the beginning of the next stage of this crisis, deeper and more impressive in its scale, with Russia's attack on Ukraine in February 2022. According to international experts, the world economy may face the biggest test since the Second World War, forecasts for global GDP growth have been revised from 4.1% to 2.9%, according to official data, the decline in GDP in Ukraine for the first 9 months of 2022 is estimated at 30%, according to the Ministry of Economy of Ukraine.

In the conditions of war, most enterprises have lost important prerequisites for effective operation or the possibility of their very existence, namely labor, material, intangible resources, fixed assets, partially or fully their suppliers and consumers, natural resources, increased currency risk, that is, the deterioration of almost all factors of the exogenous and endogenous environment in the financial

and economic system of the enterprise. The war has affected the entire economic system of our country, some enterprises were destroyed, a significant number of enterprises have to adjust to new conditions or close. Some enterprises have lost economic ties, partners, logistics capabilities, all this leads to crisis phenomena and situations, which in the future, if not timely eliminated, become the root cause of a deeper crisis, transition to crisis and bankruptcy.

Crisis, crisis situation, their causes and consequences have been studied and researched all the time in different historical epochs, during this time there were changes in all spheres of human activity due to the development of scientific and technological progress, from production methods, provision of services, to consumption, consumption products, lifestyle, values, so the approaches, tools for identification, prevention of financial crises, crisis management have been changing all the time.

The very concept of crisis has its historical roots in medicine and theater art, where it was first used. For medicine, this term was used to describe the deterioration of the patient's condition, which could lead to recovery or death, while in theatrical art it was a decisive moment, the culmination of a theatrical performance. Until the XIX century, the crisis was characterized by underproduction of agricultural products, and after that, on the contrary, as «underconsumption», which was associated with the development of science and technology and which led to a violation between supply and demand, the emergence of surplus in the market. The very concept of crisis began to be used in economics only in the XIX century and meant an undesirable, dramatic phase in the capitalist economic system, characterized by fluctuations and negative phenomena, obstacles [4].

Many economists associate the emergence of crises with scientific and technological progress (STP), according to which the active part of the fixed capital becomes obsolete over time (this time varies depending on the period of renewal of the fixed capital under the influence of STP), which leads to the need for its renewal, and therefore becomes an incentive for economic recovery.

Thus, having studied neoclassical and liberal doctrines, the theory of market freedom and modern approaches to the definition of the crisis, we can make our own interpretation of the essence of the crisis. Crisis is a kind of «crash-test», «stress-test» for firmness, steadfastness, search for vulnerabilities, problems, shortcomings, the ability to continue activities, the ability to exist, as a rule, it challenges the development of the enterprise at each stage of the life cycle, the result is the introduction and implementation of



timely response measures to internal and external threats, the formation of own practically acquired and effective tools to overcome possible crisis phenomena (situations), the formation of immunity to such situations (states).

Crisis is an opportunity to exist in new realities, the possibility of rapid change, the development of rapid response measures in the event of threats, the development of measures and indicators of continuous monitoring of crisis phenomena to prevent their transition to crisis situations and crisis. It makes it possible to assess the viability of the development strategy, to analyze its effectiveness, to assess the market position and sales policy of the enterprise by analyzing the competitiveness of prices for products (services), quality and innovation of products sold, to optimize costs, to develop a system for identifying crisis phenomena, to select effective personnel who will guide and adjust the development of the enterprise along the specified route (strategy) at a specific planned time.

A crisis is the development of a crisis phenomenon or phenomena into a crisis state in case of untimely response to these challenges, accompanied by a deterioration in the main key performance indicators of the enterprise, namely a decrease in the dynamics of profits, the emergence of losses, a decrease in the volume of sales of products (services), a decrease in the solvency of the enterprise, liquidity, etc.

Overcoming the crisis enables the company to improve its position in the market, become more competitive, more efficient and innovative.

Various methodological approaches are used to identify the financial crisis, determine the financial condition of the enterprise (Fig. 1).

These methodological approaches for identifying the financial crisis and determining the financial condition of the enterprise are divided into those that are used from public, scientific to private, the latter are closed and are usually more accurate, because to determine the crisis, the original parameters are selected that correspond to the scope of the enterprise and the time in which such an enterprise operates, because over time, the methods become outdated, take into account the factors that are key in the period of their development, are developed for certain countries and markets. Depending on the methodology for analyzing indicators, diagnostic directions, methods of forming evaluating indicators, a scheme of classification of approaches to crisis identification is proposed (Fig. 1) [7].

When analyzing indicators by each methodological approach, it is important to evaluate on the basis of a combined approach that will assess both qualitative and quantitative parameters of the state of the object, including factors that affect the negative change in the indicator in dynamics. In the process of crisis diagnostics, vertical, horizontal analysis of absolute and relative values, factor and trend analysis, modeling or discounting in the process of cash flow analysis, and forecasting the future financial condition of the enterprise are carried out. Methods of diagnosing the financial crisis or financial condition of the object of study are divided into methods of economic analysis, strategic analysis, economic and mathematical methods, SWOT analysis, expert assessments, scenario method in the process of retrospective, operational or prospective analysis to identify bottlenecks that affect the financial, economic and technical and economic position of the entity.

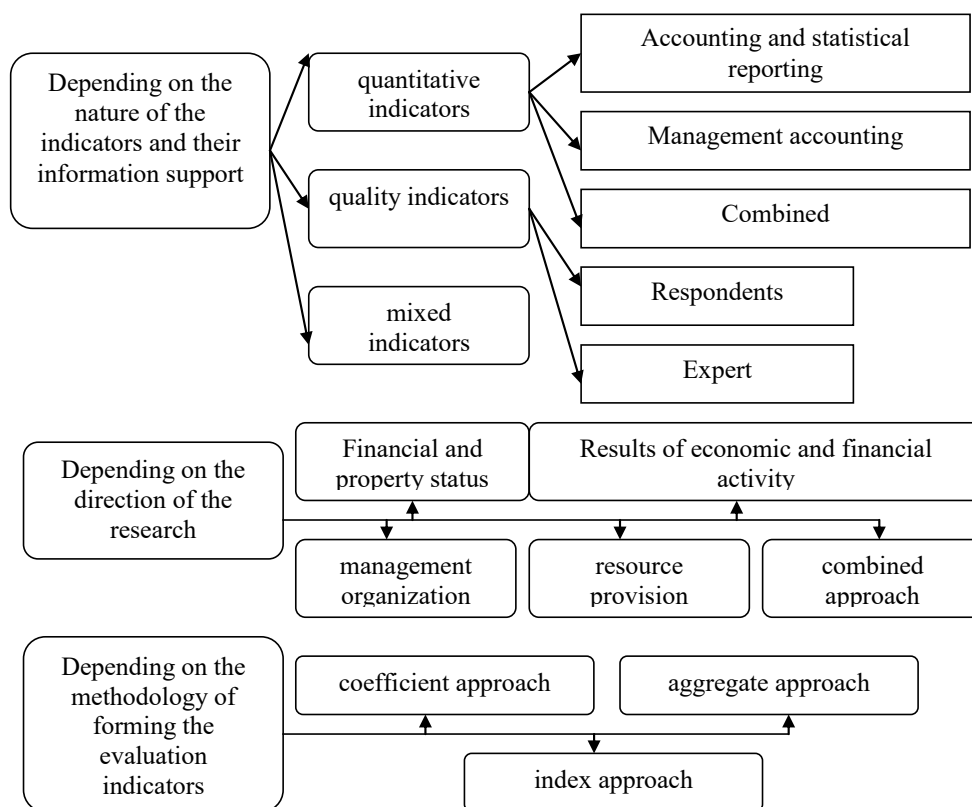


Fig. 1 – Classification of methodological approaches to the identification of financial crisis

To prevent, identify and overcome the financial crisis, it is necessary and obligatory to constantly monitor the main key parameters of the enterprise, by conducting, depending on the goals and state of the object of valuation, express analysis, fundamental (in-depth) analysis, modeling or forecasting the probability of bankruptcy in the structure of a comprehensive diagnosis of the financial condition of the subject of valuation.

To identify the financial crisis at the enterprise, it is recommended to carry out monthly express diagnostics and in case of detection of negative trends, deterioration of key indicators in the dynamics to carry out a fundamental analysis of the financial condition of the enterprise, the main key indicators and areas of activity, such frequency will allow not to miss the onset of crisis phenomena with the subsequent transition to a crisis state. For diagnostics, it is recommended to use software packages, and based on the results of the analysis, draw appropriate conclusions and implement the necessary response measures.

Express diagnostics is a regular diagnostic system for instant analysis of the main key informative indicators for the early detection of problem areas (signs) of enterprise development, for understanding and assessing the current financial condition and economic development of the enterprise in dynamics.

A deeper methodological approach to the identification of the crisis is a fundamental analysis using factor methods and forecasting, using enterprise reporting forms, operational and management accounting data, based on the analysis of qualitative and quantitative indicators, their relationship and mutual influence by a combined method, the diagnosis of the crisis should be based on financial and economic indicators, analysis of strategy, marketing environment, market position, competitors, innovation component, management style, loyalty.

To identify the financial crisis, we have developed and proposed a structural diagram of the stages of its diagnosis and prevention (Fig. 2).

At the first stage, a system of indicators is developed that are subject to systematic analysis and adjustment in accordance with the market and economic situation in the country, factors of the external and internal environment of the enterprise. These indicators include, first of all, the volume of products sold, fixed and variable costs, indicators of accounts receivable and accounts payable, indicators of solvency and liquidity, turnover indicators, profit and profitability, forecast of bankruptcy probability. At the stage of enterprise growth, the dynamics of growth in sales volumes and proportional growth in the amount of net profit of the enterprise is analyzed. This stage also includes the development of a system of anti-crisis measures, which will make it possible to respond quickly to negative changes in the financial condition of the enterprise.

The second stage includes the allocation of responsible persons who will constantly monitor the implementation of the set operational and strategic goals and performance indicators in accordance with the developed strategy, timely respond in accordance with the developed crisis management measures.

The third stage is characterized by regular rapid diagnostics of the financial condition and key parameters of the enterprise, and in case of deterioration, the transition to the next stage of crisis identification.

The fourth stage includes an in-depth, i. e. fundamental analysis of the crisis in the following areas: search for causes and factors that influenced the deterioration of key indicators; search for explicit and implicit reserves for the growth of activity (profit); forecasting the probability of bankruptcy; analysis of the market position

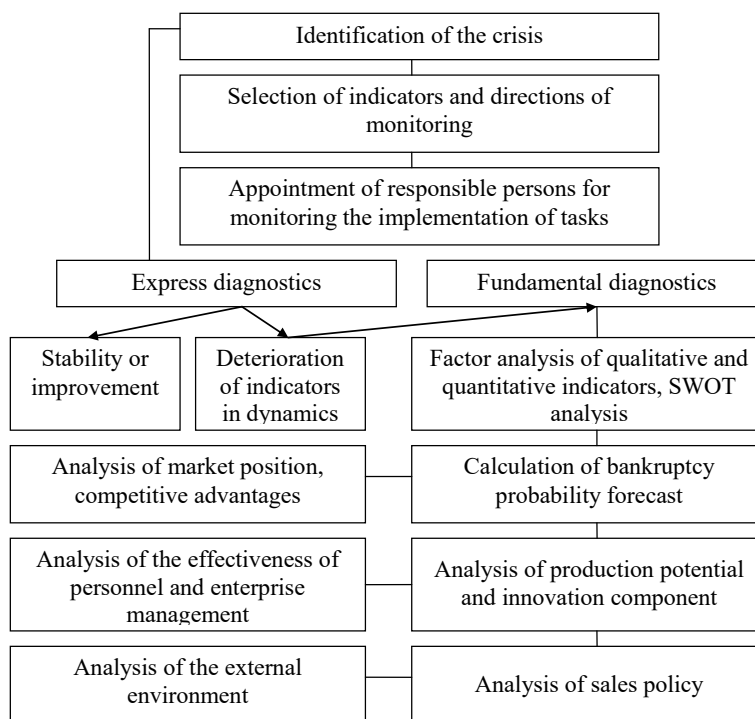


Fig. 2 – Structural diagram of identification of financial crisis at the enterprise

of the enterprise, sales policy; analysis of management and personnel: analysis of staff loyalty, productivity, digitalization of business processes where possible and impossible (including electronic document management).

We consider the creation and functioning of the following areas (divisions) in the financial and economic system of the enterprise necessary and obligatory in the current conditions of market economy development.

Creation of an information system, including automation and digitalization of business processes, functioning of electronic document management at the enterprise, which allows minimizing costs and speeding up decision-making processes at the enterprise, quickly responding to the challenges that arise in the process of implementing the enterprise strategy.

The intellectual fund of the enterprise will allow to improve the work of the enterprise in all areas where there are shortcomings that can lead to crisis phenomena, due to the material motivation of employees to develop and propose for consideration ideas that will be aimed at optimizing costs, improving the quality of service, product quality, finding vulnerabilities of the enterprise, finding areas where the enterprise can reduce costs, increase profits through the implemented measures, that is, the intellectual fund will be the center of generation, analysis and implementation of the

The direction of fraud is a necessary element in the structure of the enterprise, which makes it possible to prevent or neutralize fraud processes in the enterprise that negatively affect its activities. Any employee of the enterprise can report the facts of fraud, for which he receives a reward in case of such confirmation by the security service.

Thus, the crisis is inevitable in the life cycle of the enterprise, the enterprise is constantly developing, financing its production potential, buying innovative technologies, hiring the best employees, buying raw materials at the lowest prices, but over time, even the most modern technologies become obsolete, the best employees are less effective over time, old knowledge without updating becomes less effective, old technologies consume more resources (human, natural, etc.) and give more defects in the production process. Therefore, in the process of enterprise development, it is necessary to analyze all the time what the latest technologies are; the latest staff training programs aimed at improving their efficiency, skills, abilities; to explore the resource market, what raw materials or materials we can use in production, to reduce costs, improve product quality; great attention should be paid to the digitalization of business processes at all levels of the enterprise (production, marketing, management, financial), etc.

### Conclusions

According to the results of the study, scientific approaches to the interpretation of the concept of crisis have been further developed; the interpretation of the concept of crisis as a constant process that accompanies, as a rule, each stage of the life cycle of an enterprise, is a stress test based on rapid response measures aimed at improving the efficiency and competitiveness of the enterprise, is updated; the methodological basis for identifying the crisis state is systematized; the structural scheme of the stages of diagnostics of financial and economic crisis is proposed and improved.

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# LABOUR ECONOMICS, PERSONNEL MANAGEMENT AND MARKETING

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## INNOVATIONS IN PERSONNEL POLICY IN PANDEMIC AND WAR CONDITIONS

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### Key words:

innovative personnel products,  
electronic document management,  
personnel policy, digitization,  
freelance work,  
remote work format

The article examines innovations that are being actively implemented by HR management in the personnel policy of enterprises. Special attention is paid particularly to those innovative ideas that arose and caused considerable interest precisely during the introduction of restrictions due to the COVID -19 pandemic and became inevitable in their application during military action. The reasons for the interest of the current able-bodied generation in freelance work and the growing demand for a remote work format, which became the primary reason for the introduction of changes in the work of personnel services, are indicated. The dynamics of the labor market of Ukraine, in particular during periods of crisis, have been analyzed, and a stable trend towards an increase in the unemployment rate during various troubles in the country has been determined. The influence of large-scale digitization of the country on the transformation of the work of personnel of individual enterprises and the need for an active transition to electronic document management in all spheres of life are considered. Examples of the best innovative software products for personnel management and their functions are given. The positive impact of the results from the implementation of programs that ensure the effective functioning of personnel services even during the forced restrictions of the pandemic and war has been proven. Attention is focused on the low demand for innovative products from the HR management side, which is caused by insufficient awareness in this area and the lack of educational programs that reveal the essence and importance of using the above-mentioned personnel management products. The need for further implementation of the government policy regarding the all-Ukrainian digitization program is noted, which encourages its active participants to transition to new realities of economic life and ensures the implementation of any personnel tasks, even in the absence of the opportunity to work offline and conduct document circulation on paper media. It has been found that one of the promising ways of further work of personnel units of both individual enterprises and the state as a whole during the war and in the post-war period is the increase of electronic document circulation, in particular through the use of innovative software products for personnel management.

## ІННОВАЦІЇ У КАДРОВІЙ ПОЛІТИЦІ В УМОВАХ ПАНДЕМІЇ ТА ВІЙНИ

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### Ключові слова:

інноваційні кадрові продукти,  
електронний документообіг,  
кадрова політика,  
діджиталізація,  
фрілансерська робота,  
віддалений формат роботи

В статті досліджуються інновації, які активно впроваджуються HR-менеджментом у кадровій політиці підприємств. Особлива увага приділяється безпосередньо тим новаторським ідеям, що виникли та викликали неабияку цікавість саме під час введення обмежень через пандемію COVID-19 та стали неминучими у застосуванні під час воєнних дій. Зазначені причини зацікавленості нинішнього працездатного покоління у фрілансерській роботі та зростання попиту на віддалений формат роботи, що стало першочерговою причиною для впровадження змін у роботі кадрових служб. Проаналізовано динаміку ринку праці України, зокрема у кризові періоди, та визначено стабільну тенденцію до зростання рівня безробіття під час різних негараздів у країні. Розглянуто

вплив масштабної діджиталізації країни на трансформацію роботи кадровиків окремих підприємств та необхідність активного переходу до електронного документообігу у всіх сферах життя. Наведено приклади кращих інноваційних програмних продуктів для управління персоналом та їх функції. Доведено позитивний вплив результатів від впровадження програм, що забезпечують ефективне функціонування кадрових служб навіть під час вимушених обмежень пандемії та війни. Зосереджено увагу на низькій затребуваності інноваційних продуктів з боку HR-менеджменту, що викликано недостатньою обізнаністю у цій сфері та відсутністю освітніх програм, що розкривають сутність та важливість застосування зазначених вище продуктів кадрового управління. Зазначено необхідність подальшого впровадження урядової політики щодо загальноукраїнської програми діджиталізації, яка спонукає її активних учасників до переходу у нові реалії господарського життя та забезпечує реалізацію будь-яких кадрових завдань, навіть за умови відсутності можливості працювати в офлайн режимі та вести документообіг на паперових носіях. З'ясовано, що одним з перспективних шляхів подальшої роботи кадрових підрозділів як окремих підприємств, так і держави в цілому під час війни та у післявоєнний час є нарощування електронного документообігу, зокрема через застосування інноваційних програмних продуктів для управління персоналом.

### Formulation of the problem

This research is very relevant for Ukrainian HR management, because innovative tools in the form of HR software are usually at the core of a company and play a crucial role in running a successful business, regardless of its size. In the conditions of crisis situations, such as a pandemic or military action, such research becomes especially relevant, because it is crisis situations that cause an active and stable increase in the level of unemployment in the country and an active migration outflow of the able-bodied population. Now, when many Ukrainian entrepreneurs are testing remote work with teams scattered across different regions of the country and other states, it has become very important to have a reliable HR tool within the company. Low awareness, insufficient awareness of Ukrainian HR management in this direction and lack of educational programs encourage further research, search and active implementation of the latest HR technologies.

### Analysis of recent research and publications

Many domestic researchers take care of the issue of personnel policy as an object of research and a tool of strategic development, namely: M.D. Vinogradskyi, O.M. Shkapova, O. Andrus, V.V. Ivanchenko, O. Doronina. Peculiarities of the formation and implementation of effective personnel policy are defined in the works of Kapinos P., L.F. Shostak. Also, some researchers focus their attention on issues of innovative technologies in the field of personnel policy, namely: S.S. Tarasova, I.V. Zastrozhnikova, M.P. Denysenko. At the same time, it should be noted that new software products for personnel are being created and used in practice, but there are not enough scientific and educational programs on this issue. Developers of such products and bloggers usually pay attention to innovative products designed for HR professionals. Their publications contribute to the expansion of ideas about innovative HR products, the importance of the digitalization course developed and implemented by the Ukrainian authorities, which allows us to finally wish a farewell to the remnants of the paper Soviet past, technological backwardness and turn Ukraine into

a developed country with a high standard of living. Special attention in the study is paid to the expected acceleration of digitalization of Ukraine in the conditions of a full-scale invasion of the territory of Ukraine by the Russian Federation.

### Formulation of goals

The purpose of the article is to investigate the impact of crisis events on the level of unemployment in Ukraine and to identify promising ways of digital transformation of personnel policy and the use of innovative products for personnel management in difficult war and post-war times.

### Presentation of the main research material

The vulnerability of the economy as a whole and of each person in particular in the conditions of the 2019–2021 pandemic prompted the global business community to adapt the field of labor relations to new relationships, namely: radically change the main business processes, switch to a remote form of work, optimize and significantly reduce the number of employees. Forced vaccination caused resistance of the population and, in turn, led to a wave of voluntary dismissals and an active increase in the number of the working population willing to work without leaving home. A survey of Ukrainian freelancers showed that it was freelancing that helped them cope with the consequences of the pandemic better than those who had a traditional job [1], and 34% of the surveyed freelancers started their work specifically at the beginning of the pandemic. Analysis of the situation carried out by the American consulting company Edelman Intelligence back in 2020, showed that more than half of the US workforce will become freelancers in the next six years.

The full-scale war launched by Russia against Ukraine in February 2022 caused mass migration, mobilization and death of the working population. The majority of Ukrainians has lost the opportunity to work due to the destruction of the country's infrastructure, constant shelling of peaceful settlements, and were forced to massively switch to the online mode of work.

The remote format of work has become a new reality. Almost 90% of potential workers in the world prefer to

work remotely at least partially, and Ukrainians are forced to switch to remote work due to the war. Personnel policy from the point of view of motivational measures has undergone significant changes, because motivations such as career growth or improvement of professional qualifications have become secondary, and short-term financial advantages have gained primary importance, especially for the younger generation of the working population.

All this directly affected the work of personnel services, their perception of the application of the new toolkit of personnel policy. As a result of the pandemic and the war, HR transformation experts have become the most sought-after professions in the business environment, who must determine the priorities of companies from the point of view of the formation of a new staff of employees and the direction of personnel training. The personnel policy of Ukrainian enterprises began to be reoriented in order to satisfy the main demand of the working population – the maximum transition of business to the electronic format of work.

Analysis of the labor market of Ukraine during the crisis periods of 2008–2009 (financial crisis), 2013–2014 (the beginning of military events in the south and east of Ukraine), 2019–2021 (coronavirus pandemic) and the full-scale war in 2022 showed a stable upward trend unemployment rate

in the country. Only with regard to the officially employed population, according to the Ministry of Finance of Ukraine, each successive crisis added from 1.3% to 3% of the unemployed population (see Fig. 1). And the military crisis, according to NBU data as of July 2022, caused the unemployment rate in Ukraine to rise to a record 35% [2].

The number of the unemployed population shown in Fig. 1, calculated according to the ILO methodology, is significantly different from the number of officially registered unemployed people (see Fig. 2).

The level of officially registered unemployed population does not correspond to the actual state of affairs, because the Ukrainian personnel policy was not ready for an immediate transition to martial law both at the level of individual companies and at the state level. The question of keeping records of the unemployed or workers who were mobilized to the Armed Forces, temporarily resettled or those who emigrated remained unanswered for a long time due to the impossibility of documenting changes in the status of employed people on paper.

In view of the above, it can be stated that the strategy of digital transformation of Ukraine for the coming years, which was formed by the Cabinet of Ministers of Ukraine and actively implemented in all areas of the country’s life,

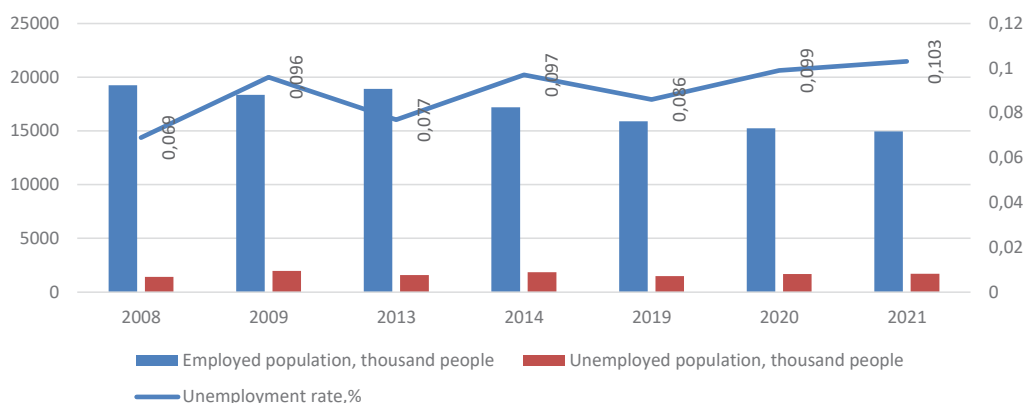


Fig. 1 – Unemployment rate in Ukraine during crisis periods

Source: compiled by the authors based on data [3]

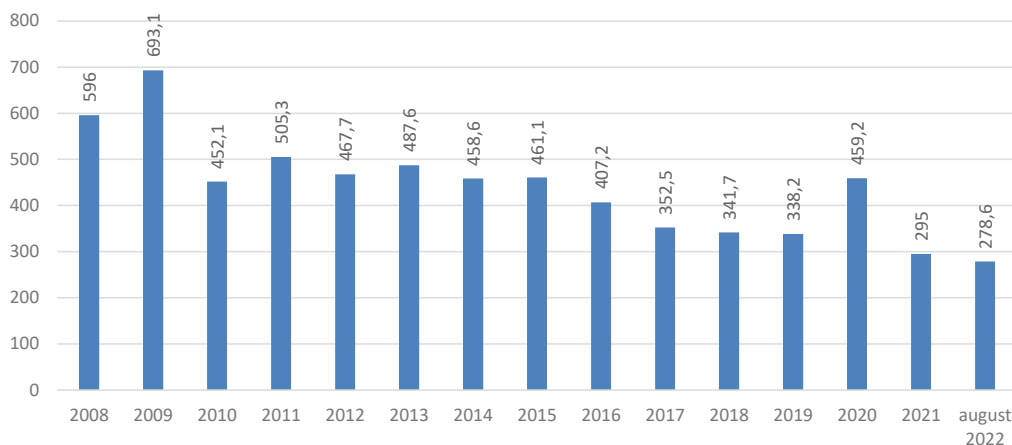


Fig. 2 – The number of officially registered unemployed in Ukraine, thousands of people

Source: compiled by the authors based on data [3]

was timely. The 94 projects approved by the government to build a digital state were supposed to be implemented within three years, but the war intensified the development processes of the IT industry, which achieved unprecedented results in 2022. The only industry that has withstood the adversities of the war and continues to actively develop in Ukraine is the IT industry. Export revenues from IT services of Ukraine for January-May 2022 amounted to 3.2 billion US dollars, which is 27% more than in the same period of 2021 [4].

Large-scale digitization of the country encourages top managers of Ukrainian business to transform companies from the inside in order to adapt to new external conditions. Ukrainian personnel officers have already joined the process of electronic document management and keep records of the length of service of workers and sick days in the form of electronic documents, and the analysis of the company’s personnel policy is partially implemented thanks to accounting programs (BAS). They are gradually starting to implement the latest personnel tools in the form of documents certified by electronic signatures and studying the principles of information systems for personnel management. The most common today’s programs for personnel management, which allow the employer and managers of the personnel department to more efficiently allocate their time and resources for the management and control of personnel issues, are shown in Table 1.

The use of the aforementioned innovative tools by human resource personnel of enterprises helps to implement any service related to the life cycle of an employee in the company: search, analysis and hiring of new employees, registration of leave, replacement, dismissal, obtaining additional wages and financial assistance, control of effective use working hours, career growth, etc. Some programs provide an opportunity to

automatically create a document that is electronically signed by the employee and approved by the employer, and subsequently all participants in the work process have the opportunity to monitor the status of the documents online. When choosing a software product, HR management should take into account the main thing – the compliance of the product with the company’s personnel management goals. An ideal tool should help company management with hiring, feedback and performance management. The developers of the above-mentioned software products offer additional services for their adaptation to the requirements of a specific enterprise and its strategic and tactical goals.

**Conclusions**

Global crises and crisis situations within the country cause an active and stable increase in the level of unemployment in Ukraine and an active migration outflow of the working population. The efforts of state policy and HR management of individual companies are aimed at solving this problem, the main tool of which is the digitalization of all processes and the transition to an online mode of operation.

The personnel policy of the state and each individual company needs adaptation to new conditions of existence in times of pandemic and war. Innovative tools for implementing such a transformation in the field of personnel management are available on the Ukrainian market, but they are not in sufficient demand from the HR management side. Maximum digitization of all personnel policy processes and the creation of favorable working conditions in wartime will stimulate the growth of the number of officially employed population, satisfy the requirements of the freelance generation, encourage the population of Ukraine to realize their talents in the Motherland and lead to a decrease in the unemployment rate in the country.

Table 1 – List of the best HR software products and their features in 2021

The name of programs for personnel management	Functions offered by personnel management programs
BambooHR	– employee training records; – self-service of employees; – self-service manager; – performance and compensation reviews; – reporting and calculation of wages; – status control and tracking of applicants; – information about the employee; – administration of benefits; – working hours and attendance, etc.
Able to work	
HR payroll system	
People	
Peopleforce	
Jazz HR	
Lanterns	
Salary	

Source: compiled by the authors based on data [5]

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# PROJECT MANAGEMENT AND FINANCIAL AND ECONOMIC SECURITY IN THE CONDITIONS OF GLOBALIZATION

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## FEATURES OF ENSURING THE ECONOMIC SECURITY SYSTEM OF THE BANKING INSTITUTION

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### Key words:

economic security,  
banking institution,  
banking sector, analysis,  
approach, control

It has been established that the essence and content of the economic security of a banking institution derive from the tasks that the bank solves at each of the stages of its formation and development and are determined by a number of factors of both an external and internal nature. Theoretical approaches to the essence and content of the economic security of a banking institution have been studied. Attention is focused on the fact that the primary task for ensuring the sustainable development of the banking sector of Ukraine is to assure the economic security of the banking system and assess its level, which will make it possible to define the actual state of financial security of the banking system of Ukraine, the influence of certain factors and threats on the stability of the functioning of banks and to determine the vector of actions to prevent their negative impact, and effective implementation of preservative measures to increase the level of security of the banking system. The prerequisites and results of the banking institution activity have been investigated, which are a necessary condition for solving the tasks of ensuring the economic security of the bank. It is revealed that in the theoretical aspect, several approaches are used to determine the quantitative level of economic security: indicator (threshold), resource-functional, program-target (complex), approach based on the theory of economic risks. The stages of ensuring the economic security of banking institutions are disclosed. A set of measures to increase the economic security of the bank is provided and analyzed. Existing threats to the banking system of Ukraine are highlighted.

## ОСОБЛИВОСТІ ЗАБЕЗПЕЧЕННЯ СИСТЕМИ ЕКОНОМІЧНОЇ БЕЗПЕКИ БАНКІВСЬКОЇ УСТАНОВИ

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### Ключові слова:

економічна безпека,  
банківська установа,  
банківський сектор, аналіз,  
підхід, контроль

Встановлено, що на сутність і зміст економічної безпеки банківської установи впливають із завдань, що їх вирішує банк на кожному з етапів свого становлення й розвитку та зумовлюється низкою чинників як зовнішнього, так і внутрішнього характеру. Досліджено теоретичні походи до суті та змісту економічної безпеки банківської установи. Зосереджена увага на тому, що першочерговим завданням для забезпечення сталого розвитку банківського сектору України є забезпечення економічної безпеки банківської системи та оцінка її рівня, яка дасть можливість визначити фактичний стан фінансової безпеки банківської системи України, вплив тих чи інших чинників та загроз на стабільність функціонування банків та визначити вектор дій щодо запобігання їх негативного впливу, і ефективної реалізації превентивних заходів для підвищення рівня безпеки банківської системи. Досліджено передумови та результати діяльності банківської установи, які є необхідною умовою вирішення завдань щодо забезпечення економічної безпеки банку.



Розкрито, що в теоретичному аспекті для визначення кількісного рівня економічної безпеки використовується декілька підходів: індикаторний (пороговий), ресурсно-функціональний, програмно-цільовий (комплексний), підхід на основі теорії економічних ризиків. Розкриті етапи забезпечення економічної безпеки банківських установ. Наданий та проаналізований комплекс заходів щодо підвищення економічної безпеки банку. Виділено наявні загрози банківській системі України.

### **Formulation of the problem**

The formation of the security system of banking institutions has acquired special significance in the conditions of the post-crisis period at the macro and micro levels. Its nature and content originate from the tasks that the bank solves at each of the stages of its formation and development and are determined by a number of factors of both external and internal character. Firstly, the necessity and importance of security arises from the existing variety of interests of banking services market subjects. Secondly, the limited financial resources of banks and their sources of attraction require the development of effective technologies for providing banking products and services, the use of economic tools to maintain the liquidity and competitiveness of institutions at the required level, and the quality use of their resource base. Thirdly, the unstable economic situation, its unexpected and sudden changes, make it necessary to take into account crisis phenomena and threats in conditions of high market and financial risks, sometimes on the verge of losing liquidity. Fourthly, the growth of economic crime, primarily in the credit and financial sphere, places banking activity in a high-risk group and causes increased responsibility of banks to their customers, depositors and shareholders. Therefore, the issue of forming the security system of banking institutions is relevant and timely in scientific and applied aspects.

### **Analysis of recent researches and publications**

The issue of assessing the economic security of a banking institution combines the views of various scientists regarding the methods of analysis in this area. Thus, O.M. Kolodizev and O.M. Shtayer in their work offer an improved methodology for assessing the level of economic security of a bank, which consists in the formation of an integral indicator with the possibility for banks to choose independently the indicators for each component. Accordingly, I.O. Hubarieva gives preference to the most common areas of analysis of commercial bank activity, such as analysis of compliance with mandatory economic standards and ratio analysis. This analysis is quite simple, accessible and easily implemented. L.R. Demus singles out the evaluation of the borrower's credit standing using the CENSOR creditworthiness assessment system as one of the methods of ensuring the bank economic security. It contributes to the preparation of high-quality investment proposals and the improvement of business plans with the enhancement of their evaluation. In turn, I.P. Moiseienko and O.A. Martyniuk researched the scoring methodology, which is formed on the calculation of the number of points formed on the basis of the assessment of financial coefficients and indicators. This methodology provides

for the use of threshold values that will more accurately characterize the destabilizing factors affecting the bank economic security. But the problem of determining the influence of individual indicators on the resulting one needs further research in order to develop an effective system for ensuring the economic security of a banking institution.

### **Formulation of the goals of the article**

The purpose of this article is to define the features of ensuring the economic security of a banking institution and justify the complex of its measures.

### **Presentation of the main research material**

The development of the economy of any country is impossible without assuring an effective and reliable banking system, which represents a tool for the accumulation and redistribution of economic resources. The banking sector of Ukraine at this stage of development is going through difficult times, because of the worsening of the economic crisis, increased level of competition, high distrust of the population and other external and internal threats that negatively affect the stable and efficient functioning of commercial banks. The primary task for ensuring the sustainable development of the banking sector of Ukraine is to provide the economic security of the banking system and assess its level, which will permit to determine the actual state of financial security of the banking system of Ukraine, the influence of certain factors and threats on the stability of the operation of banks, and to define the vector of actions to prevent their negative impact, and effective implementation of preventive measures to increase the level of safety of the banking system [1; 3]. Researching the prerequisites and results of the banking institution activity is a necessary condition for solving the tasks of ensuring the bank economic security. The main goal of this analysis is to identify the methodical toolkit for diagnosing the bank economic safety, which will allow to adequately assess the state, specifics of the institution activity and determine a set of measures to increase or stabilize economic security, taking into account the effects of all negative influencing factors [6; 9].

The safety of banking institutions defines the financial security of the country, since the banking system is the most important component of the financial and credit sphere of the state. Thus, the state of the banking sector determines the level of financial and credit security, and, therefore, the level of financial security of the state [7].

Issues of economic safety begin with the creation of a banking institution, where a management (department, service) of economic security must be created, the activities of which are managed by its head, who in turn reports to the head of the bank.

All the methods and tools used to ensure the economic security of the bank can be divided into two large groups: internal and external. This distribution is based on two prerequisites. On the one hand, the bank, like any other business entity, has economic freedom and can independently take certain measures aimed at achieving economic security. On the other hand, its activities are subject to intervention by the state, which has tools to influence the activities of banking institutions [10].

Ensuring economic security is the responsibility of not only employees of economic services, but also technical departments. The bank economic services plan business activities, supply and sell products and services, organize work, financial work, accounting and control of business activities. The most comprehensive study of the problem and finding the most optimal version of its solution is possible only with the joint efforts of economists, technicians, managers of various departments, who have a variety of knowledge regarding the researched issue.

Internal analysis of the bank economic security is carried out by employees of the banking institution, and external analysis is performed by the bank marketing and economic intelligence services. Analytical departments of the bank should execute both external and internal analysis of its economic security as a whole.

In the theoretical aspect, several approaches are used to determine the quantitative level of economic security: indicator (threshold), resource-functional, program-target (complex), approach based on the theory of economic risks.

The indicator approach consists in establishing the level of economic security as a result of comparing actual indicators of activity with indicators that act as threshold values of these indicators and correspond to a certain level of security. This approach allows you to define the categories: safe or dangerous; crisis, critical, pre-crisis normal state of economic security. The main disadvantage of this approach is that if the indicator values are incorrectly determined, the level of economic security will be improperly established. The resource-functional approach involves determining the level of economic security by evaluating the efficiency

of resource use. The business entity develops a set of measures to protect against threats and the economic effect is assessed for each direction. When applying this approach, values are most often calculated by functional components. Taking this into account, the level of economic security under this approach can only be defined by comparing it with the same levels over several periods, that is, in dynamics. The programmatic approach is based on the integration of indicators that determine the level of economic security. Sometimes, this approach is called complex. When using it, considerable attention should be paid to the selection of indicators and the definition of methods of their integration. Difficulties also arise when establishing significance coefficients based on expert assessment methods. The essence of the approach based on the theory of economic risks is to identify various threats and calculate the loss, which is compared with the amount of profit, income and property [2; 4; 8].

The process of ensuring the economic security of banking institutions should include the following stages (Fig. 1).

Thus, in order to achieve a high level of economic security, a banking institution must assure the structural balance of the main functional components (Table 1).

The development of methodical approaches to the assessment of the security system of the banking sector of the national economy will contribute to the improvement of the level of security of banking institutions. Maximization of profit and optimization of its quality, as well as maximization of the market value of domestic commercial banks should be considered the main criteria for the effectiveness of the security system of banking institutions [5; 7].

The implementation of a set of measures to maintain a sufficient level of economic security and further increase it will allow in the medium term to keep the stability and viability of the bank, which ensures the realization of its goal (making a profit), principal interests (increasing its rating on the market of banking services) and protection from internal and external destabilizing factors regardless of the operating conditions (assuring the safe operation of the bank in the future). Carrying out these measures requires

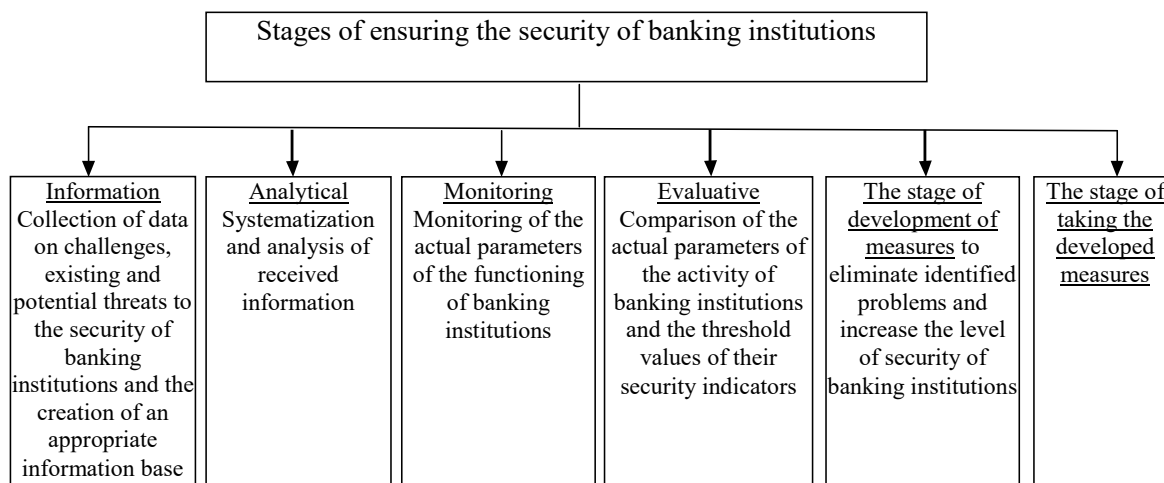


Fig. 1 – Stages of ensuring the economic security of banking institutions [7]

Table 1 – A set of measures to increase the bank economic security

Indicator	Set of measures to increase economic security bank, taking into account the relationship between indicators
Bank efficiency	- rational and effective allocation of the bank funds to ensure its financial stability. Fulfillment of this condition will make it possible to get rid of contradictions between liquidity, reliability and profitability of the bank.
Efficiency of commission activity	- increasing the economic efficiency of non-traditional operations.
Return on assets	- optimization of the structure of assets, due to the improvement of quality and raise of the specific weight of working assets in their total value; - increasing the efficiency of cash management, that is, it is necessary to plan inflows and outflows of cash and develop payment schedules; - the use of financial planning as one of the reserves for growing profit and its rational use. Banks bear significant costs as a result of uncoordinated actions of various divisions among themselves. The financial plan allows you to forecast the income, expenses and profit of the bank for the year. And although in the conditions that have developed in our country, because of instability and inflation, the real data may differ significantly from the planned ones, but the proportions remain practically unchanged. A banking institution should realistically see its development prospects and goals for the current year.
Liquidity (instant)	- balancing the bank assets and liabilities according to their maturity and size, which will lead to a significant improvement in the bank liquidity standards; - expanding the share of highly liquid and liquid assets of the bank, at the expense of reducing the share of illiquid ones.
The level of problem loans	- carrying out work on reducing the risk of active operations. At the same time, it is necessary to remember that urgent measures implemented by credit institutions to maintain their liquidity and solvency are, as a rule, associated with an increase in bank expenses and a decrease in their profit.
Credit risk coefficient	- systematic and comprehensive study of credit risks, taking measures to diminish them and improving the level of professionalism of employees.
Loans and liabilities ratio	- control of the placement of credit investments according to the degree of risk, forms of guaranteeing the return of loans, the level of profitability, limitation of the size of the loan granted to one borrower with part of one's own funds; - formation of sufficient insurance reserves and reserve funds. Since the main cause of bank bankruptcies is the non-return of previously issued loans, the formation of these funds will contribute to strengthening the reliability and stability of the bank, and therefore the banking system of Ukraine, to decreasing possible financial risks in credit activities. The creation of these reserves will guarantee the coverage of miscalculations in the bank activities, will help maintain its liquidity at the required level.
The capital adequacy ratio	- increase in the bank own funds, which will promote to the growth of the bank resource base and, accordingly, its investment potential, will be one of the prerequisites for attracting foreign investments, and will stimulate integration processes, will ensure the independence of the bank and create conditions for the survival of the banking system of Ukraine in the period of increased competition from foreign banks.

the activation of the forces of the entire banking institution and the effective selection of the necessary security tools and technologies at all levels of the bank security system.

### Conclusions

Thus, the formation of the security system of banking institutions is a complex and very difficult problem, the solution of which requires a systematic approach in this area, the definition of a hierarchy of goals, approaches to their provision with the development of a clear implementation mechanism, the organization of proper coordination of the efforts of all participants in the domestic market of banking services to comply and increasing the security level of the country banking sector.

It is worth highlighting the existing threats to the banking system of Ukraine. First of all, this is the share of non-performing loans, this indicator was critically high for the period under study (more than 50%), which indicates the low quality of banks loan portfolios and the imperfect methodology of assessing the level of borrowers' solvency, the next threat is the ratio of long-

term loans and deposits, as is known it is long-term loans that are the driving force of the bank economic growth and the guarantee of their income in the future, however, because of economic imbalances, unstable interest rates and a decrease in trust in banks on the part of depositors, the level of this indicator is not sufficient for the effective development of Ukrainian banks. Another important factor is the predominance of the assets of the five largest banks in the total assets of the banking system, such concentration indicates the capture of the banking market, which leads to monopolization.

It should also be noted that when studying the issue of the system of economic security of banking institutions, the following aspects can be distinguished: the selection of a set of methodical approaches to the quantitative assessment of the level of economic security and the verification of the adequacy of these approaches; segregation of criteria and indicators of the level of economic security and sorting of individual indicators according to their significance; search for absolute characteristics of the level of economic security, including integral ones.

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## ECONOMIC RECOVERY GENESIS OF THE COUNTRIES OF THE WORLD AFTER ARMED CONFLICTS

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innovative technologies, security,  
military-industrial complex

Against the background of martial law, the challenges of restoring the country after the end of active hostilities is becoming increasingly urgent. The peculiarity of the russian-ukrainian war is its duration and extent, because since 2014, the territory of Ukraine has constantly suffered economic, industrial, social and production losses, the large-scale invasion of 2022 only intensified this crisis. The annexation of the Crimean Peninsula led to the loss of production resources, seaports, the agricultural complex, further occupation and military actions in the areas of the largest concentration of the production complex, agriculture, and the expansion of the battleground resulted in problems and losses also in the field of atomic energy, the maritime sector, constant attacks on the energy structure throughout the country have devastating consequences for the state's economy. Already today, as a result of russian aggression, Ukraine is the country most mined and contaminated with explosive devices in the world, and demining the entire territory will take at least 5 years. It is for this reason that the issues of restoration and development of the country's economic sector in the future and the search for ways of development today remain relevant and urgent. After studying the reconstruction experience of countries that suffered from armed conflicts, we will be able to determine the main factors of reconstruction, the problems they faced and ways to solve them. Now, let us analyze the means, by implementing which it will be possible to draw out the economy rebuilding program and implement the development potential of Ukraine. We will independently consider the recovery plan that is already being implemented by the Ukrainian government and international support for the state economy.

## ГЕНЕЗИС ЕКОНОМІЧНОГО ВІДНОВЛЕННЯ КРАЇН СВІТУ ПІСЛЯ ЗБРОЙНИХ КОНФЛІКТІВ

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### Ключові слова:

післявоєнне відновлення,  
російсько-українська війна,  
розвиток економіки,  
міжнародні економічні  
відносини,  
інноваційні технології, безпека,  
військово-промисловий  
комплекс

В умовах воєнного стану все гостріше постає питання відновлення країни після завершення активних бойових дій. Особливістю російсько-української війни є її тривалість та протяжність, адже з 2014 року територія України постійно зазнавала економічних, виробничих, соціальних та виробничих втрат, широкомасштабне вторгнення 2022 року лиш посилює цю кризу. Анексія Кримського півострову призвела до втрати виробничих ресурсів, морських портів, аграрного комплексу, подальша окупація та воєнні дії в районах найбільшого зосередження виробничого комплексу, сільського господарства, а розширення арени бойових дій призвело до проблем та втрат ще й в галузі атомної енергетики, морського сектору, постійні атаки на енергетичну структуру по всій країні несуть за собою руйнівні наслідки для економіки держави. Вже сьогодні, внаслідок російської агресії Україна є найбільш замінованою та забрудненою вибуховими пристроями країною світу, а на розмінування всієї території піде не менше 5 років. Саме з цієї причини актуальними і нагальними залишаються питання відновлення та розвитку економічного сектору країни в майбутньому та пошуки шляхів розвитку сьогодні. Вивчивши досвід відбудови країн, що потерпали від збройних конфліктів матимемо змогу визначити основні фактори відбудови,

проблеми з якими вони стикалися та шляхи їх вирішення. Проаналізуємо засоби, реалізувавши які вдасться розробити план дій реконструкції економіки та реалізувати потенціал розвитку України. Особливо розглянемо план відновлення, що вже реалізується українським урядом та міжнародну підтримку державної економіки.

### Statement of the problem

Russia's military aggression in Ukraine resulted in a severe humanitarian crisis. Since 2014, the country has been in the conditions of a special period – the period that begins from the moment the decision on mobilization (except for targeted ones) was announced or brought to the notice of the executors regarding covert mobilization or from the moment martial law was introduced in Ukraine or in some of its localities and covers the time of mobilization, wartime and partially the reconstruction period after the end of hostilities [1]. This was caused by the annexation of the Crimean Peninsula and the seizure of the territory of Donetsk and Luhansk regions. The country's economy was in a difficult situation due to the loss of a significant amount of the industrial complex, constant shelling of the infrastructure, refugees, and as a result of the corrupt enrichment of previous state managers. The new Ukrainian government took measures to resolve the existing problems and the country's economy gradually began to improve, but the new aggression of the Russian Federation became an obstacle, namely a full-scale invasion and intensive fighting performance with a length of almost 3.7 thousand km, whereas the territory occupied by the enemy is 108 thousand sq. km [2]. All this has caused a powerful blow to the economic, social, and humanitarian spheres of the country.

The issues of restoration and development of Ukraine after the end of the war are urgent for the country, although taking into account the peculiarities of the location of our country and the capabilities of our enemy, it is necessary to draw up a reconstruction plan taking into account the probability of a prolonged conflict or existence in conditions of constant threat. For this reason, it will be appropriate to consider the experience of economic growth and recovery of South Korea after the Korean War of 1950–1953 and the experience of Israel, which has been living under constant military threats for 75 years.

Having analyzed the experience of these countries, it will be possible to develop a mechanism for surmounting the crisis, restoring the destroyed production sector, finding new sources of financing the economy, reforming the public sector and mobilizing all resources to overcome possible challenges and critical situations in the future.

### Analysis of recent researches and publications

The problems of relations between the countries of the world are studied not only by economists, but also by diplomats, so in their work Izhnin I., Polishchuk K. and Shamborovska O. note that the classical mechanisms for preventing armed conflicts do not work, the activities of international organizations are not aimed at reducing conflict, but at minimization of damage after their resolution [3]. In their collective monograph, authors Blokhin P., Vasylytsiv T., Iliash O., Mokiy A., Smoliar L., Fleychuk M.

and Khaustova V. draw attention to the fact that the most important issue for Ukraine is ensuring the security of the state in the conditions of a hybrid war, prove that the goal of the state peacekeeping policy should be the competitiveness of the national economy, the reintegration of temporarily occupied territories and the realization of the potential of the Eastern regions of the country. The authors claim that in order to prevent separatism, the state should stimulate the socio-economic development of the regions bordering Russia, the development of infrastructure, creation of new vacancies, and the development of the housing and communal sector in order to solve the crisis of internally displaced persons [4].

The Center research shows that as of February 2022, 2.9 million people in the Eastern part of the country needed humanitarian support, and as of May 2022, the UN estimated the number of victims of the invasion amounted to 18 million people [5], and the principal sum of damage for three months of war amounted to 349 billion dollars. [6].

Both scientists – S. Ivanov and a number of journalists – were engaged in research concerning the world experience of overcoming the post-war consequences. Ivanov S. in his work examines the factors and attributes that helped restore and develop economies of Germany, Japan, South Korea, and Georgia [7].

### Objectives of the article

The main task of this article is the analysis of examples of the recovery of countries and the development of the economy after wars and armed conflicts, the experience of building the economy in the conditions of a constant armed threat and the search for sources of financing. Determining the strategy of the Ukrainian government in overcoming the economic and social crisis.

### The main material of the research

The Russian-Ukrainian war became one of the largest conflicts in Europe after 1945, and the most intense since the Korean War. Along with Ukraine, it should be noted the increase in tension in the Pacific Ocean around Taiwan [8]. Thus, only in 2020, the American Center for Comprehensive Peace counted 36 wars in the world, of which 15 have been going on for more than 10 years, and after the Second World War, it accounted for 334 of such conflicts [9].

The main difference between modern wars is their hybridity, that is, they are fought not only on the battlefield, but in the diplomatic, media, peacekeeping, and humanitarian spheres, and classical settlement mechanisms do not work [3]. This being the case, it can be assumed that there is no effective and definitive solution to the conflict. The experience of Israel shows that the cessation of active hostilities and the conclusion of a peace treaty do not provide for the end of the war, and the example of South Korea shows that there is always a threat from an aggressive neighbor, even isolated from the rest of the world.

The most important for Ukraine is the experience of the recovery and development of these countries, because the prerequisites are close to our state.

After considering the examples of post-war recovery of Western Europe and Japan, the main attention was paid to international financing and priority developing industries [10]. However, this experience cannot be fully applied in Ukraine due to a number of factors and aspects, starting from geopolitical ones and ending with the pre-war development of our country's economy.

At the same time, the example of South Korea can be useful for Ukraine, because the country was in a crisis situation, large-scale destruction, total poverty, the country's economy was supported by agriculture, and there was a constant threat from North Korea. Israel's experience shows how it is possible to build the economy of a country that resumed its existence in 1948 and is still frequently subject to shelling and terrorist attacks. Thus, the United States played an important role in the formation of both countries. In Table 1 financial resources provided to countries from 1948 to 2009 are presented.

However, it is clear that the support was provided to countries in different periods and in different shares. In comparison with 1952, as of 1961, the support for South Korea increased by 8.7 times and amounted to 4 billion dollars, for Israel it amounted to 508 million dollars, of which only 900 thousand dollars was intended for the military sector, while the financing of the military sector of Korea amounted to 1.7 billion dollars. However, in the period 1962–2009, the situation changed and Israel's financing increased by 204 times and amounted to 103.6 billion dollars, of which 68% was intended for military purposes. During the same period, South Korea received 9.9 billion dollars, of which 71% was for military purposes.

After the end of the Korean War in 1953, South Korea was completely destroyed, about 3 million were killed on both sides, most of the industry and infrastructure went to the DPRK, more than half of the budget was the support from foreign countries [12; 13].

The country was unable to face a strong opponent, the military sector was underdeveloped, the majority of the population was employed in the agricultural sector, and the state itself was one of the poorest countries in the world. The United States called the invasion of North Korea into the South Korea a Hitler scenario and decided that the policy of appeasement was not justified, the main factor was also the support of the DPRK by the Soviet Union [14].

The main basis for the country's development was laid by the USA, concluding a treaty on mutual defense and financing all public sectors. Thus, from Table 1, it can be seen that in the post-war period, South Korea received 14 billion dollars from the United States.

On the other hand, until the 1960s, the country could not boast of results, although the infrastructure was restored, but most of the funds were distributed by the political elites among themselves. The first steps were the restoration of schools, roads and communication, the state authorities tried to build import substitution, but due to insufficient internal resources and corruption, this idea suffered a throw-down, as a result, in 1956, exports amounted to 25 million dollars, while imports amounted to 389 million dollars. The deficit in the trade balance was covered with the help of financial infusions from the USA, as a result of which the United States reduced funding and demanded economic reforms [15].

Economic growth occurred after the military government of General Park Chung Hee came to power. The main areas of his government's activity were the transformation of the country from an agrarian to an industrial one with an export orientation.

At the time General Hee came to power, there was no metallurgical industry in South Korea, the first five-year plan for 1962–1966 provided for forced industrialization and predicted a GDP growth rate of more than 7% per year but the United States did not share this opinion and the Koreans had to reduce the indicators to 5.4%. But during these years, the country's economy grew mainly by 7.8% per year [12].

Fig. 1 shows the growth of the GDP level of South Korea from 1960 to 2020.

Thus, in the period from 1960 to 1970, the GDP of South Korea increased from 4 billion dollars to 9 billion dollars, i. e. by 125%. The country needed a large amount of metallurgy, so a project for a full-cycle metallurgical plant was developed and submitted to the World Bank for financing but the Bank refused. After this refusal, the Korean government addressed the Japanese government with a proposal to build a metallurgical plant at the expense of the reparations that Japan had to pay to South Korea. The project was carrying out by *Nippon Steel* from 1968 to 1972 [12]. Therefore, with the construction of the metallurgical complex, a new bounce in the country's development took place, and in the next 10 years, the GDP increased up to 65 billion dollars, that is, 7 times, or by 620%.

Table 1 – Amount of financial assistance of the United States in 1949–2009

US financial support, million dollars					
Country	Purpose of support	Period, years			Total
		1949–1952	1953–1961	1962–2009	
South Korea	Total:	498.1	4,364.1	9,997.4	15,040.8
	- economic	485.6	2,579	2,883.3	6,129.1
	- military	12.5	1,785.1	7,114.1	8,911.7
Israel	Total:	86.5	508	103,664.4	104,258.9
	- economic	86.5	507.1	33,506.4	34,100
	- military	-	0.9	70,158	70,158.9

Source: formed on the basis of [11]

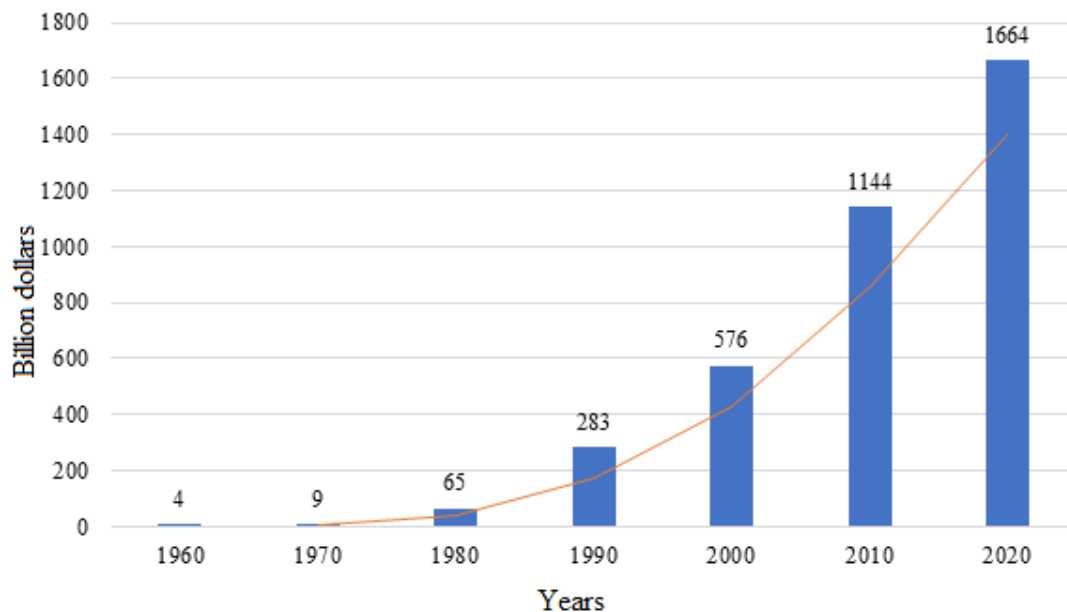


Fig. 1 – South Korea GDP in 1960–2020, billion dollars

Source: formed on the basis of [16]

The country's government paid special attention to education, which became the main investment and provided the country with qualified specialists. Thus, in the 70s, the creation of a special consulting center on attracting foreign technologies began, and since the 1990s, a support system for technological production has been created. Since the 90s and up to nowadays, the gross domestic product has grown from 283 billion dollars. to 1.664 billion dollars, which is an increase of 589%. The country began to develop scientific centers, technology parks, incubators, support startups, as a result, today South Korea is one of the most technologically advanced countries, and the United States calls it the largest partner.

Thus, after analyzing the experience of South Korea, the following actions and factors that helped to achieve the country's development can be identified:

- external financial aid, both infusions from the United States and reparations from Japan;
- strict regulation of the economy, namely control of foreign trade, with a reduction in imports and development of exports;
- the transition from an agrarian country to an industrial one, and then a technological one, exporting shipbuilding, the automotive industry, and electronics;
- the main attention was paid to the development of education and increasing the level of qualification of employees, thanks to which the development of technological production became possible;
- support of business, start-ups and scientific and technical progress.

As can be seen from the above, the opinion that Korea became an economically developed country due to liberal policies is wrong, on the contrary, the country became liberal due to economic development created by the policy of protectionism [12].

These steps have helped South Korea build its economy from the ground up and become a world leader in many fields but tension on the peninsula remain as Pyongyang continues to develop its nuclear program with the help of Russia while South Korea has an American anti-missile defense system and military bases (28.5 thousand US troops) on its territory [17].

The next country with relevant experience in economic development is Israel. The example of this country is important for Ukraine due to similar geopolitical circumstances. Thus, many Western analysts and politicians express the opinion that the war in Ukraine may last for years and even after the signing of the peace agreement there will not be a hundred percent guarantee that Russia will stop shelling our territory and will not prepare a new offensive blow [18].

In 1948, Israel declared its independence, due to which a war broke out in the region, which lasted until 1950, and for the next 10 years the country conducted military operations in response to numerous provocations, although in fact hostilities continue to this day. The country's economy was burdened by a large influx of migrants, more than 800,000 Jews repatriated from Arab countries to Israel. Agriculture could provide approximately 50% of food needs, and export revenues offset about 30% of import costs, as well as military expenditures reached 40% of total costs [10; 19].

Despite the troublesome situation: in 1956–1957 there was the Suez Crisis, and in 1967 the Six-Day War broke out, after which in the same year the War of Attrition began – Israel against Egypt, the USSR, Jordan, Syria and the Palestine Liberation Organization, which lasted until 1970. In October 1973, the Yom Kippur War broke out with a coalition of Arab states led by Egypt and Syria, as well as the Two Lebanon Wars of 1982 and 2006, all this is completed by constant rocket attacks, mass terrorist attacks



against the civilian population, Israel chooses its right to exist in every war, as Ukraine is doing now [19].

Put in other words, the secret of the success of this small warlike country is relevant for our country. The formation of Israel's economy under the conditions of constant wars with the countries of the Arab League is mainly determined by loans and grants from the United States. An important resource was reparations from West Germany, which accounted for up to 55% of additional budget revenues in 1952–65 [10].

From the moment of its foundation until 1967, Israel mainly produced small arms and ammunition for them, and later also weapons for French firms, however, after the Six Day War, the French government imposed an embargo on arms supplies and the country found itself in a difficult geopolitical situation. At that time, the country's government began to develop a concept for the development of the military-industrial complex. The only possibility to do this was the intensive development of research and development works in the field of military technologies [20].

Simultaneously with the development of the military-industrial complex, the Israeli government implemented an innovative strategy, thus in 1964 Yissum was founded – the technology transfer center of the Hebrew University in Jerusalem, which registered 10.7 thousand patents for 3 thousand inventions, licensed more than a thousand technologies and helped to form more than 170 start-up companies [21].

The main sectors of the Israeli economy are technologies and industrial production. A whole group of state programs for the support and development of innovations operates in the country:

1. Programs of technological incubators, more than 2.5 thousand startups have been created, the programs have been designed for adults and schoolchildren. The volume of public investments is about 1 billion dollars, and the volume of private ones is 5.5 billion dollars.

2. The *Magnet* program has tools to support the priority sectors of industry, nanotechnology, biotechnology, cyber security and environmental protection technologies. They include: grants of funds for research and development works (agriculture is financed up to 75%), the creation of incubators and venture investment funds, organization of specialized centers in academies and universities, creation of the National Nanotechnology Initiative of Israel.

3. Technological incubator:

- start-up companies can receive a grant in the amount of 1.2 million dollars. Financing in the amount of 100% of the budget, of which 85% is provided by the state budget. It includes technical support from the business incubator;

- the state finances 85% of the approved project budget for the incubator, and the incubator itself invests 15% of the approved budget in exchange for 50% of startup shares.

4. Participation in research projects of transnational corporations [21].

US financial support played a significant role in the development of Israel. Thus, Table 1 shows that since 1953, the United States actively financed the country's government, so by 1961, 508 million dollars were

allocated, all money was directed exclusively to support the economy. However, funding from 1962 to 2009 increased by 204 times and amounted to 103 billion dollars, of which 70 billion was forwarded to defense sector.

This is due to the fact that since 1987 Israel has the status of the main ally of the United States, the US sees its benefit in cooperation with the country to establish its presence in the Middle East, thanks to which the development of anti-missile defense is financed.

Taking into account two factors: funding from allies and the development of the defense complex, together with innovative technologies, allowed the country to develop a strong economy in the region. Thus, Fig. 2 shows changes in the country's GDP from 1960 to 2020.

Thus, as is obvious, in 1960 the gross domestic product of the country was 2.6 billion dollars, at that time after 12 years since the declaration of independence and in conditions of constant wars, the country had no resources for development. However, only since the beginning of close cooperation with the United States and the implementation of the development strategy, the country has shown development. In open sources, information is provided since 1995, so it can be seen that in 1995 GDP amounted to 104.9 billion dollars, which is by 29 times more than in 1965. In 2010, the gross domestic product increased up to 238.4 billion dollars, with a growth rate of 127% until 1995. In the following years, the growth rate was 27% and 36%, in 2015 and 2020 to the previous five respectively. Thus, in comparison with Ukraine in 2021, Israel's GDP amounted up to 488.5 billion dollars, while Ukraine's GDP was 200 billion dollars. [22].

Specifically, after analyzing the experience of Israel, the following main factors of development can be identified:

- the presence of a constant threat stimulated the government to find ways to fight and provide for itself;
- the development of the military industry made it possible to provide its own military needs, the population with jobs, and foreign trade in military products;
- impregnation by the military-industrial complex of all spheres of the economy – business, production, science and education;
- significant state support for innovative technologies, business, science and startups;
- cooperation with the allied states in military, scientific, innovative and economic terms.

### Conclusion

On the basis reasoning from the processed materials, it is possible to single out the main similar factors of the countries' development and project them onto Ukrainian realities:

1. To work out a strategy for the development of the military-industrial complex in order to exclude the possibility of a repetition of hostilities, as well as exclude the possibility of qualified workers and scientific developments loss. For many years, the military industry of Ukraine was in a state of stagnation, the state did not finance the development of weapons and military purpose products, whereas factories for the production of military products traded with the enemy [23; 24].

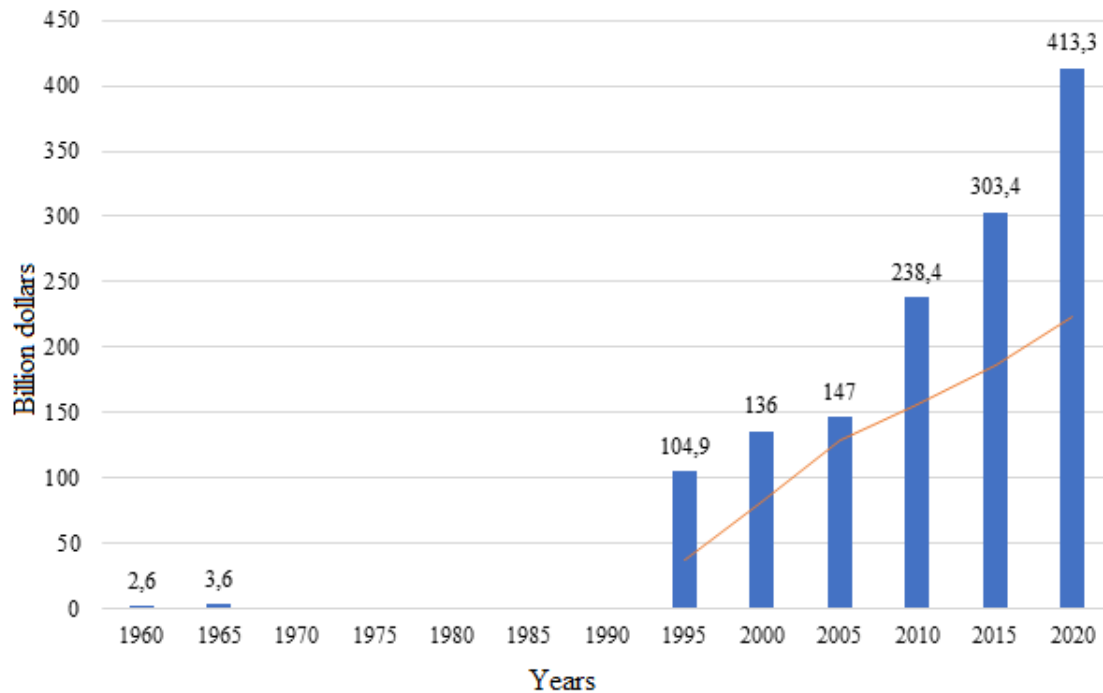


Fig. 2 – GDP of Israel in 1960–2020, billion dollars

Source: formed on the basis of [22]

2. Commitment to foreign trade and export. Thus, in 2021 alone, Ukraine imported goods worth \$73.3 billion, while exported goods worth \$68.3 billion. In 2021, Ukrainian farmers exported sunflower oil and grains worth 18.6 billion dollars, which is 27% of total exports. But as a result of the war, Ukraine lost a significant part of its agricultural land, some of it was occupied, and some of it was mined for decades. Also, the problem with exports is the loss of access to sea ports, while it is possible to export the 2021 crop by land over the period of 3 years [25]. For that very reason it is necessary to finance a business that will be able to export its goods regardless of ports.

3. Based on the assumption of clause 2, the development of innovative technologies and scientific and technological designs is important. It is necessary to pay great attention to the development of human potential, retraining of personnel, development and support of scientists and academic personnel, financing of the IT sector, development of technology parks.

4. Implementation of a policy of supporting medium and small businesses, financing startups, providing them with grants and cheap loans, encouraging international IT companies to open their representative offices in Ukraine.

5. Development of diplomatic relations, search for new partners, cooperation in the military and technological spheres, establishing relations with countries that occupy a neutral position.

6. And then, one of the main factors of development is the fight against corruption, as the experience of South

Korea shows, it is money laundering and its distribution among elites that prevents the country's development.

The reconstruction of the country, as is already forecasted, will take more than one year, but it is clear from the experience of Israel and South Korea that it cannot be postponed until fat days. The Ukrainian government has already started the development and implementation of the reconstruction project. The President of Ukraine, in cooperation with the Cabinet of Ministers, the Verkhovna Rada and the Ministry of Digital Transformation, proposed «Ukraine Restoration Plan», on the project website every citizen can propose his or her own idea for the development and reconstruction of the country. The plan is based on the principles of: immediate start and gradual development; increasing fair well-being; integration into the European Union; better rebuilding than it was, and stimulating private investment on a national and regional scale [26].

Under the support of the Prime Minister, eRobota program was launched, where Ukrainians will receive non-refundable grants of up to UAH 250,000 for opening their own businesses. And entrepreneurs can take advantage of the «5–7–9» cheap lending program of up to UAH 2.5 million, which can be used for the construction or reconstruction of existing premises, the purchase of additional equipment, etc. [27].

However, the main goals are the military-industrial complex, ensuring defense and security, as well as resolving the humanitarian crisis.

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DOI <https://doi.org/10.26661/2414-0287-2023-1-57-18>**INVESTMENT ACTIVITY AS THE BASIS OF FINANCIAL AND ECONOMIC SECURITY****\*Boiko O.B., \*\*Vasylieva O.V., \*\*Kurchenko M.M.***\*Ternopil Ivan Puluj National Technical University**\*\*Zaporizhzhia National University**Ukraine, 69600, Zaporizhzhia, Zhykovsky str., 66*

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**Key words:**investment, investment activity,  
financial and economic security,  
investment attractiveness index

Theoretical approaches to the definition of the essence and value of investment activity are researched. The importance of investment activity for enterprises is substantiated. The classification of investments by types is given. The author's definition of the essence of "investment activity" is given, which is proposed to be considered as a process of investing investment resources in tangible and intangible objects in order to obtain various types of effects: economic, ecological, financial, social, budgetary. It is noted that investment activity significantly affects economic security both at the macro and micro levels. The most important components of economic security are characterized and it is proved that guaranteeing the investment security of the country while observing investment restrictions can significantly affect both the macroeconomic indicators of the country and the development of regions and economic entities. The influence on the Investment Attractiveness Index of Ukraine of important events such as Euromaidan (2014), COVID-19 (2020–2021) and the tragic event for the Ukrainian people – a full-scale invasion of Russia (2022) is investigated. The main problems that reduce the investment attractiveness of the Ukrainian economy in 2018–2022 are indicated. The assessment presented by the CEOs on the state of the investment environment in Ukraine in 2022 is also presented. It is established that the key issue of national economic policy is the intensification of investment activity, which provides for the necessary formation of an investment policy that ensures the maximum use of national resources and attracts foreign investment. Investment activity as a significant component in ensuring financial and economic security is investigated. The investment attractiveness of Ukraine in the first half of 2022 and the factors that influenced it are also considered. Proposals to increase the investment attractiveness of the Ukrainian economy are made.

**ІНВЕСТИЦІЙНА ДІЯЛЬНІСТЬ ЯК ОСНОВА ФІНАНСОВО-ЕКОНОМІЧНОЇ БЕЗПЕКИ****\*Бойко О.Б., \*\*Васильєва О.В., \*\*Курченко М.М.***\*Тернопільський національний технічний університет імені Івана Пулюя**\*\*Запорізький національний університет**Україна, 69600, м. Запоріжжя, вул. Жуковського, 66***Ключові слова:**інвестиції,  
інвестиційна діяльність,  
фінансово-економічна безпека,  
індекс інвестиційної  
привабливості

Досліджено теоретичні підходи до визначення сутності та цінності інвестиційної діяльності. Обґрунтовано значення інвестиційної діяльності для підприємств. Наведено класифікацію інвестицій за видами. Надано авторське визначення сутності «інвестиційна діяльність», яку запропоновано розглядати як процес вкладання інвестиційних ресурсів в матеріальні та нематеріальні об'єкти з метою отримання різних видів ефектів: економічного, екологічного, фінансового, соціального, бюджетного. Зазначено, що інвестиційна діяльність суттєво впливає на економічну безпеку як на макrorівні, так і на мікрорівні. Охарактеризовано найважливіші складові економічної безпеки та доведено, що гарантування інвестиційної безпеки країни при дотриманні інвестиційних обмежень може суттєво впливати як на макроекономічні показники країни, розвиток регіонів та суб'єктів господарювання. Досліджено вплив на Індекс інвестиційної привабливості України важливих подій таких як, Євромайдан (2014 р.), COVID-19 (2020–2021 рр.) та трагічна подія для українського народу – це повномасштабне вторгнення Росії (2022 р.) Зазначено основні проблеми, що знижують інвестиційну привабливість економіки України у 2018–2022 рр. Надано оцінку, яке представили генеральні директори, щодо стану інвестиційного середовища в Україні 2022 рік. Встановлено,

що ключовим питанням національної економічної політики є активізація інвестиційної діяльності, яка передбачає необхідне формування інвестиційної політики, що забезпечує максимальне використання національних ресурсів та залучення іноземних інвестицій. Досліджено інвестиційну діяльність як вагому складову у забезпеченні фінансово-економічної безпеки. Також розглянуто інвестиційну привабливість України у першій половині 2022 р. та чинники, які на це вплинули. Внесено пропозиції щодо підвищення інвестиційної привабливості економіки України.

### Formulation of the problem

The economy of Ukraine has suffered considerable losses from the full-scale invasion of Russia. However, even in such conditions it is necessary to look for ways to improve the economy. Investments are the tool that will overcome the crisis because investments revive production at the macro and micro levels, contribute to stable economic growth. However, investment attractiveness is affected by various internal and external factors.

### Analysis of recent research and publications

Investment processes are considered in the studies of such scientists as O.I. Baranovsky [1], M.O. Moroz [1], I.M. Boychik [2], A.O. Zadoya [3], L.M. Zakrevska [4], A.O. Zainchkovsky [4], T.V. Kulinich [5], N.O. Krykhivska [6], M.A. Mrychko [5], N.V. Pavlenko [7], G.M. Chernyshova [6], A.O. Shcherba [8].

### Formulation of the objectives of the article

Analysis of the essence and nature of investment activity as an important functional component of financial and economic security and identification of ways to increase the investment attractiveness of Ukraine in order to guarantee financial and economic security.

### Presentation of the main material

One of the important means of forming the production base is investment. The concept of «investment» comes from the Latin «invest», i. e. investment of funds. The term «investment» of the enterprise is mainly associated with quantitative and qualitative changes in production capacity. Without investment activity, the production process cannot function normally.

Economic growth is achieved through investment activity, since in this process the long-term strategic goals of various business entities are achieved.

According to the Law of Ukraine «On Investment Activity» (1991), investment is an investment of all types of property and intellectual property in economic entities and other types of activities with the aim of obtaining profit (income) and/or achieving social and environmental impact [9, Article 1].

Values may include [9, Article 1]:

- target bank deposits, funds, shares and other types of securities;
- movable and immovable property, especially buildings, various structures, equipment, and other types of material assets;
- intellectual property;
- technical, commercial and other knowledge, formalized in the form of documentation, skills and includes

production experience necessary for the organization of production, but not patented;

- the right to use land, water, resources, facilities, equipment and include other rights to property, values.

Investments are divided into different types, depending on the classification.

Now we can define what investment activity is. It is the actions of individuals, the state to implement investments, the main purpose of which is to make a profit.

Investment activity of enterprises is an activity aimed at capitalization of property objects, regulation of investment and international investment flows, formation and use of investment resources and creation of an appropriate investment environment [3, p. 6].

We think that investment activity can be defined as the process of investing investment resources in tangible and intangible objects in order to obtain various types of effects: economic, ecological, financial, social, budgetary.

In modern conditions, the successful development of industrial enterprises depends on the implementation of effective investment activity, which contributes to the introduction and development of the latest production technologies and increase competitiveness in the process of attracting various forms of capital, domestic and foreign investment.

It should be noted that investment activity significantly affects economic security both at the macro and micro levels.

The investment component of economic security is a set of social, legal and environmental conditions that determine the type and dynamics of reproduction processes to ensure the reliability of income and efficient use of investment funds. Investment security of the country should be understood as its ability to maintain the accumulation of production and capital investments at the pace necessary to ensure the expansion of economic reproduction, structural and technological restructuring [1].

The dominant place in the system of economic security is occupied by financial security, which affects absolutely all spheres of economic activity. Financial security is a complex system that consists of subsystems (budget, taxation, debt, financial security of the banking system, currency, monetary, investment, insurance, financial security of the stock market), each of which has its own structure and logic of development.

One of the most important components of economic security is investment security. Ensuring investment security of the country, while observing investment restrictions, can restore and preserve the intellectual and scientific and technical potential of the country; reproduce capital to a greater extent; maintain economic competitiveness; ensure GDP stability at the level of socio-economic development and international cooperation;

ensure sustainable growth; form strategic reserves; reduce or overcome depression in different parts of the country; preserve and restore natural resources; preserve the environment; and protect the environment [4].

It is believed that in developed countries the rate of gross investment to fixed capital varies from 30% to 40%, in countries characterized by medium and low rates of economic development – from 17% to 20%. The economy grows on average by 3% when, respectively, the share of gross investment in fixed capital in GDP is from 20% to 22% [7]. Therefore, to ensure sustainable economic growth, it is necessary to keep the share of gross investment at 25% and above.

Investment security refers to the process of ensuring that the investment environment is in a state where the economy can maintain and provide sufficient investment resources in the face of internal and external threats, which is necessary to ensure sustainable development. As well as the socio-economic stability of the country, the growth of competitiveness of the national economy and the welfare of people.

Analysis of Ukraine’s investment activity in 2018–2019 shows that despite the good growth of investment in Ukraine, the situation remains disappointing [10]. This is mainly due to the deterioration of the investment climate in the country due to the unstable political and economic situation. In addition, in 2022, the factors hindering the development of investment activity in Ukraine include: unstable legislation, lack of effective strategies for attracting investment, huge tax and administrative pressure on legal entities, unresolved issues of protecting investors’ property rights and Russian aggression.

Stable economic growth of the country directly depends on the improvement of the investment environment. This will directly contribute to the mechanism of attracting foreign capital. Its basis is the economic and organizational block, which is based on a sound strategy for attracting foreign investment, namely the system of tax incentives. The development of certain spheres of economic activity will ensure the improvement of the economic situation in Ukraine.

Therefore, investment activity requires immediate stimulating measures to accelerate the inflow of domestic and foreign capital into the Ukrainian economy, thereby contributing to the development of priority areas of the national economy.

Our country is not as attractive for investors as it has the potential due to unsatisfactory legal, judicial and tax systems. Because of this, we still lack huge investments that are useful for our economy from different parts of the world.

According to the European Business Association [11], the investment attractiveness index of Ukraine showed the

lowest value since 2013 (Fig.1). The semi-annual index decreased by half a point – to 2.17 from 5. During the active phase of the COVID-19 pandemic, the index fell to 2.4 points, and during the Euromaidan – to 1.8 points, which remains the lowest value for the entire period of the study (Fig. 1).

The main problems that reduce investment attractiveness include [12]:

- complexity and uncertainty of the political situation inside the country, which determines the unclear direction of Ukraine’s foreign policy;
- weak legislative system: lack of laws on the distribution of products to investment companies; low efficiency of antimonopoly regulation;
- inadequate taxation systems: complicated tax administration, technical obstacles in the VAT refund process, pressure from the authorities, corruption and regulation of business creation and operation;
- the judicial system is not transparent; low business culture of counterparties, distrust of business entities – problems with obtaining bank credit and loans;
- full-scale invasion of Russia into the territory of Ukraine.

Assessment of the investment climate is quite an important indicator. Fig. 2 shows the impact of the war in Ukraine on this indicator.

In general, the investment climate is unfavorable. However, it is necessary to apply various tools to increase the investment attractiveness of Ukraine, in particular to attract foreign investors.

Increasing the investment attractiveness of Ukraine should be one of our priorities. The problems that currently exist and need to be overcome and the ways to make Ukraine attractive for investment:

- huge tax burden; income tax rates (18%) and VAT rates (20%) in Ukraine are higher than in many European countries [12] – simplify tax administration systems;
- political stability and setting foreign policy priorities – with a clear focus on establishing a free trade area with the EU;
- adapt regulations and legislation to the European Union model [5];
- corruption of the authorities at all levels and non-transparent decision-making procedures by administrative bodies; extremely high level of shadow economy – the problems that throughout the existence of Ukraine impede the normal functioning of the economy, it is necessary to conduct more strict control and take effective measures, to create a law on the elimination of corruption;

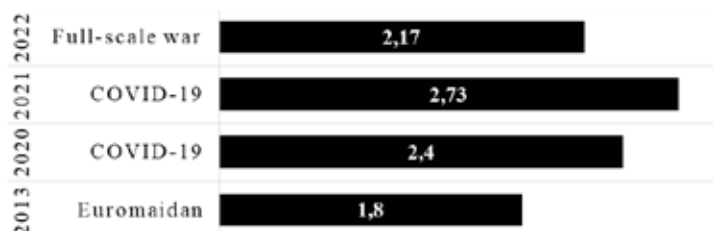


Fig. 1 – Ukraine’s investment attractiveness index during Euromaidan (2013), COVID-19 (2020–2021) and full-scale Russian invasion (2022) on a 5-point scale

Source: compiled by the authors based on [11]

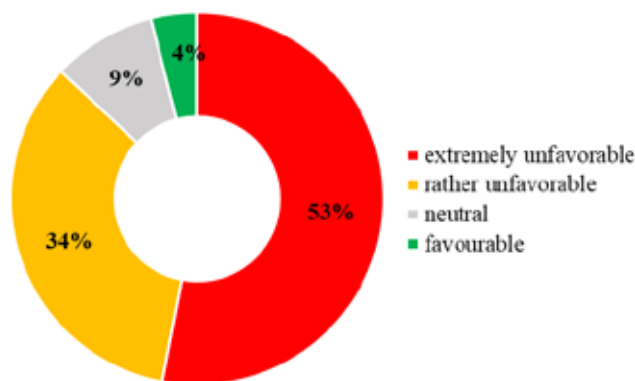


Fig. 2 – CEOs' assessment of the investment environment in Ukraine 2022

Source: compiled by the authors based on [11]

– lack of mechanisms for protecting market rights and freedoms of investors, low level of investor protection – to develop the stable functioning of investment security as a component of financial and economic security and to introduce economic mechanisms for insuring foreign investment risks [6];

- to win the war, which has actually been going on since 2014, because hostilities cause distrust and risk among investors, including foreign ones;
- to develop the stock market;
- provide enterprises with timely relevant information, such as macroeconomic indicators, investment ratings;
- create everything to ensure free competition.

### Conclusions

Investments are an important component in ensuring financial and economic security. There are methods to increase the investment attractiveness of Ukraine, although

not all problems can be solved in the near future. The main thing is to choose the right course to gradually increase investment attractiveness and attract funds from both Ukrainian and foreign investors.

As of 2022, the investment attractiveness of Ukraine as a whole has suffered some blows, in particular due to the invasion of Russia, but after the victory it will be necessary to be able to attract investments and use them effectively.

Investments are the basis of economic development and financial and economic security, and this article shows that this is indeed the case: in order to ensure sustainable economic growth, it is necessary to keep the share of gross investment at 25% and above to fixed capital.

The development of industrial enterprises directly depends on how investments will be attracted, which directly contribute to the introduction and development of new modern production technologies and increase competitiveness.

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## DIGITAL COMPETENCIES OF THE POPULATION AS A FACTOR IN THE FORMATION OF DIGITAL HUMAN CAPITAL IN KAZAKHSTAN

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### Key words:

business, war, tourism, recreation,  
united territorial community,  
administrative-territorial reform,  
post-war period

As the title implies the article describes the processes of digital transformation of society that led to changes in the manifestation and development of human capital. The digital literacy as a whole, and its digital competences precisely, has come to the fore. This article is concerned with analyzing the digital competencies of the population of Kazakhstan as a factor in the development and formation of digital human capital in the country. The study is initiated based on the competence approach to the research of digital literacy of the population using the basis of comparative analysis of economic-statistical data. The information base of the research was the data of the Bureau of National Statistics of the Strategic Planning Agency for 2018 and 2021. The results of the analysis show that Kazakhstan has a very high level of digital literacy and the highest level of computer literacy. The most developed among Kazakhstanis are communicative competences, followed by information and media competences. In Kazakhstan, digital competences contribute to the formation and development of digital human capital, and different stages of formation and development of digital human capital in Kazakhstan are observed in the regions of the Republic. Thus, it is most developed in the cities of Nur-Sultan and Almaty, and least developed in the regions of Western and Southern Kazakhstan. The practical value of the work lies in the fact that the conclusions of the study may be of interest to a range of people engaged in scientific and practical study of the development of digital human capital

## ЦИФРОВІ КОМПЕТЕНЦІЇ НАСЕЛЕННЯ ЯК ФАКТОР ФОРМУВАННЯ ЦИФРОВОГО ЛЮДСЬКОГО КАПІТАЛУ В КАЗАХСТАНІ

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### Ключові слова:

цифрова економіка,  
людський капітал,  
цифровий людський капітал,  
цифрова компетентність,  
цифрова грамотність,  
цифровізація,  
компетентнісний підхід

Відповідно до назви, стаття описує процеси цифрової трансформації суспільства, які призвели до змін у прояві та розвитку людського капіталу. На перший план вийшла цифрова грамотність загалом та її цифрові компетенції зокрема. Стаття присвячена аналізу цифрових компетенцій населення Казахстану як фактору розвитку та формування цифрового людського капіталу в країні. Дослідження ініційовано на основі компетентнісного підходу до вивчення цифрової грамотності населення на основі порівняльного аналізу економіко-статистичних даних. Інформаційною базою дослідження стали дані Бюро національної статистики Агентства стратегічного планування за 2018 та 2021 роки. Результати аналізу показують, що Казахстан має дуже високий рівень цифрової грамотності та найвищий рівень комп'ютерної грамотності. Найбільш розвиненими серед казахстанців є комунікативні компетенції, за ними йдуть інформаційні та медіа-компетенції. У Казахстані цифрові компетенції сприяють формуванню та розвитку цифрового людського капіталу, а в регіонах республіки спостерігаються різні етапи формування та розвитку цифрового людського капіталу в Казахстані. Так, найбільш розвинений він у містах Нур-Султан і Алмати, а найменш розвинений в регіонах Західного і Південного Казахстану. Практична цінність роботи полягає в тому, що висновки дослідження можуть становити інтерес для кола осіб, які займаються науковим і практичним вивченням розвитку цифрового людського капіталу.



## Literature review

Initially, in accordance with the works of T. Schultz, «human capital» was defined as valuable qualities acquired by a person, which can be multiplied by appropriate investments (Schultz, 1971). Nowadays, the definition of human capital has expanded. It consists of a wide range of personal skills, qualities, value orientations, indirectly influencing the results of industrial activity (Veshkurova et al., 2021). An important qualitative characteristic of human capital is professional competence, the increase of which indicates the development of human capital (Evgrafova, 2019). With the processes of digital transformation of society there have been changes in the formation and development of human capital. The digital literacy of the population, namely its digital competences came to the fore. The concept of «digital human capital» (Grimpe et al., 2022), the basis of which is digital inclusion, which requires access to technology and basic computer literacy (Bach et al., 2013), has been widely developed. Digital human capital is defined as «the relevant stock of knowledge, skills, and abilities that are realized in the labor market and are associated with the intensive use of ICT in the process of creating customer value» (Alekseev et al., 2019). At the organizational level, the digital human capital model is a concept of human resource development based on digital capabilities in performing their duties and functions to achieve organizational goals. In doing so, digital human development begins with the digital human process, which begins with finding people with digital capabilities, i. e., having digital competencies (Yahya & Adnan, 2022).

Much attention is given to the fact that digital competence has been identified by the European Commission as one of the eight core competences for lifelong learning (Carretero Gomez, 2017). In accordance with the European Commission's classification, digital literacy is one of the three main categories of digital skills and competencies, along with specialized digital skills for certain professions and digital skills for ICT professionals. Digital literacy includes a number of basic digital skills covering information and data skills, online communication and interaction, digital content creation, security, and problem solving (Brolpito, 2019). According to Gilster (1997), digital competence refers to «the ability to understand and use information provided in various forms using an electronic computing machine,» expressed in the following skills: media competence, information competence, and communication competence. Many factors influence the formation and development of digital competencies in the population, including gender, age, and level of education (Neagu, 2022; Guillén-Gámez, 2021).

Therefore, professional competence is an important qualitative characteristic of human capital. At the same time, the increase in professional competence indicates the development of human capital. With the processes of digital transformation of the economy and society, digital competence of the population has come to the fore, which in turn is the basis for the formation and development of digital human capital.

## Materials and methods

The conceptual framework of the study was the provisions of the theory of human capital, in particular used the competence approach of digital literacy on the basis of economic-statistical and comparative analysis. The information base of the study was statistical data on digital literacy of the Bureau of National Statistics of the Strategic Planning Agency for 2018 and 2021. Microsoft Excel software was used to process the statistical data.

The hypothesis of the study was as follows: the digital competencies of the population of Kazakhstan have a high level of development and contribute to the formation of digital human capital in the country.

In order to determine the level of development of digital competence, it is proposed to present the indicators of digital and computer literacy in the form of a numerical scale (Table 1).

Table 1 – Numerical scale of digital and computer literacy indicators and their interpretation

№	Value	Description
1	90–100	The highest level
2	80–90	Very high level
3	70–80	High level
4	60–70	Above average
5	50–60	Average level
6	40–50	Below average level
7	30–40	Satisfactory level
8	20–30	Low level
9	10–20	Very low level
10	0–10	Unsatisfactory level

Source: Alibekova et al., 2018

It is worth noting that there are no indicators describing media competence («ability to perceive information expressed in various semiotic systems»), information competence («skills to find necessary information and tools to work with it, ability to quickly master these tools») and communicative competence («skills to communicate with other users») in Kazakhstan. In this regard, the following statistical indicators were used to describe the relevant competences:

1) information competencies: «using software to work over the Internet, to edit text documents, tables or presentations», «getting information about goods and services»;

2) communicative competencies: «posting or instant messaging», «participation in social networks», «sending and receiving e-mail», «telephone conversations via the Internet/VoIP»;

3) media competencies: «access to chat rooms, blogs, news and online discussions,» «read or download online newspapers or magazines, e-books».

## Results and discussion

In order to develop digital competence in Kazakhstan in the period 2018–2022, the State program «Digital Kazakhstan» is being implemented, one of the directions of which is the development of human capital. The level of digital literacy of the population is one of twelve target indicators, which by

the end of 2022 should reach 83%. It should be noted that according to 2021, the level of digital literacy in Kazakhstan was 87.3%, i. e., the plan was fulfilled ahead of schedule. At the same time, the pandemic contributed to the growth of digital literacy in the country (Figure 1).

In 2018 it can be noted that the level of development of digital literacy in Kazakhstan was high, starting from 2019 it is very high. At the same time, there are no significant regional differences in the level of digital literacy of the population of Kazakhstan (Table 2).

The margins that illustrated the highest level of digital literacy are observed in the population of Nur-Sultan (94.7%), Almaty city (91.5%) and Almaty region (91.0%). Compared to 2018, the digital literacy of the population in these regions has increased. Several prerequisites contribute to this. Firstly, the digital infrastructure is developed in the cities of the republic, secondly, the amount of funding for the development of digital competence is sufficient, and thirdly, most of the educational institutions that promote digital competence are located in these cities. In addition, public and private support for the development of digital competence is more developed in developed cities. It should be noted that the development of digital competences in urban areas is higher than in rural areas. In recent years, in these regions, the digital competences of the population have increased, largely due to the mass transition of education from the traditional format to the online format, especially because of the pandemic. Teachers and other workers have been forced to increase their digital competence in order not to interrupt the learning process. Research confirms that online learning during the pandemic increased the digital competence of the population.

The positive trend of this indicator is also observed in other regions. The low value of digital literacy in the West-Kazakhstan region (79.2%). At the same time, the highest level of computer literacy in the country – 93.9% in 2021, which is higher by 6.5 percentage points (p. p.) compared to 2018, most of them (64.7%) are ordinary users. Digital infrastructure is poorly developed in the West-Kazakhstan region, with limited access to the Internet. Moreover, the low computer literacy of this region can be associated with a low standard of living. The North-Kazakhstan region can also be attributed to such regions.

The highest value of this indicator is in the Kyzylorda region (99.4%) and the cities of Nur-Sultan (98.0%) and Almaty (96.3%), the lowest – in the North-Kazakhstan region (86.1%). Digital competence requires the population to have digital gadgets. In regions where the

income of the population is low and the infrastructure is poorly developed, digital competence will be low as well.

At the same time, there are significant regional differences in the context of specific digital competencies. It should also be noted that in 2021, compared with 2018, there is a decrease in most of the indicators characterizing the digital competencies of the population of Kazakhstan, with the exception of telephone conversations over the Internet, the value of which increased by 3.2 p. p. Significant decrease in the indicator for posting information or instant messaging – by 6.9 p. p.

The most developed among Kazakhstan citizens are communicative competences, then informational and media competences. Communication competences, information and media competences are related to the development of social networks, such as Facebook, Instagram, TikTok. In recent years, the activity of media personalities or bloggers has increased in Kazakhstan, which in turn can increase these competencies among the population. It should be noted that the number of bloggers has increased, because as earnings on online platforms are many times higher than the earnings of traditional specifications, in connection with this population seeks to find its niche in the online space. Social networks have helped to increase the digital competence of the population, especially through various online sales workshops, SMM targeting, online consultations, online advertising, etc.

According to the indicators under consideration, the population of Nur-Sultan and Almaty, especially in Almaty, the level of digital competencies is higher compared to other regions, while the population of the regions of Western and Southern Kazakhstan is largely characterized by low digital competencies.

Thus, the digital and computer literacy of the population of Kazakhstan is at a very high level. However, there are regional disparities in the development of individual digital competencies, as well as a decline in most indicators of digital competencies, with a mixed trend across regions. The pandemic has contributed to an increase in digital and computer literacy in the republic. In connection with the increase in digital and computer literacy, we can talk about the development of digital human capital in Kazakhstan, and the different level of development of individual digital competencies in the regions of the country indicates the different stages of formation and development of digital human capital in Kazakhstan. Therefore, it is most developed in Nur-Sultan and Almaty, and least developed in the regions of Western and Southern Kazakhstan.

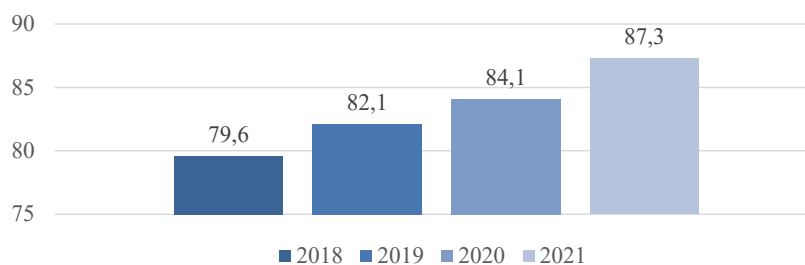


Fig. 1 – The level of digital literacy in Kazakhstan, 2018–2022

Source: compiled by the authors

Table 2 – Digital competencies of the population in the regions of the Republic of Kazakhstan, 2018 and 2021, % of the population

Region	Digital Literacy by age in the context of regions (ages 6–74)		Level of computer literacy (ages 6–74)		Information competencies				Communicative competencies				Media Competencies							
	2018		2021		Using software to work over the Internet to edit text documents, spreadsheets, or presentations		Getting information about products and services		Posting or instant messaging		Participation in social networks		Sending and receiving email		Telephone conversations via the Internet / VoIP		Access to chat rooms, blogs, news, and online discussions		Reading or downloading online newspapers or magazines, e-books	
	2018	2021	2018	2021	2018	2021	2018	2021	2018	2021	2018	2021	2018	2021	2018	2021	2018	2021	2018	2021
Republic of Kazakhstan	79.6	87.3	87.4	93.9	4.7	3.8	36.8	36.9	75.4	68.5	69.7	65.5	32.6	30.2	19.6	22.8	25.9	26.0	12.1	11.8
Akmola region	68.9	81.5	75.6	87.6	3.8	5.1	36.1	35.6	83.6	84.5	84.3	76.6	41.8	41.2	34.6	30.5	32.6	20.2	25.4	20.4
Aktobe region	78.0	86.8	87.1	95.8	1.6	0.7	43.3	34.9	80.6	73.4	81.5	74.0	44.1	37.4	31.9	30.6	34.0	29.9	12.7	12.8
Almaty region	86.7	91.0	90.0	94.6	7.9	4.2	47.7	46.4	69.8	46.1	54.2	47.8	34.1	24.7	13.1	25.5	24.1	28.7	7.4	2.1
Atyrau region	81.2	85.2	81.3	88.0	2.3	0.4	36.2	16.0	86.4	79.7	83.1	79.6	38.8	29.5	12.2	13.6	27.8	21.1	17.8	4.6
West Kazakhstan	76.4	79.2	94.5	95.3	18.9	1.8	39.7	37.4	86.6	50.9	74.3	50.9	33.8	28.0	23.8	22.6	42.3	20.2	14.9	10.4
Zhambyl region	78.2	85.8	86.5	94.2	2.1	0.5	23.2	10.4	71.5	60.5	74.1	55.5	24.0	11.0	16.3	17.0	25.9	9.4	7.9	4.9
Karaganda region	70.6	83.3	85.2	96.6	8.4	11.3	53.9	62.1	87.2	86.8	82.5	83.2	53.7	58.5	36.3	40.9	33.4	42.8	23.3	47.8
Kostanay region	80.8	90.8	82.1	90.6	4.0	2.3	44.5	38.4	78.9	77.1	76.1	80.0	32.5	35.8	26.1	33.6	17.9	23.6	13.7	16.7
Kyzylorda region	78.6	89.3	91.9	99.4	4.5	1.4	24.5	21.1	59.4	44.7	68.4	41.4	19.6	16.2	14.1	13.2	18.1	19.1	9.3	2.9
Mangistau region	78.1	84.9	93.2	95.5	1.9	0.4	23.6	9.7	79.1	75.3	75.1	69.2	24.1	17.9	22.5	20.5	37.4	32.9	5.8	1.5
Pavlodar region	79.6	85.1	85.5	92.9	2.4	5.5	47.4	42.1	77.9	81.8	78.9	74.1	31.1	24.2	19.1	21.5	30.0	35.1	11.3	12.3
North Kazakhstan	74.8	80.2	80.9	86.1	2.5	7.1	33.0	38.5	83.9	88.7	85.0	81.3	36.2	31.3	26.9	19.8	31.3	22.9	12.6	19.7
Turkistan region	76.9	87.2	88.4	95.6	0.5	4.9	24.7	41.1	67.1	76.7	69.4	67.8	25.2	34.5	13.0	24.5	25.5	36.9	7.6	9.0
East Kazakhstan	77.8	84.7	81.9	89.5	1.6	1.5	36.5	29.9	71.7	64.3	50.1	50.6	19.1	22.5	13.3	9.9	19.0	14.1	6.5	6.7
Nur-Sultan	85.4	94.7	94.8	98.0	4.4	5.4	26.5	28.3	78.9	61.2	64.2	62.0	51.8	24.7	13.9	17.6	24.8	21.2	23.7	9.7
Almaty	87.2	91.5	92.9	96.3	7.7	4.7	49.7	53.4	69.4	70.2	58.0	73.9	35.8	44.1	20.7	22.7	22.1	27.0	11.8	13.6
Shymkent	80.8	87.5	85.0	90.0	1.2	0.9	15.0	28.6	81.6	65.2	83.6	62.4	9.2	8.3	14.1	13.1	16.4	17.2	6.0	3.0

Source: compiled based on sources (Bureau of National Statistics. 2018; 2021)

### Conclusion

The hypothesis of the study has been confirmed. Based on the results of the analysis, we can conclude that the digital competencies of the population of Kazakhstan have a very high level of development and contribute to the formation of digital human capital in the country.

The following results were obtained in the course of the study.

Firstly, professional competence is an important qualitative characteristic of human capital, with the increase of which human capital develops. The digital competence of the population has come to the forefront in the digital economy, which is the basis for the formation and development of digital human capital.

Secondly, in 2018 the level of development of digital literacy in Kazakhstan was high, starting from 2019 it is very high. The country has the highest level of computer literacy. The pandemic contributed to the growth of digital and computer literacy in the country. There are no significant regional differences in the level of digital and computer literacy of the population of Kazakhstan. At the same time, the development of digital competences in the regions of

Kazakhstan is characterized by unevenness and the presence of disproportions, as well as a decrease in the values of the indicators characterizing them for the period under review.

Thirdly, communicative competences are the most developed among Kazakhstanis, followed by information and media competences. The increase in digital and computer literacy indicates the development of digital human capital in Kazakhstan, while the different level of development of individual digital competencies in the regions of the country indicates the different stages of formation and development of digital human capital in Kazakhstan. Thus, it is most developed in Nur-Sultan and Almaty, and least developed in the regions of Western and Southern Kazakhstan.

This study can become the basis for future research in the field of digital human capital, in particular digital competences as an important factor in the formation and development of human capital, considering the processes of digital transformation of the economy and society. The conclusions of the study may be of interest to those involved in scientific and practical work on the development of digital human capital.

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## FORMATION OF THE MANAGEMENT SYSTEM OF FINANCIAL AND ECONOMIC SECURITY OF THE ENTERPRISE

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financial and economic security management system,  
digital transformations of the economy

A set of unfavourable trends in the economy of Ukraine, caused by the full-scale Russian invasion, which make it necessary to increase the level of financial and economic security of enterprises, is determined. It is substantiated that for this, enterprises must form an appropriate management system for their financial and economic security, which should take place taking into account the modern approaches analysed in the research process. The state of war in Ukraine exacerbates the problem of ensuring the financial and economic security of enterprises, which actualizes the need to observe the principles of ensuring financial and economic security, the coordinated interaction of organizational-management, information-analytical and regulatory-legal subsystems. The priority tasks for enterprises should be ensuring and increasing their profitability, financial stability, optimal liquidity, managing economic and other risks through the use of levers of managerial influence, tools, methods, as well as evaluating the results of financial and economic security management. This will enable enterprises to face modern economic challenges, focus on digital transformations in order to counter destructive factors, promote victory in the Russian-Ukrainian war on the economic front, and create prerequisites for the recovery of the Ukrainian economy.

## ФОРМУВАННЯ СИСТЕМИ УПРАВЛІННЯ ФІНАНСОВО-ЕКОНОМІЧНОЮ БЕЗПЕКОЮ ПІДПРИЄМСТВА

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**Ключові слова:**

воєнний стан,  
нові економічні виклики,  
принципи забезпечення фінансово-економічної безпеки,  
система управління фінансово-економічною безпекою,  
цифрові трансформації економіки

Визначено комплекс несприятливих тенденцій в економіці України, спричинених повномасштабним російським вторгненням, які зумовлюють необхідність підвищення рівня фінансово-економічної безпеки підприємств. Обґрунтовано, що для цього підприємства повинні сформувати відповідну систему управління фінансово-економічною безпекою, яка має відбуватися з урахуванням сучасних підходів, проаналізованих у процесі дослідження. Стан війни в Україні загострює проблему забезпечення фінансово-економічної безпеки підприємств, що актуалізує необхідність дотримання принципів забезпечення фінансово-економічної безпеки, узгодженої взаємодії організаційно-управлінської, інформаційно-аналітичної та нормативно-правової підсистем. Пріоритетними завданнями для підприємств мають стати забезпечення та підвищення їх прибутковості, фінансової стійкості, оптимальної ліквідності, управління економічними та іншими ризиками на основі використання важелів управлінського впливу, інструментів, методів, а також оцінювання результатів управління фінансово-економічною безпекою. Це дозволить підприємствам протистояти сучасним економічним викликам, зосередитися на цифрових трансформаціях з метою протидії деструктивним факторам, сприятиме перемозі в російсько-українській війні на економічному фронті та створить передумови для відновлення української економіки.

### Problem definition

In modern conditions, the activities of enterprises in all branches of the Ukrainian economy are under the influence of factors of a political, economic, financial, and legal nature, causing numerous destructive effects, exacerbating crisis phenomena and dangers at the global, macro-, meso- and microeconomic levels, leading to the deterioration of the financial condition of many business entities and their liquidation.

Under such conditions, the need to implement an effective system of managing the financial and economic security of the enterprise, which should ensure its stability both in the current and future periods, minimize and neutralize the impact of risks, threats and dangers, is becoming urgent. This determines the importance of forming the basic principles of financial and economic security of enterprises from the standpoint of complexity, efficiency, and systematicity, with the identification of its key elements, forms, methods, levers, and tools, taking into account both stable and crisis conditions of operation.

### Analysis of recent research and publications

The problem of ensuring financial and economic security has already been sufficiently studied, but it still remains debatable in many aspects. An interesting approach was proposed by I.P. Potapiuk, S.S. Mazilenko, and M.O. Prusova, identifying modern trends in ensuring the appropriate level of financial and economic security of Ukrainian enterprises [1]. Of course, in the course of the research, monographic scientific publications were studied, in particular, by E.I. Danilova [2], M.S. Kirzhetska, and Yu.I. Kirzhetsky [3] on economic and financial security. The authors of the monograph L.O. Vdovenko and O.S. Chernenko have a special view on financial security [4].

By the way, Y.V. Biliak also has new developments on ensuring financial security, represented in a scientific article [5]. Modern researchers O.I. Kopeliuk, U. Ie. Huzar, S.V. Huta [6], H.H. Soboleva [7], V.K. Antoshkin [8], I.O. Dotsenko, and O.P. Melnychuk. [9], E.R. Selievska and I.O. Tarasenko [10] proposed new approaches to ensuring the financial and economic security of enterprises.

### Formulation of the goals of the article (statement of the task)

The purpose of the study is to identify modern challenges that necessitate the formation of a management system for the financial and economic security of Ukrainian enterprises, which should occur due to the coordinated interaction of organizational-management, information-analytical and regulatory-legal subsystems to create the prerequisites for the recovery of the Ukrainian economy.

### Presentation of the main research material

The consequence of the increase in the level of dangers, threats and risks of the internal and external environment is a decrease in the company's income and profits, loss of liquidity, solvency and financial independence. Under such conditions, it is quite important to study the theory of managing the financial and economic security of

the enterprise in order to timely identify and eliminate unforeseen circumstances that cause the financial instability of the enterprise [1].

It is necessary to improve the existing theoretical and methodological approaches to the organization of the management system of financial and economic security of the enterprise. From the positions of close interdependence, interdetermination and equivalence at the micro level, the expediency of using the definition "financial and economic security of the enterprise" is substantiated. It is worth noting that resource, financial and complex approaches are used to reveal the economic essence of this concept. In particular, V.K. Antoshkin adheres to the resource approach to considering the financial and economic security of the enterprise – as a state of protection of its resources, actual production and intellectual potential from potential threats of the external and internal environment with the help of tools, methods, levers and a system of information and analytical support [8].

According to M.S. Kirzhetska and Yu.I. Kirzhetsky, this is the state of the enterprise's economic system, which is characterized by internal balance, resistance to the negative impact of any threats, a high level of adaptability to the changing conditions of the external environment and its ability to ensure financial and economic activity based on the realization of the interests of owners of corporate rights, investors by optimally combining the available tools of a diagnostic and controlling financial nature [3].

The financial approach is based on a number of basic provisions, namely:

- 1) elimination of financial and economic threats and ensuring the financial stability of the enterprise;
- 2) stable financial and economic condition of the enterprise, which ensures protection from internal and external threats;
- 3) the ability to fulfil financial obligations and the ability to apply appropriate financial mechanisms through financial levers, incentives and for financial purposes [4].

A comprehensive approach is not only aimed at achieving financial stability, but also at protecting against the negative effects of internal and external threats, that is, it combines both financial and resource approaches. According to this approach, the complexity of the concept is revealed in two ways:

– firstly, through the integration of the system of measures, the mechanism of their generation and provision and manifests itself through the corresponding state, which is characterized by stability, adaptability and positive dynamics of the economic and other interconnected systems of the enterprise;

– secondly, as a level of protection from the negative effects of the surrounding environment, which is achieved due to the compliance of financial, personnel, technical and economic potentials with the strategic goals and objectives of the enterprise [5].

In theoretical and applied aspects, unanimity was also not formed in the approaches to the disclosure of the content, the mechanism of formation and provision of the enterprise's security system. In particular, it should be emphasized that the systemic approach is based on a set

of interrelated elements that interact with each other and ensure the achievement of current and strategic goals in the conditions of action of mega-, macro-, meso- and micro-factors.

The security system of the enterprise is special and depends on a significant number of factors of entrepreneurial activity, namely, the level of development and structure of production potential, the efficiency of its use and the direction of production activity, the qualifications of personnel, the enterprise’s industrial relations, the competitive environment, the riskiness of production, etc. [2]. Such a position emphasizes the need to take into account the features and elements of the external and internal environment of the enterprise’s functioning.

The position of H.H. Soboleva deserves attention, who notes that there are two different approaches to system formation, in particular descriptive and constructive. According to the descriptive approach, the system is an already formed unit in the environment of its functioning with a stable structure and relationships between elements.

The constructive approach consists in the ability of the system to “adapt” to the requirements and problems that need to be solved, as a result of which a system is constructed that is a means of solving the task. The last approach is adaptive, corresponds to the modern realities of the functioning of the enterprise, as it takes into account the dynamism of its development and the variability of the external and internal environment [7].

The system of economic security is also understood as a set of external and internal elements that, using available resources, methods and means, ensure the protection of the economic entity from real and potential risks related to its

economic security, which enables the enterprise to function effectively and develop [6].

It is advisable to interpret the complex system of economic security of the enterprise as a complex of interrelated organizational and legal measures carried out by special services, divisions of the enterprise, aimed at protecting the vital interests of the individual and the enterprise from real or potential threats to ensure successful financial and economic development [9].

The system of financial and economic security of an enterprise is a set of interconnected elements and mechanisms that are interconnected and interdependent and are able to ensure the stability of the enterprise, taking into account the impact of existing and potential risks, threats and dangers. System and safety-oriented approaches are aimed at achieving the goal, objective and tasks of the enterprise in current and strategic dimensions.

The purpose of forming a system of managing the financial and economic security of the enterprise is the need to achieve the financial stability of the enterprise’s functioning and the ability to identify and minimize real and potential risks, threats, and dangers. The main tasks are not only to guarantee the financial stability of the enterprise, but also to organize the management of financial and economic security under the influence of potential and real crisis phenomena and the implementation of both preventive and reactive anti-crisis management (Fig. 1).

Ensuring the financial and economic security of the enterprise usually occurs at two levels: the operational level involves solving everyday economic problems that are associated with establishing the optimal level of use of resources at the disposal of the enterprise; the strategic

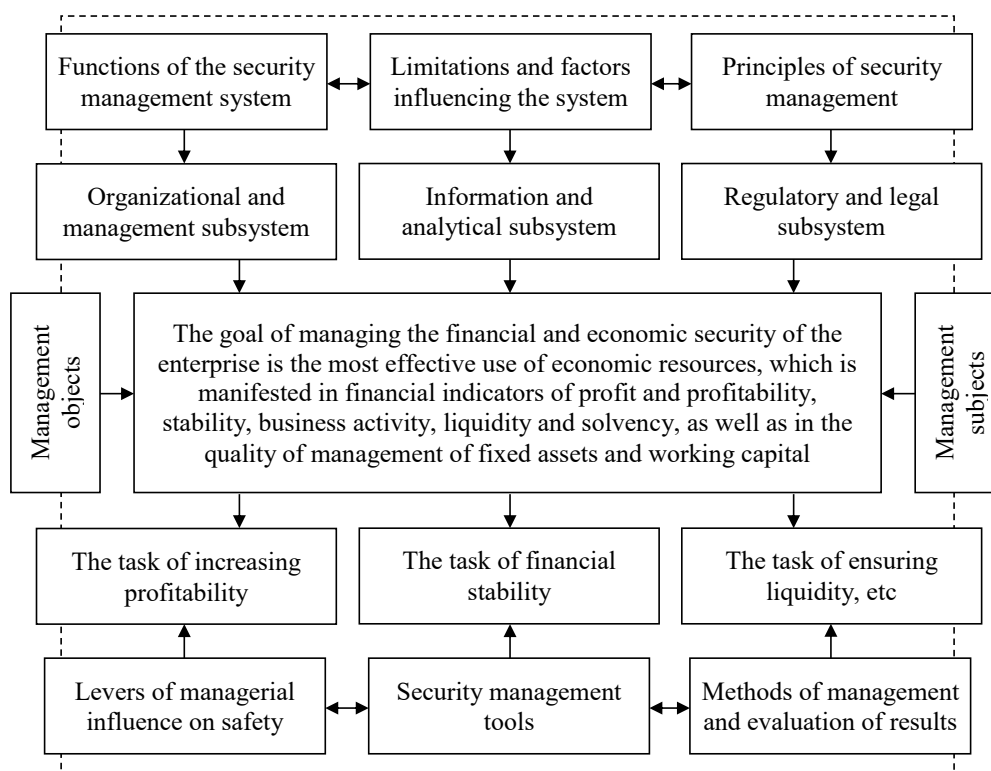


Fig. 1 – The system of managing financial and economic security of the enterprise in modern conditions



level involves making the most important decisions that are aimed at the long-term period.

The construction and functioning of the enterprise's financial and economic security management system must take into account a number of fundamental components: the principles of enterprise construction, its organizational and management structure, effective functioning of divisions and services, including financial and economic security management.

The functioning of the enterprise's financial and economic security management system is impossible without clarification of its objects and entities that are related to each other. Thus, V.K. Antoshkin rightly notes that the object of the security system is everything that is aimed at ensuring it, namely: information, personnel, a set of non-property rights and economic interests, the transformation of whose state leads to a change in the level of their financial and economic security [8]. Based on this approach, we believe that the object of the specified system is the security of the financial, property, technical and technological, personnel, information, and intellectual potential of the enterprise.

Subjects of the system include individuals, divisions, services, bodies, institutions, ministries and departments that directly ensure the financial and economic security of the enterprise [10].

Therefore, the subjects of ensuring the financial and economic security of the enterprise are internal and external and, in accordance with the regulated powers, form, organize, control and monitor the level of financial and economic security of the enterprise in the current and strategic periods.

The effective functioning of the financial and economic security system of the enterprise must be based on and adhere to a number of principles, the most important of which are:

- systemicity – the need to create a comprehensive security system that would function effectively and respond in a timely manner to risks, threats and dangers;
- continuity – constancy in the functioning of all constituent elements of the system;
- preventiveness – the ability of the system to implement measures of a preventive nature regarding potential risks, threats and dangers;
- optimality – involves the minimization of costs for the organization of the system from the standpoint of its most effective functioning in conditions of risks, threats and dangers;
- hierarchy – determines the clear regulation and accountability of the subjects of management of the financial and economic security of the enterprise;
- efficiency – involves ensuring financial stability as a result of an established system of managing the financial and economic security of the enterprise.

The system of managing the financial and economic security of the enterprise should be based on the effective functioning of a number of subsystems: organizational-management, information-analytical, regulatory-legal, monitoring-control, etc.

The organizational-management subsystem is a set of actions related to the diagnosis of real and potential risks,

dangers and threats and the implementation of measures to minimize or neutralize them.

According to the criterion of depth and detail, the diagnosis can be superficial or in-depth. In this regard, economic literature distinguishes between:

1) express diagnostics – a formal assessment of the financial condition of the business entity based on the regular calculation of relevant ratios and balance sheet data (this technique has the following goals: to identify trends in changes in the business entity's condition, to conduct an analysis of financial circulation);

2) fundamental diagnostics – a comprehensive and in-depth assessment of the current state of the business entity, identification of the causes of its deterioration and expected development trends [7].

The information-analytical subsystem is fundamental in the organization and provision of financial and economic security of the enterprise, as it involves the collection, processing and documentation of information regarding its condition and determination of the level of security, confidentiality and transparency of information. The functioning of this subsystem should be based on planning, analysis and control of financial and economic indicators of activity, determination of key parameters of profitability, threats and bankruptcy and liquidation.

Such a system must include: qualitative and quantitative values of indicators of financial and economic security, the presence or potential of risks and threats, formalized financial interests and the state of their implementation, a strategic plan (strategy) for ensuring the financial security of the enterprise, qualitative and quantitative parameters of the use of financial resources, the amount of the latter, as well as sources of their receipt, financial plan (budget). Information support is a collection of statistical, economic, commercial, financial and other information.

The regulatory-legal subsystem regulates the compliance of the enterprise's functioning with the existing regulatory and legislative acts, compliance with the requirements in terms of guaranteeing the enterprise's security.

The monitoring-control subsystem is based on the constant monitoring of risks, threats and dangers and the implementation of methods of operational anti-crisis and strategic management of the financial and economic security of the enterprise. In our opinion, to ensure the effectiveness of the company's security management system, it is necessary to use modern controlling methods, such as benchmarking, break-even point analysis, SWOT analysis, ABC analysis, and others – both for current and strategic management of the company's security.

The system of financial and economic security of the enterprise must be based on an effective mechanism, which is a set of methods, levers and tools, which are aimed at the implementation of security measures within the framework of subject-object relations and with the help of which the minimization of the impact of risks, threats and dangers is guaranteed.

Methods of financial and economic security are means of action aimed at guaranteeing the effectiveness of measures to strengthen the security of the enterprise. Such methods are organizational, economic, financial, managerial and

social, which must be specified depending on the stable or crisis conditions of the enterprise's functioning.

The structural element of the mechanism is the levers, which are methods of action and implementation of methods. It is advisable to consider them in the context of motivational, organizational, economic and other.

The tools are the means of ensuring financial and economic security to achieve the set goals and objectives.

It is expedient to classify such tools into administrative, financial, and organizational ones, taking into account both the stability of the enterprise's activity and real and potential crisis phenomena and threats.

The combination of all elements of the system of ensuring financial and economic security of the enterprise will allow to minimize external and internal threats and dangers and the risks associated with them. The formation of an effective system of financial and economic security of an enterprise is a specific, complex and multifaceted task and encompasses a set of elements, the rational combination of which will allow enterprises to ensure the realization of the purpose of their operation in both current and strategic dimensions. When forming it, it is necessary to take into account the specifics of the functioning of specific business entities, the degree of riskiness of their activities, real and potential threats and dangers [1].

Subjects, objects, components, principles and subsystems of ensuring its functioning, as well as an effectively functioning mechanism, which is a set of methods, levers and tools, occupy a significant place in the system.

The methodological support of the system of financial and economic security at the enterprise is based on the following methods: the method of financial and economic analysis, economic and mathematical modelling, forecasting, technical and economic and balance sheet. In general, methodical provision of effective management of financial and economic security is divided into two groups: financial and economic methods and economic levers.

The mechanism for ensuring the economic security of the enterprise is realized through: strategic planning of financial and economic activity; prompt assessment of the achieved level of economic security of the enterprise and development of recommendations; operational planning of the financial and economic activity of the enterprise; practical implementation of developed plans and measures.

Internal and external threats also affect the operation of the system [10].

One of the main elements of the security management system at the enterprise is its information and analytical support, which should contain qualitative and quantitative values of indicators of financial and economic security, information about the presence of risks and threats to the enterprise, financial interests of the enterprise and the extent of their realization, a plan to ensure financial and economic security, information on the amount of financial resources, their use and sources of their income, the budget.

Constant control and monitoring of the level of financial and economic security of the enterprise makes it possible to detect signs of crisis development at an early stage, determine its scope and develop measures to avoid the development of this situation. Diagnostics of the enterprise's activity in the system of financial and economic security is a systematic analysis of the environment of its functioning with the help of interdependent and mutually complementary indicators that reflect the state of using the enterprise's potential and the assessment of the level of security. Diagnostic results are the basis for making appropriate management decisions [3].

### Conclusions and prospects for further research

Therefore, maintaining an appropriate level of financial and economic security at the enterprise will contribute to the achievement of the enterprise's goals and objectives and will create conditions for timely identification and overcoming of threats and dangers of the external and internal environment. Maintaining an appropriate level of financial and economic security under martial law is possible only with the creation of an effective system for managing the financial and economic security of the enterprise.

Further research should be aimed at developing an effective strategy for the development of financial and economic security, which would be characterized by a close relationship and interdependence of its main components. Since the main criterion of the effectiveness of the management of the financial and economic security system is the assessment of the economic condition of the enterprise and its financial stability, the determination of the system of quantitative and qualitative parameters of the effectiveness of the management of the financial and economic security system for the economic recovery of the entire economy of Ukraine will be a promising direction of further research.

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DOI <https://doi.org/10.26661/2414-0287-2023-1-57-21>**MANAGEMENT OF RECURRENT CONFLICT PHENOMENA OF EVACUATION  
AND MIGRATION PROCESSES IN WAR AND POST-WAR TIMES****\*Andrushkiv B.M., \*\*Cherep O.H., \*Tsikh H.V., \*Pohaidak A.R.***\*Ternopil Ivan Puluj National Technical University**Ukraine, 46001, Ternopil, Ruska str., 56**\*\*Zaporizhzhia National University**Ukraine, 69600, Zaporizhzhia, Zhykovsky str., 66*

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**Key words:**bullying, war, defence,  
management, ideology,  
public opinion, enterprises,  
stability, strategy, tactics,  
efficiency, economic activity,  
reformation and transformation  
society,  
European Union, NATO

In the article, based on a sociological analysis of public opinion and the existing experience of state management bodies, local self-government bodies, with the participation of public formations, certain problems of a military and defence nature were identified, including manifestations of bullying in educational institutions. They were evaluated both from the standpoint of scientists and the average citizen. The study was carried out by surveying citizens about the causes of bullying and disciplinary violations of both educational and cognitive nature. Based on existing experience, ways and means of their prevention, spread and elimination were proposed. The prerequisites for increasing responsibility for inaction in this area of educational institutions have been studied. The causes of bullying and other types of harassment are considered, which confirm that not only education, culture, science, but also directly the administrative and management apparatus are most exposed to this negative influence. In the spread of this phenomenon, an important role is played by social networks and the presentation of the material itself, where the victim and the perpetrator are determined in advance. In most cases, the video content clearly identifies the victim and the perpetrator. Sometimes such content pursues another goal - it is to create a false impression about the real state of affairs or situation. Such content is pre-thought-out, designed for a certain age category, presented one-sidedly, biased and with the specific goal of evoking negative emotions in the observer and inciting aggressive actions. This is also facilitated by the lack of critical thinking, unwillingness to analyse and trust the information presented. The accession of Ukraine to the European Commonwealth in the post-war period determines not only the success of the fight against the prevention and spread of conflicts, but also the elimination of interpersonal contradictions. As a result, the development and implementation of the latest means and mechanisms for the activation of educational institutions in fundamentally new European democratic conditions. It was established that due to the comprehensive use of public, political, spiritual and other factors when making relevant changes in the legislation it is possible to ensure an increase in the effectiveness of reforms and prevent the spread of these negative phenomena caused by the war and developed in this period.

**УПРАВЛІННЯ ПОВТОРЮВАНИМИ КОНФЛІКТНИМИ ЯВИЩАМИ ЕВАКУАЦІЇ  
ТА МІГРАЦІЙНИМИ ПРОЦЕСАМИ У ВОЄННИЙ ТА ПОВОЄННИЙ ЧАС****\*Андрушків Б.М., \*\*Череп О.Г., \*Ціх Г.В., \*Погайдак А.Р.***\*Тернопільський національний технічний університет імені Івана Пулюя**Україна, 46001, м. Тернопіль, вул. Руська, 56,**\*\*Запорізький національний університет**Україна, 69600, м. Запоріжжя, вул. Жуковського, 66*

У статті на основі соціологічного аналізу громадської думки та наявного досвіду роботи органів державного управління, органів місцевого самоврядування за участю громадських формувань визначено окремі проблеми військово-оборонного характеру, зокрема прояви булінгу в закладах освіти. Їх оцінювали як з точки зору науковців, так і з точки зору пересічного громадянина. Дослідження проводилося шляхом опитування громадян

**Ключові слова:**

булінг, війна, оборона, управління, ідеологія, громадська думка, підприємства, стабільність, стратегія, тактика, ефективність, економічна діяльність, реформування та трансформація суспільства, Європейський Союз, НАТО

щодо причин булінгу та дисциплінарних порушень як навчального, так і пізнавального характеру. На основі наявного досвіду запропоновано шляхи та засоби їх попередження, поширення та ліквідації. Досліджено передумови підвищення відповідальності за бездіяльність у цій сфері навчальних закладів. Розглянуто причини булінгу та інших видів цькування, які підтверджують, що не лише освіта, культура, наука, а й безпосередньо адміністративно-управлінський апарат найбільше піддаються цьому негативному впливу. У поширенні цього явища важливу роль відіграють соціальні мережі та сама подача матеріалу, де заздалегідь визначені жертва і злочинець. У більшості випадків відеоконтент чітко ідентифікує жертву та злочинця. Іноді такий контент переслідує іншу мету - створити хибне враження про реальний стан речей або ситуацію. Такий контент заздалегідь продуманий, розрахований на певну вікову категорію, поданий однобоко, упереджено та з конкретною метою викликати негативні емоції у глядача та спонукати до агресивних дій. Цьому також сприяє відсутність критичного мислення, небажання аналізувати та довіряти поданій інформації. Приєднання України до Європейської співдружності в післявоєнний період визначає не тільки успішність боротьби із запобіганням і поширенням конфліктів, але й усуненням міжособистісних протиріч. Як наслідок, розробка та впровадження новітніх засобів і механізмів активізації діяльності навчальних закладів у принципово нових європейських демократичних умовах. Встановлено, що завдяки комплексному використанню суспільних, політичних, духовних та інших чинників при внесенні відповідних змін до законодавства можна забезпечити підвищення ефективності реформ та запобігти поширенню зазначених негативних явищ, спричинених війною та розвинутих у цей період.

**Problem definition**

The full-scale war with Russia exacerbated the problems of children's and youth conflicts in Ukraine. This is due to numerous psychological reasons, including the intensification of the evacuation of people from the places of hostilities and the migration of Ukrainians abroad. Currently, about 8.0 million people have emigrated from the Southern and Eastern regions due to hostilities abroad and were evacuated to the Western regions of Ukraine (this process is ongoing). Children and students who were brought up on other, somewhat different, regional principles and traditions arrived at schools and institutions of higher education in Podillia, Halychyna, Volyn, Transcarpathia, and others. A large number of children and their parents left abroad. These and other circumstances, both abroad and in Ukraine, cause sometimes aggravation of relations between both adults and young people, provoking bullying as a phenomenon of aggressive behaviour of one child or a group of children in relation to another child, which is accompanied, as a rule, by constant physical and psychological influence and, by the way, is not a rare phenomenon and not only in youth relations during wartime. Actually, this determines the relevance and timeliness of the specified range of problems.

**Analysis of recent research and publications**

Meanwhile, Ukrainian society still lacks the means to deal with these cases as illogical social phenomena.

Analysing the problems of bullying and conflicts in military and defence conditions, the use of public initiative in this area, especially in the extreme conditions of the implementation of regional, administrative and general state reforms, the works of domestic scientists, including V.M. Burlaka, Iu.V. Goncharov, G.I. Mechnikov, A.A. Oleshko, L. Yaremenko, others, is indirectly devoted

to the elimination of the problems of the multifaceted crisis and its impact on the development of Ukraine. Such scientists as I.T. Balabanov, O.I. Vivchar, L.S. Golovkova, V.I. Franchuk, V. Ia. Gorfinkel, A.P. Grechan, M.P. Denisenko, E.F. Denisov, S.M. Ilyashenko, O.E. Kuzmin, N.V. Krasnokutska, L.N. Ogoleva, V.M. Porohnia, I.I. Rekuna, R.A. Fathutdinov, I.V. Fedulova, L.O. Cherkashchyna [12]. It should be said that the research was once again carried out not only without taking into account conflict situations, public opinion, but also without taking into account the requirements of the state's possible accession to the EU and NATO.

Currently, in general, quite a few articles and scientific works are devoted to the problems of state formation, the relationship between science and production. Some domestic and foreign managers pay attention to the problem of adaptation and transformation processes in accordance with the requirements of associate membership in the EU and NATO without linking these processes to the aggravation of conflict phenomena, both directly in educational institutions and in territorial structures.

Studies and sociological studies of the causes of bullying and other abuses confirm that not only education, culture, science, but also directly the administrative and management apparatus are most exposed to this negative influence. Due to post-totalitarian traditions, they have always been and remain very susceptible to such abuses.

M.O. Andreieva, R. Bezpalcha, O.V. Dzhelali, A.V. Kudin, L.O. Kirzhner, M.V. Martynenko, H.V. Lozhkyn, Kh. Ia. Saiko, K.O. Ostrovska, others. Meanwhile, there were practically not many publications on the manifestations of bullying in the conditions of evacuations and mass migration of both the population and youth during the war period abroad and to the western regions of Ukraine.

Therefore, the issue of the development of bullying has a negative effect on the effectiveness of the functioning of the territories and educational institutions operating there, the psychological stability of Ukrainian citizens, the activities of economic entities, etc.

Based on these considerations, the goal and objectives of this article were formed.

### **The purpose and objectives of the article**

Ukraine is a state that, due to the war and related circumstances, is faced with the problem of developing the latest European development strategy for the future. Its implementation should take into account public opinion in terms of not only the restoration of the post-war economy and preparation for joining the EU and NATO, but also the development of scientifically based measures to prevent this negative phenomenon. In this context, developers should be interested in the development and implementation of not only ideological tools, but also the development of the latest technologies, which are based on the advanced achievements of science, strengthening, at the expense of administrative means, and the use of public opinion in all spheres of moral and spiritual life of youth and citizens of Ukraine.

### **Presentation of the main research material**

In fact, it should be noted that currently, in many cases in connection with the war, the educational and disciplinary function of the state is deliberately ignored, levelled and not fulfilled. These issues are especially relevant in the conditions of territorial communities. The implementation of the educational function is delayed due to the absence of state ideology, which significantly affects the formation of professional and conscientiously patriotic indicators of the development of the younger generation of society. Scientists claim that in states where ideological work is absent, morality is correspondingly low, bullying flourishes, and executive discipline and responsibility are low. Science has also established that a high number of abuses in this sphere of social relations occurs where the level of spirituality is low, the moral principles of coexistence are not supported, where people have no hope for a better future.

Meanwhile, among Ukrainian researchers, at the moment, there is not even a single understanding of the meaning of bullying and the definition of its place in the list of “conflictology” terms. So, according to Internet sources, some researchers use this term as a synonym for conflict theory, to denote the empirical study of conflicts, and some use it to study the main patterns of conflict manifestation.

The term “conflictology”, judging by the content, should mean the scientific study of conflict (conflicts) or be the name of the science of conflicts.

Again, the psychology of children’s conflicts called bullying is not clear in this situation.

**For reference:** *Bullying (from the English bully – hooligan, bullyboy, rude, “to bully” – pick a quarrel, make a nuisance of oneself) is a long process of deliberate cruel treatment, aggressive behaviour to cause harm, cause fear, anxiety or create a negative environment for a person.*

Most often, bullying occurs in places where adult control is weakened, or there is none at all, which is justified in educational groups by the conditions of war. It can be, as the researchers testify, the school yard, stairs, corridors, toilets, changing rooms, sports grounds. In some cases, a child may be bullied outside the school premises. A victim of bullying can be harassed by sending abusive messages on the phone.

A person who has been chosen as a victim and who cannot stand up for himself is tried to be humiliated, intimidated, isolated from others in various ways. The most common forms of bullying are: verbal insults, mockery, name-calling, threats, offensive gestures, verbal intimidation, threatening intonations, ignoring, refusal to communicate, exclusion from the game, boycott, extortion of money, food, things, intentional damage to personal property, physical violence, humiliation using mobile phones and the Internet, spreading rumours and gossip, often used by collaborators, provocateurs, etc..

According to the available experience in this area, bullying can be combined into groups of oral (verbal), physical, social (emotional) and electronic (cyber) bullying, which are often combined for greater impact. This classification does not take into account the cause of such a phenomenon. In many cases, the war, in the absence of ideological education of young Ukrainians of the future, adequate psychological support, is a catalyst for their development.

As the study showed, 70 percent of bullying occurs verbally. Physical violence is the most visible, but accounts for less than a third of bullying cases.

Nowadays, cyberbullying is gaining momentum. This is humiliation with the help of mobile phones, the Internet, etc.

***What can psychological scientists advise in this situation?*** Of course, schoolchildren should seek help from adults, namely teachers and parents. The help of adults is needed if the actions of offenders can cause harm to physical or mental health.

Older children and teenagers can try to cope with some situations on their own. Psychologists have developed several tips for them.

- Ignore the abuser. If possible, try to avoid an argument, pretend you don’t care and walk away. If the situation does not allow you to walk away while maintaining your composure, use humour.

- Control anger and rage. After all, this is exactly what the offender seeks. Don’t get into a fight. Don’t hesitate to discuss such threatening situations with people you trust. This will help to build the right line of behaviour and stop violence.

***According to our belief and the conclusions of the public survey, it would be worthwhile to provide for the study of this phenomenon in the prevention of bullying and conflicts in educational programs.*** To speed up the formation and implementation of statist ideology.

To give bullying a proper sound and understanding as a component of conflictology, as a discipline, the identical theory of conflict, which is fully justified not only from a methodical, but also from a methodological point of view.

The problematic ones also include questions of a theoretical nature, which casually affect the delineation of the object of research. This is primarily a definition and understanding of the conflict. How should the conflict be considered, in a broad or narrow sense?

In other words, are conflicts, including bullying, as a consequential phenomenon of war, and should become the subject of further study of conflictology in post-war conditions? The question is also whether to consider all phenomena of an antagonistic nature that exist both in the minds of individuals and groups, as well as in their behaviour at all levels of society, including bullying, as a conflict, or just an open confrontation, a clash of parties? For practitioners whose efforts are aimed at direct conflict resolution, these issues are less important, but they also require special attention from theorists.

It is necessary to agree that the term “conflictology” in various phrases did not arise by itself, but became widespread in the territory of the former Soviet Union as a result of the coincidence of several circumstances: the lack of a clear understanding of concepts in the social sciences; weak level of research; the desire to make the works more scientific; inappropriate use of the term in the mass media; the desire to avoid “negative” commenting when using the term “conflict”.

Incidentally, we note that in Western countries, when it comes to the tradition of studying a problem by public opinion, they use the phrase “conflict tradition”, when it comes to theory, they use “conflict theory”, and for applied studies of conflicts, they use the term “conflict studies”. It is primarily not about tracing anglicisms, but about the development of a full-fledged and at the same time unified scientific terminology that would be understandable to both domestic and Western researchers.

The basis for writing this article was the need for a scientific study of bullying as a component of the conflict, as an objective reality that arose, or more precisely, worsened as a result of the war and exists in various spheres of social life. The concern caused not only by different interpretations of the term, but above all by the military circumstances, which is emphasized by modern war researchers.

The analysis of bullying as a type of conflict and an objective phenomenon of social life in sociology has formed a certain direction called the sociology of conflict. From the point of view of solving the problems of violence in conflicts of various levels of complexity, it is advisable to highlight the concept of “bullying caused by military circumstances.” The main problems considered in it are the study of the causes of the conflict, the search for ways of its non-violent settlement under conditions that would contribute to the preservation of peace. Close to the latter is the direction of experimental study of the conflict, which is based on the analysis of individual cases caused by evacuation and migration reasons.

***Is there any experience of solving similar problems abroad?*** The study showed that a special place in Western social science, for example, is occupied by such a discipline as polemology. The creators of this discipline derive its name from the Heraclitean *polemos*, which means not only war, but also conflict in the broadest sense of the word.

Polemology is the science of war and conflicts. It examines various aspects of war and conflict, such as the political, social, economic and cultural factors that lead to conflict, including identity, territorial claims, ethnic religious and ideological differences, and the roles of international and domestic factors in conflict. The field of study of this science also includes the study of various aspects of warfare, such as military tactics, strategy, weapons and technologies, military ethics and rights, problems of restoration and establishment of peace and security, including international arms control, demilitarization and the development of peacekeeping programs.

Polemology is important for the development of a scientific approach to resolving conflicts and building peace in the modern world.

The term “polemology” was introduced by the German sociologist and philosopher Gaston Bodenheim in 1907, but the study of war and conflicts as a relevant topic of scientific research originated in ancient Greece. In their works such as the Peloponnesian War and the History of the Persian Wars, Herodotus and Thucydides analyzed the causes of war and its consequences.

In the middle of the 19th century, with the development of science and technology, new ways of waging war appeared, which led to an increase in the number and intensity of armed conflicts. This stimulated the emergence of scientific research on the problems of war and conflicts.

In the 20th century, polemology became a separate branch of scientific research. It became especially important after World War I and World War II, when humanity experienced the terrible consequences of war, such as millions of deaths and destruction. Today, polemology is a relevant topic of scientific research dealing with the problems of war and conflicts in the modern world.

## Conclusions

Therefore, these and other circumstances determine the need for state institutions to carefully study the socio-psychological situation with evacuation and migration processes, develop a national strategy in this regard and form mechanisms for its implementation, taking into account the opinion of scientists and the public. After all, the emergence of the phenomenon of bullying in Ukraine, the aggravation of which was caused by wartime circumstances, requires an urgent, scientifically based, methodical formation of means of its prevention and spread, and ultimately its elimination. Strengthening responsibility for inactivity in this area, both of educational institutions and territorial bodies of local self-government, etc.

In general, the improvement of the effectiveness of the specified measures is proposed at the expense of actual ideological and educational factors and innovative and managerial levers. This is one of the directions not only for the development of national and regional traditions and culture, but also for the strengthening of economic security in the state and the stable functioning of educational institutions of Ukraine, which actually can accelerate the unity of our society in the fight against the hated enemy, make it competitive in the conditions of global rivalry and successful accession to the EU and NATO.

In fact, a safe educational environment and pedagogy of partnership between all participants of the educational process should become important values of the new Ukrainian school in the post-war period. Relations here should be based on the principles of respect, benevolence, and tolerance.

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## ВИМОГИ ДО ОФОРМЛЕННЯ СТАТЕЙ У ФАХОВОМУ НАУКОВО-ПРАКТИЧНОМУ ЖУРНАЛІ «ФІНАНСОВІ СТРАТЕГІЇ ІННОВАЦІЙНОГО РОЗВИТКУ ЕКОНОМІКИ»

З № 2(42) 2019 року фаховий науково-практичний журнал «Фінансові стратегії інноваційного розвитку економіки» виходить лише англійською мовою. Стаття подається до розгляду в редакцію українською мовою. Після проходження внутрішнього рецензування – обов'язкове надання перекладу статті англійською мовою. Переклад має бути професійним, у жодному разі не використовуючи інтернет-перекладач.

До друку приймаються наукові статті обсягом від 10 сторінок, що відповідають тематиці серії видання й містять нові наукові результати, не опубліковані раніше. Виклад матеріалу статті має бути послідовним, логічно завершеним, із чіткими формулюваннями, що виключають подвійне тлумачення або неправильне розуміння інформації; мова тексту має відповідати літературним нормам, бути професійною і лаконічною. Автор зобов'язаний забезпечити високий науковий рівень викладеного матеріалу, повноту і системність висвітлення питання, достовірність результатів і даних, що наводяться, правильність цитування та посилань на літературні джерела. Редакційна колегія приймає до друку статті, які характеризуються оригінальністю, високою мірою наукової новизни і практичною значущістю.

### 1. МАКЕТ СТОРІНКИ

Для оформлення статті автор використовує формат А4 з полями з усіх боків – 2 см. Порядок абзацу виділяється відступом 1,25.

☞ *До уваги авторів:* У разі необхідності для шрифтових виділень у таблицях і рисунках дозволяється застосовувати шрифт Courier New (наприклад, для ілюстрації текстів програм для ЕОМ). Для стилістичного виділення фрагментів тексту слід вживати начертання *курсив*, **напівжирний**, *напівжирний курсив* зі збереженням гарнітури, розміру шрифту та інтервалу абзацу.

### 2. ТИПОГРАФСЬКІ ПОГОДЖЕННЯ ТА СТИЛІ

Текст статті, яка подається до розгляду та рецензування українською, має бути побудований за такою схемою:

- індекс УДК у верхньому лівому кутку аркуша (Times New Roman, 14 пт., звичайний);
- назва статті великими літерами (по центру, Times New Roman, 14 пт., напівжирний);
- ПІБ авторів (по центру, Times New Roman, 14 пт., звичайний);
- назва ЗВО (по центру, Times New Roman, 14 пт., курсив);
- повна адреса ЗВО або місця роботи автора (по центру, Times New Roman, 14 пт., курсив);
- адреса електронної пошти;
- ORCID (обов'язково);
- анотація (200–250 слів), яка містить стисле формулювання змісту статті (вирівнювання – по ширині сторінки, Times New Roman, 14 пт., звичайний);
- ключові слова (до 10 слів) (вирівнювання – по ширині сторінки, Times New Roman, 14 пт., курсив).

Після цього з абзацу викладається основний текст статті (вирівнювання – по ширині сторінки, Times New Roman, 14 пт., міжрядковий інтервал 1,5).

#### Структура основної частини рукопису українською мовою:

**I. Постановка проблеми** в загальному вигляді та її зв'язок з важливими науковими чи практичними завданнями.

**II. Аналіз останніх досліджень і публікацій**, у яких започатковано розв'язання даної проблеми і на які спирається автор (з обов'язковими посиланнями в тексті на використану наукову літературу!!!), виділення не вирішених раніше частин загальної проблеми, котрим присвячується стаття.

**III. Формулювання цілей статті** (постановка завдання).

**IV. Виклад основного матеріалу дослідження** з повним обґрунтуванням отриманих наукових результатів.

**V. Висновки і перспективи подальших досліджень** у даному напрямку.

**VI. Література.** Оформлюється відповідно до вимог Національного стандарту України ДСТУ 8302:2015.

**ЛИШЕ ПІСЛЯ ПРОХОДЖЕННЯ ВНУТРІШНЬОГО РЕЦЕНЗУВАННЯ  
АВТОР НАДАЄ ПЕРЕКЛАД СТАТТІ АНГЛІЙСЬКОЮ МОВОЮ.**

Схема побудови англomовної статті аналогічна українському варіанту:

- UDC у верхньому лівому кутку аркуша (Times New Roman, 14 пт., звичайний);
- назва статті великими літерами по центру (Times New Roman, 14 пт., напівжирний);
- ПІБ авторів (по центру, Times New Roman, 14 пт., звичайний);
- назва ЗВО (по центру, Times New Roman, 14 пт., курсив);
- повна адреса ЗВО або місця роботи автора (по центру, Times New Roman, 14 пт., курсив);
- адреса електронної пошти (по центру, Times New Roman, 14 пт., звичайний);
- анотація англійською мовою розширена (1800 знаків) (вирівнювання – по ширині сторінки, Times New Roman, 14 пт., звичайний);
- ключові слова (key words) – до 10 слів – (вирівнювання – по ширині сторінки, Times New Roman, 14 пт., курсив).

☞ *До уваги авторів:* після ключових слів англійською мовою необхідно надати цей блок інформації (крім УДК) також українською, вимоги до оформлення зберігаються.

Структура основної частини статті англійською мовою

(вирівнювання – по ширині сторінки, Times New Roman, 14 пт., міжрядковий інтервал 1,5)

**I. Statement of the problem** (Постановка проблеми).

**II. Analysis of recent studies and publications** (Аналіз останніх досліджень і публікацій).

**III. Objectives of the article** (Формулювання цілей статті).

**IV. The main material of the research** (Виклад основного матеріалу дослідження).

**V. Conclusions** (Висновки).

**VI. References** (Література), оформлюється за міжнародним бібліографічним стандартом. Приклади оформлення: <http://journalsofznu.zp.ua/References.pdf>

**ВАЖЛИВО!** Кожен рисунок включається до тексту у вигляді одного графічного об'єкта (положення об'єкта «В тексті»).

**ДЛЯ ОПУБЛІКУВАННЯ СТАТТІ АВТОРУ НЕОБХІДНО:**

*надіслати на електронну пошту редакції збірника [kconf.econom.znu@gmail.com](mailto:kconf.econom.znu@gmail.com)*

1. Текст статті, оформлений відповідно до встановлених вимог.
2. Витяг із протоколу засідання кафедри з рекомендацією статті до друку (скан. копію).
3. Рецензію доктора або кандидата наук із відповідної галузі науки, завірену відповідним підписом та печаткою установи, яка є зовнішньою по відношенню до ЗНУ та установи, де працює автор (автори) статті (скан. копію).
4. Відомості про автора (авторів) у вигляді таблиці (бажано у файлі формату .xls):

П.І.Б.	ORCID	Назва закладу вищої освіти/установи	Назва кафедри/підрозділу	Посада	Науковий ступінь, вчене звання	Назва статті	К-сть стор.	Назва розділу, до якого підготовлена стаття	Контактний телефон	Електронна пошта	Поштова адреса (адреса, куди буде надіслано надрукований примірник)

Кожній статті, починаючи з № 4 2018 року, присвоюється DOI.

*Адреса редакції фахового науково-практичного журналу «Фінансові стратегії інноваційного розвитку економіки»:* Україна, 69600, м. Запоріжжя, МСП-41, вул. Жуковського, 66.

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## **NOTES**

Збірник наукових праць

**ФІНАНСОВІ СТРАТЕГІЇ  
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