Міністерство освіти і науки України Кам'янець-Подільський національний університет імені Івана Огієнка

# ЦИФРОВА ТРАНСФОРМАЦІЯ ЕКОНОМІКИ: МІКРО- ТА МАКРОАСПЕКТИ

**Колективна монографія** за заг. редакцією Н.А. Мазур, д.е.н., професорки

## DIGITAL TRANSFORMATION OF THE ECONOMY: MICRO AND MACRO APPROACHES

**Collective monograph** in edition N. Mazur, Doctor of Economic Sciences, Professor



Чернівці Чернівецький національний університет імені Юрія Федьковича 2022

#### УДК 330.101.54:330.34 Ц 752

#### Друкується за ухвалою вченої ради Кам'янець-Подільського національного університету імені Івана Огієнка (протокол №6 від 25 травня 2022 року)

#### Рецензенти:

С.Д. Лучик, докторка економічних наук, професорка, завідувачка кафедри обліку і оподаткування Чернівецького торговельно-економічного інституту КНТЕУ (Україна);

**М.В. Зось-Кіор,** доктор економічних наук, професор, професор кафедри менеджменту Полтавського державного аграрного університету (Україна); **Лідія Собчак,** кандидатка економічних наук, доцентка кафедри фінансів Варшавської політехніки (Республіка Польша).

Ц 752 Цифрова трансформація економіки : мікро- та макроаспекти : колективна монографія / за заг. ред. Н.А. Мазур, д.е.н., проф.; Кам'янець-Подільськ. нац. ун-т ім. І. Огієнка. Чернівці : Чернівец. нац. ун-т ім. Ю. Федьковича, 2022. 440 с.

ISBN 978-966-423-727-4

Монографія присвячена висвітленню актуальних проблем і визначенню перспектив цифрової трансформації економіки на мікро- та макрорівнях. Завдання авторів полягало не просто у тому, щоб у черговий раз наголосити на важливості прискореного розвитку цифрової трансформації економіки, що є тепер загальносвітовою тенденцією, а у тому, щоб оцінити її реальні можливості у тих конкретних історичних умовах, які тепер склались в Україні, та визначити, що саме потрібно зробити для її подальшого підвищення й ефективного використання.

Для фахівців, представників бізнес-середовища, органів виконавчої влади та місцевого самоврядування, науковців, викладачів та здобувачів вищої освіти.

#### УДК 330.101.54:330.34

 © Чернівецький національний університет імені Юрія Федьковича, 2022
© Мазур Н.А. (загальна редакція), 2022

ISBN 978-966-423-727-4

# **3MICT**

Автори монографії
Передмова
Розділ 1. Соціальні та економічні аспекти процесу
цифровізації
1.1. The effects of the digital transformation
1.2. European Experience of Social Effects of Digitalization 29
1.3. Перспективи розвитку цифрової економіки в
Україні у контексті світових тенденцій
1.4. Вплив цифрової економіки на тенденції сучасного
ринку праці94
1.5. Цифровізація сфери публічного управління
1.6. Особливості цифровізації комерційної дипломатії в
Україні
Розділ 2. Інформаційно-інноваційні зміни бізнесу
в умовах цифрової економіки
2.1. Theoretical and practical aspects of blockchain
application in Ukraine176
2.2. Розвиток електронної торгівлі як елемента
цифрового бізнесу207
2.3. Публічні закупівлі для бізнесу в Україні та процес
їх діджиталізації241
2.4. Цифрова трансформація як фактор розвитку
туристичного бізнесу258
Розділ 3. Цифрова трансформація системи управління
суб'єктів господарювання
3.1. Digital technologies in the management of Ukrainian
enterprises
3.2. Digital activity in the company operating on the
industrial market during a pandemic - a case study
3.3. Modeling of strategic competitiveness management of
innovation-oriented enterprises in conditions of foreign
economic activity, digitalization and increased risks
3.4. Управління великими даними для забезпечення
ефективної діяльності суб'єктів господарювання
3.5. Трансформація інформаційних потоків у контексті
інноваційної системи менеджменту405

## Автори монографії

1.1. *Leszek Jerzy Jasicski* - dr hab., professor, Faculty of Management Warsaw University of Technology, Poland

leszek.jasinski@pw.edu.pl, ORCID 0000-0001-5724-5568

1.2. *Iryna Yashchyshyna* - Doctor of Economics, Professor, Kamianets-Podilskyi Ivan Ohiienko National University, Ukraine yarinaeco@gmail.com, ORCID 0000-0002-9107-7980

*Tetiana Bodnarchuk* - Ph.D in Economics, Associate Professor, Kamianets-Podilskyi Ivan Ohiienko National University, Institute for Economics and Forecasting, National Academy of Sciences of Ukraine, Ukraine

tetiana\_bodnarchuk@kpnu.edu.ua, ORCID 0000-0002-7682-487X

1.3. *Вадим Чаплінський* - к.е.н., Кам'янець-Подільський національний університет імені Івана Огієнка, Україна chaplinskyi.vadym@kpnu.edu.ua, ORCID 0000-0002-3209-1475

1.4. *Оксана Лаврук* - к.е.н., доцент, Кам'янець-Подільський національний університет імені Івана Огієнка, Україна

lavrukoksana73@gmail.com, ORCID 0000-0001-9089-237X

1.5. *Людмила Матвейчук* - доктор наук з державного управління, к.е.н., доцент, професор кафедри туризму та готельно-ресторанної справи, Кам'янець-Подільський національний університет імені Івана Огієнка, Україна

sla.kpnu@gmail.com, ORCID 0000-0002-2989-6002

Павло Польовий - аспірант Хмельницького університету управління та права імені Леоніда Юзькова, начальник відділу управління персоналом та нагород Чернівецької обласної державної адміністрації, Україна

pvpolovyi@gmail.com, ORCID 0000-0002-1250-0366

1.6. *Марта Коновалова* - кандидат наук з державного управління, доцент, Навчально-науковий інститут міжнародних відносин, Київський національний університет імені Тараса Шевченка konovalova.marta@gmail.com, ORCID 0000-0002-0680-6975

2.1. *Andriy Nikolashyn* - Ph.D in Economics, Associate Professor, Kamianets-Podilskyi National Ivan Ohiienko University, Ukraine nikolashyn@kpnu.edu.ua, ORCID 0000-0002-6249-8241

2.2. *Вероніка Буторіна* - к.е.н., Кам'янець-Подільський національний університет імені Івана Огієнка, Україна

butorina@kpnu.edu.ua, ORCID 0000-0002-6657-5718

2.3. *Іван Семенець* - к.е.н., доцент, Кам'янець-Подільський національний, університет імені Івана Огієнка, Україна grisloup72@gmail.com, ORCID 0000-0002-2928-7979

2.4. *Тетяна Марусей* - к.е.н., доцент, Кам'янець-Подільський національний університет імені Івана Огієнка, Україна nikmar76@gmail.com, ORCID 0000-0002-1018-702X

3.1. *Nataliia Mazur* - Doctor of Economics, professor, Kamianets-Podilskyi Ivan Ohiienko National University, Ukraine natali76.01maz@gmail.com, ORCID 0000-0002-4670-6805

3.2. *Dariusz Nowak* - dr hab., professor, Poznan University of Economics and Business, Poland

dariusz.nowak@ue.poznan.pl, ORCID 0000-0001-7448-6101

*Szymon Nowak* - Adam Mickiewicz University, Poland szyma.no19@gmail.com

*Marzena Remlein* - Poznan University of Economics and Business dariusz.nowak@ue.poznan.pl, ORCID 0000-0001-7865-0319

3.3. *Svitlana Kozhemiakina* - Dr. Sc. (Economics), Professor, Professor of Management Department, Borys Grinchenko Kyiv University, Ukraine

*Olena Oviechkina* - Dr. Sc. (Economics), Associate Professor, Department of Economics and Entrepreneurship, East Ukrainian Volodymyr Dahl National University, Ukraine

*Viktoriia Skrypnyk* - PhD in Economics, Associate Professor, Associate Professor of the Department of Finance, Accounting and Banking, Luhansk Taras Shevchenko National University, Ukraine

3.4. *Оксана Кушнір* - к.е.н., доцент, Кам'янець-Подільський національний університет імені Івана Огієнка, Україна oks kushnir@ukr.net, ORCID 0000-0003-2679-2782

3.5. *Віталій Ткачук* - к.е.н., доцент, Кам'янець-Подільський національний, університет імені Івана Огієнка, Україна tkachuk@kpnu.edu.ua, ORCID 0000-0002-8529-9632

## 3.3. MODELING OF STRATEGIC COMPETITIVENESS MANAGEMENT OF INNOVATION-ORIENTED ENTERPRISES IN CONDITIONS OF FOREIGN ECONOMIC ACTIVITY, DIGITALIZATION AND INCREASED SECURITY RISKS

The competitiveness of an innovation-oriented enterprise is the main integrated indicator that reflects almost all aspects of its activities, characterizes the development potential, financial and production stability, determines the place of the enterprise in the market. The competitiveness of an innovation-oriented enterprise can be characterized as the ability to produce and sell products that are more attractive in their price and non-price factors than the products of competing enterprises, using the competitive advantages of the enterprise and having potential opportunities to ensure competitiveness in the future .

Competition permeates all levels and parts of the economic system - from the macro level (enterprise) to the macro level (industry, regional market, world economic system), is the core of its functioning. The efficiency of economic entities of any hierarchical level or management of such entities in the context of intensifying foreign economic activity, digitalization and increased security risks largely depends on understanding the nature of competition, its manifestations, methods of competition and factors determining the readiness of subprojects of the economy to such a struggle.

At the present stage of economic development, competition as a driving force forces manufacturers to constantly look for new ways to increase their competitiveness.

Since competitors are able to strongly influence the choice of innovation-oriented enterprise of a market, including foreign, in which it will try to work, it should be borne in mind that there are three types of competition:

1. The nature of functional competition is to meet any needs in different ways. This means that virtually all products that guarantee this satisfaction are functional competitors. Despite the status of the company - the manufacturer of a unique product must take into account this type of competition. 2. If there are goods that are designed to solve the same goal, but differ in a certain important parameter, then there is species competition.

3. As a result of the company's production of almost identical goods, the only difference being quality, substantive competition is formed. Its second name, for obvious reasons, is interfirm. It should be noted that in practical terms, inter-firm can be considered both functional and species types of competition [3; 8-10; 14; 18].

Competitiveness of the innovation-oriented enterprise is reached at long and faultless work in the market. From this we can conclude that an enterprise that operates for a longer period of time in the market has great competitive advantages over an enterprise that is just entering this market or operates for a short period of time in it. In other words, the competitiveness of an innovation-oriented enterprise is determined by its competitive advantages. Competitive advantages in turn are divided into external and internal. The organization is not able to influence external factors, but internal factors are almost entirely controlled by the company's management, or rather management has all the necessary conditions to control these factors. Achieving internal competitive advantages of the enterprise is carried out by staff, with a special role given to the head.

As the world practice of market relations shows, in the languages of high risks, including military ones, the interconnected solution of both external and internal problems guarantees the increase of the competitiveness of enterprises. However, in joint stock companies, and especially in large ones, competitiveness also depends on clear coordination between individual units to ensure it and on the ability of senior management to identify main paths of development, clearly set goals and share responsibilities between units. At the same time, the most important issues are pre-approved by the Board of Shareholders, which can sometimes negatively affect the efficiency of their solution, which is especially relevant in the context of intensification of foreign economic activity.

To ensure the competitiveness of innovation-oriented enterprise, a systematic approach to management is mainly used. There are several approaches to assessing the competitiveness of enterprises in the world, the main of which are: - a method based on the theory of effective competition;

- approaches to assessing the competitiveness of the enterprise, which link its level with indicators of quality (competitiveness) of products;

- methods based on the theory of competitive advantage;

- benchmarking method.

These methods are radically different in nature and basis for the formation of competitiveness indicators. Their use can be convenient in different situations depending on the specifics of the industry to which the object belongs. Let's consider the mentioned methods in more detail.

According to the theory of effective competition [1; 7; 12-13; 15; 25], the highest level of competitiveness are enterprises that have been able to most effectively organize the work of their structural units. The efficiency of each such service is influenced by many factors, which can be generally called the resources of the enterprise. Determining the efficiency and analysis of the work of each structural unit of the enterprise in terms of digitalization involves assessing the effectiveness of the use of these resources. The essence of this method is to analyze 4 main group indicators (criteria) of competitiveness.

The first group of these indicators includes those that allow to characterize the level of efficiency of production process management:

cost-effectiveness of production,

rational use of fixed assets,

perfection of technology of production of goods,

organization of work of workers and managers.

The second group includes the following generalized indicators that reflect the level of efficiency of working capital management:

independence from external sources of funding,

ability to pay off their debts,

the possibility of stable development of the enterprise in the future.

The third group is relevant to include indicators that diagnose the effectiveness of sales management and promotion of goods in the markets through advertising and sales promotion.

To the fourth group we consider it expedient to include a group of indicators of competitiveness of the goods and their prices.

Due to the fact that each of these indicators has a different degree of importance for the calculation of the competitiveness of an innovation-oriented enterprise, the weighting coefficients of each criterion and indicator were calculated expertly.

Then the competitiveness of the innovation-oriented enterprise can be determined by the method of weighted arithmetic mean:

$$Kk = 0,15E + 0,29F + 0,23M + 0,33Kg, \qquad (1)$$

where Kk is the coefficient of competitiveness of the organization;

E - the value of the criterion of efficiency of production activities of the organization;

 ${\rm F}$  - the value of the criterion of the financial position of the organization;

M - the value of the criterion of efficiency of sales and promotion of goods;

Kg - the value of the criterion of product competitiveness.

This assessment of competitiveness covers all the most important assessments of economic activity of innovation-oriented enterprise, eliminates duplication of individual indicators, allows you to quickly and efficiently get a picture of the state of the enterprise in the industry market.

The method presented for analysis has obvious advantages and disadvantages. Among the advantages should be noted the convenience of its use in the study of the competitiveness of innovation-oriented enterprise, and this method allows you to cover the main areas of its activities. Among the disadvantages should be noted that the basis of this method is an expert assessment of the weight of each of the coefficients. This assessment from a scientific point of view can not be considered absolutely reliable, especially in conditions of high security risks.

The competitiveness of individual goods (works, services) is determined by their advantages over similar in purpose or their substitutes in solving potential problems of potential buyers. That is, it is the level of compliance of goods (works, services) at a certain time to the requirements of target groups of consumers or the selected market in terms of technical, economic, environmental, safety and other characteristics [2; 4-6; 11].

It is not correct to identify the parameters and indicators of competitiveness.

Thus, the parameters of competitiveness should be understood as quantitative characteristics of the properties of goods, which must take into account the industry specifics of assessing their competitiveness. Therefore, it is advisable to identify separate groups of parameters of competitiveness:

technical - is a characteristic of technical and physical properties of goods. They should determine the industry characteristics, methods of their use, as well as the functions of goods in the process of their use. Technical parameters can be divided into purpose parameters, ergonomic and aesthetic parameters.

economic - determine the level of production costs and consumption prices through the costs of purchase, maintenance, consumption, as well as disposal of goods. This is very important in the context of intensification of foreign economic activity, which, given the significant increase in the discount rate of the NBU is gaining momentum. Economic parameters can be divided into one-time and current.

normative - determine the level of conformity of goods to established norms, standards and requirements stipulated by national and international legislation and other normative documents (parameters of patent purity, ecological parameters, safety parameters, for which specific requirements of international, national standards, technical regulations, norms, legislation).

At the same time, competitiveness indicators are an absolute set of system criteria for quantitative assessment of the level of competitiveness of goods, which are based on the parameters of competitiveness.

In practical terms, it should be noted that the list of competitiveness indicators will depend on the object of study, as well as on the chosen method of determining the level of competitiveness.

Thus for an estimation of competitiveness of the goods it is most expedient to use:

- differential method;

- complex method;

- mixed method.

The differential method is based on the use of partial parameters of the analyzed goods, bases for comparison and their comparison. The calculation of partial indicators of competitiveness should be carried out according to the formula:

$$Kj = Pj/Pj0*100\%$$
, (2)

where Ki is the partial parametric indicator of competitiveness for the j-th parameter (j = 1,2,3, ..., N);

Pj - the value of the j-th parameter for the analyzed product;

Pj0 - the value of the j-th parameter at which the need is fully met;

N is the number of parameters.

When evaluating normative indicators, partial indicators take only two values - either 1 or 0. It should be noted that if the analyzed products meet all mandatory norms and standards, the indicators are equal to 1, if not - then 0.

When assessing only the technical and economic parameters, the partial indicators may be greater than or equal to 1, but only if the basic values of the parameters are set by regulatory and technical documentation, special conditions, orders and contracts.

If the basis of evaluation is taken e product, and its analogue, the calculation of partial indicators of competitiveness should be carried out according to the formulas:

qj = Pj/Pj0\*100%, (3)

$$qj' = Pj0/Pj*100\%,$$
 (4)

where qj, qj '- partial indicators of competitiveness on the j-th technical parameter.

In this method, the following feature should be noted: from the last two formulas choose the one in which the growth of the partial indicator corresponds to an increase in the level of competitiveness. If the technical parameters do not have any quantitative assessment, then they use expert methods of evaluation in points. The differential method makes it possible to determine whether the set target level of competitiveness has been achieved, if so, on which indicators it is not achieved, and which of the parameters differ most from the baseline target. It should be noted that the presented method can only capture the fact of product competitiveness and the presence of shortcomings in it compared to competing products. The main thing is that it does not take into account the influence of the weight of each of the parameters on the commitment of buyers when choosing alternative products.

It should be noted that the integrated method is based on the widespread use of complex (eg, group, integrated, generalized) indicators or comparing the actual specific benefits of the product under analysis.

The mixed method is ideally in practice a combination of differential and complex methods. The mixed method of assessing the level of competitiveness uses part of the parameters calculated by the differential method, as well as another part of the parameters calculated by the complex method.

This method of determining the level of competitiveness of goods can not be considered perfect, because it does not take into account the importance of consumer properties of goods for different buyers. Such topical factors in terms of intensification of foreign economic activity in wartime include:

1. The degree of novelty of goods.

2. Symbolic factors that are considered in terms of social norms (the product gives a certain status to its owner).

3. Additional factors that are not directly related to the product (offer of services, warranty, installation of the product and its installation, the possibility of repair, etc.).

Thus, fair competition is aimed at making a profit not only by improving the consumer quality of products, but also by providing better services. Increasing the level of competitiveness is possible if you target an innovation-oriented enterprise on: - constant introduction into production of new, improved products;

- constant reduction of all types of production costs;

- increase of qualitative and consumer characteristics at decrease in the prices for the let out goods;

- use of new technology;

- use of new equipment;

- development of new product design;

- introduction of innovations in the distribution and sales system.

Analysis of the competitiveness of the product is insufficient to form a conclusion about the competitiveness of the enterprise as a whole, although in most cases this approach is used. Competitiveness of the enterprise is a complex concept, which should cover not only the quality of products. This method is even less valuable for practical use in modern business conditions than the one based on the theory of effective competition. At the present stage of development of market relations, a more global vision of the problem of enterprise competitiveness is needed for an adequate conclusion about its level.

Recently, the method of determining competitiveness based on the theory of competitive advantage, authored by the American scientist M. Porter, has become popular.

External competitive advantage is an advantage in the properties of the product, which creates "value for the buyer" due to the fuller satisfaction of his needs. This advantage increases the "market power" of the organization, so it can force the market to raise the selling price higher than the priority competitor, which does not have such an advantage (sometimes called the advantage in the price of goods). Estimation of such strength can be considered the elasticity of demand for price.

Internal competitive advantage is the advantage of the enterprise in production costs, which creates "value for the manufacturer" due to its higher productivity. Internal advantage provides the organization with greater resilience to lower market prices imposed by the market or competitors, and higher profitability [16-17; 21; 24], and in wartime - also greater social guarantees.

These two types of competitive advantage, which have different origins, are often incompatible. It is believed that these advantages can be identified when determining the "market power" (the ratio of the maximum selling price of a particular innovation-oriented enterprise and the price of a priority competitor) and "productivity" (ratio of unit costs of a specific innovation-oriented enterprise and priority competitor). The most difficult process is to establish the nature of the company's advantage over competitors and its evaluation.

To determine market share, you need reliable and complete information, which is often obtained in consumer markets of developed countries through dealers and consumer associations. The reliability of such information is ensured through the use of optical readers of commodity codes. For non-consumer goods, such information can be obtained through marketing information systems.

If the product has a high enough level of differentiation, a wide range of prices, it is desirable to supplement the calculation of market share in physical terms by determining the market share in value terms. This addition makes it possible to determine the most attractive price segment for competitors. Depending on why this ratio is equal, determine in which price segment the organization operates: if the ratio is 1, the organization operates on average, more than 1 - low, if less than 1 - high. Assessment of the level of competitiveness of the organization by market share is given in table 3.3.1 [19; 23].

Defining a market niche, the development of which allows an innovation-oriented enterprise to increase its sphere of influence, is carried out by comparing the market potential with the sales of goods of a particular enterprise. The analyzed indicator characterizes the total share of the first (ie largest) enterprises in a given market. In the world's leading economies, such as the United States, France, Germany, England and Canada, concentration ratios are calculated and analyzed mainly by statistical organizations.

## Table 3.3.1

# Assessing the level of competitiveness of innovation-oriented enterprises

Level of competitiveness	Evaluation criterion
High	The market share of a specific innovation-oriented enterprise exceeds the market share of a priority competitor
Average	The market share of a specific innovation-oriented enterprise is equal to the market share of a priority competitor
Low	The market share of a particular innovation-oriented enterprise is much lower than the market share of a priority competitor

In addition to the positive qualities, this method has significant disadvantages: it is insensitive to different options for the actual distribution of market share among competitors. For example, the CC may be the same level and equal to 0.8 for the following different conditional market situations: one company controls 77% of the market, and the remaining 23 - 1%; five equal companies own 20% each.

One of the most relevant and practically oriented in terms of change management approaches to determining the level of competitiveness of innovative enterprises in terms of increasing foreign economic activity and digitalization is the method of benchmarking.

Benchmarking has a lot of positive qualities and is successfully used in the practice of many Japanese, American, Western European and Scandinavian companies.

Benchmarking can be considered the art of discovering the facts of what other companies do better than us, as well as the study, adaptation and application of methods of other companies, ie competitors. At the same time, a lot of the East is with industrial espionage, ie analysis of competitors' activities, study of their best achievements, and so on.

During the implementation of benchmarking, employees of different departments work in teams formed from representatives of even different companies. At the same time, the most important components of the activities of individual employees and innovation-oriented enterprises are planning with a focus on creating a system of values, as well as competence in customer service, technology and modern business culture. Practitioners call benchmarking such a special type of activity that is just related to customers, technology and business culture and that should be carried out in planning with a focus on creating specific values and necessary competencies.

Currently, benchmarking is carried out according to the following current parameters:

- cost of goods;

- profitability of goods;
- level of labor productivity;
- quality of the management team;
- availability of new products;
- the ratio of world and domestic prices;
- sales volume;
- market share;
- quality of goods;
- the price of the goods;
- production technology;
- sales channels of goods;
- proximity to sources of raw materials;
- reputation of the enterprise.

Today, in conditions of increased risks, benchmarking is an extremely useful tool, especially in a situation of intensification of foreign economic activity, when it is necessary to constantly review the internal efficiency of the enterprise and determine new basic priorities. Comparison of performance indicators can make it possible to identify most of the vulnerabilities and rational aspects of the enterprise in the market in comparison with competitors and global players in the same industry. This allows you to find market niches closed to entry, reach out to potential partners with proposals for industrial and technical cooperation and clearly identify the benefits of mergers and acquisitions as a means of strengthening the fight against open and potential dangers.

Thus, the benefit of benchmarking is that production and marketing functions become as manageable as possible when researching and

implementing the best methods and technologies of other, leading companies in the industry. Such an analysis can increase the profitability of high-efficiency businesses, create useful competition and meet customer needs, which is especially true in the context of digitalization.

Ukraine's role in foreign economic relations is currently growing. Therefore, there is a need to choose rational directions of production activities of enterprises. The relevance of scientific and applied research on the diversification of production and economic activities of innovation-oriented enterprises is due to many circumstances, including: intensive market environment, increased competition between manufacturers, development of marketing tools to identify new consumer needs and unmet demand.

The main factor in ensuring the competitiveness of innovation-oriented enterprises is the introduction of diversification into production. As you know, diversification in the economy is used to: reduce risks, increase enterprise revenue, expand the range of products, ensure greater stability of results and avoid fluctuations in profits, development of new industries and more.

Analyzing the approaches to the definition of diversification, we can say that there is no single point of view on the essence of the concept of diversification. The word "diversification" means expanding the range, modification of products, development of new industries. In addition, some scholars consider the diversification of production as a means of managing financial risks, ie as one of the areas of strategic development of enterprises. Diversification in production is used to reduce risks, conquer new market segments, increase enterprise revenue.

Currently, the basis for integrated use of the main advantages of basic competition strategies in martial law is diversification, which involves the development and harmonization of the current system of competition for production units, as well as innovation-oriented enterprises in general. At the same time, if the strategy of individual production units considers the issue of competitive advantages in a particular area of activity of enterprises, then a separate strategy of competition of enterprises should determine the directions of business and create them by interaction.

It follows that the strategy of competition of enterprises is much more than just the sum of the strategies of individual structural units, ie it has a synergy effect.

Usually not diversified enterprises as a whole compete, but only individual industries that are part of them. The current practice of martial law proves that the overall current strategy of enterprises will be more effective if it is based on the unconditional success of each individual structural unit.

But diversification also clearly increases costs and increases the complexity of the management process, which is often a deterrent to the creation of new structural units. Because of this, it can be quickly nullified by the consumers of the goods themselves. Therefore, competition in today's conditions of diversification can be successful only when it is really beneficial to individual structural units, as well as increases the competitive status of the enterprise as a whole.

Taking into account the presented features makes it possible to take full advantage of the simultaneous implementation of the basic basic strategies of competition in various diversified areas of entrepreneurship. It should be noted that the joint implementation of the various strategies presented is possible not only in terms of diversification. There are also special techniques that allow you to carry out such work without significantly expanding the scope and changing the profile of the innovation-oriented enterprise.

Diversification of the economy in wartime is associated with both diversification of production and expansion of the sphere of activity, acts as a "user" of surplus resources and multiplier of new jobs and income opportunities, which, given the limited economic processes in limited areas, is a key element development. Along with this, employment as a result of diversification is the main driving force for the development of both territories and the national economy, security, economic growth, welfare.

In order to reduce the risk of innovation-oriented enterprises and increase their financial stability, it is necessary to rationally combine the degree of specialization and diversification, and commodity producers should organize the production of such products, works and services. In order to ensure full payment readiness, barter transactions should be kept to a minimum. The peculiarities of anti-crisis management of enterprises are mainly related to the peculiarities of the economy itself under martial law. The way out of the current situation in the economy is seen in the development and implementation of the following anti-crisis measures:

- improvement of the system of state regulation (development of market infrastructure, creation of an effective organizational and legal mechanism of management, etc.);

- ensuring the equivalence of exchange on the basis of price parity;

- improvement of credit and financial and investment policy of the state;

- organization of purchase of products and their wholesale through exchanges;

- formation of the economic environment for the implementation of the achievements of science and technology, the creation of information and advisory services;

- improving the organization of labor and production;

- transition to energy saving;

- introduction of advanced technologies, mechanization and automation of production;

- calculation of the ratio of the annual cash flow and the total amount of accounts payable to assess the financial capacity of the enterprise;

- in order to reduce the risk of enterprise activity to combine specialization with diversification of production;

- expanding the training of specialists in the field of crisis management.

Thus, measures aimed at improving the financial system of Ukraine can give positive results only if the finances of the basic link of the economy - innovation-oriented enterprises. It can be concluded that increasing the level of diversification of the enterprise must be carried out very carefully, taking into account in each case the specifics of production, the structure of competition in the market of finished products. Diversification of production is one of the areas of optimization of intersectoral relations in all sectors of the economy. Diversification of production will allow innovation-oriented enterprises to effectively influence the market, form a clear development strategy, and thus obtain high assets, avoid possible risk.

It should be noted that diversification can be applied:

- when market stagnation is observed;

- when the fact of excess capital stock is relevant and there is a need to use it;

- when the company loses the opportunity to make additional profits in the traditional market due to reduced competitiveness.

An enterprise that has decided to introduce diversification in the production process must take into account all the factors influencing its implementation and go through the main stages of diversification and digitalization.

It should be borne in mind that small processing or trading companies will not be able to provide the appropriate level of quality and unit costs as in industrial enterprises, so they automatically have competitive disadvantages. One of the ways to increase the profitability of innovation-oriented enterprises is to avoid discrimination against raw material producers - the basis of products from processing and trade enterprises, increase logistical re-equipment of basic production and ensure a high level of competitiveness.

Another area of diversification of production is to expand its structure.

One of the areas of production diversification is to expand the range of services provided by the company. To increase the competitiveness of innovation-oriented enterprises, it is necessary to work in such areas as: providing equipment for rent; provision of services, etc. The more activities the company has, the higher the level of diversification, and hence the lower the possibility of losses in general from production and, consequently, the lower the risk of commercial activity.

Analysis of the study of the introduction of diversification of production, that the company, which produces for several years the same products and does not prepare to produce new ones, loses competitiveness and, ultimately, goes bankrupt. Therefore, it is necessary to develop a strategy of enterprises that would be aimed at developing production in a relatively short time, followed by the introduction of the latest product on the market.

Thus, diversification stabilizes activities, makes innovation-oriented enterprise less vulnerable to crises. As a result, diversified enterprises are more stable and competitive than highly specialized ones. They have the opportunity to pour capital into the most profitable industries.

The introduction of diversification into production is undoubtedly ancillary, and even the main factor in ensuring the competitiveness of innovation-oriented enterprises. Diversification in production is positive, as encouraging integration with domestic enterprises increases their workload, increases their competitiveness in the domestic and global markets and contributes to the economic security of the state. Therefore, diversification is an organizational and economic factor in improving production efficiency and competitiveness.

Setting the goals of the enterprise should be based on awareness of the intentions of the enterprise in the field of increasing its competitiveness, taking into account the identified opportunities. The formulation of goals and objectives depends on the life cycle of the enterprise (the period during which the enterprise operates in the market). The whole cycle of the enterprise on the market can be divided into several stages: birth, childhood, adolescence, early adulthood, maturity, aging and rebirth.

Competition places strict demands on employees in terms of production efficiency, product quality, and employment. Financial efficiency, competitiveness have become the main indicators and conditions of production development, investment formation, material incentives. Due to the significant dependence of production results on imports, disruption of logistics, constantly changing market conditions, and other factors, it is not easy to achieve a good state of the economy and finances, especially in times of economic crisis, lack of effective state support.

A detailed analysis of current production shows an insufficient level of planning in accordance with the frequent changes and requirements of the modern market. The vast majority of innovation-oriented enterprises conduct almost spontaneous production, low-quality products. while receiving The introduction of organizational and economic mechanisms for the diversification of production will provide an opportunity to manage financial and economic risks and reduce dependence on frequent market changes. The introduction of forms of diversified production provides enterprises with increased competitiveness and financial stability, while highly specialized enterprises, increasing the concentration and globalization of production, suffer significant losses due to frequent market transformations. The current state of Ukraine's economy has a number of features due to overcoming social and political instability.

Under market conditions, the planning of diversified sales channels deserves special attention, because in the conditions of the war, logistics channels were severely damaged, sea routes and civil aviation did not work.

In recent years, there have been many significant changes in production, in particular a very important change is the acquisition of Ukraine's status as a market economy. This, in turn, expands the possibilities of selling national products on the European market, and thus requires the production of quality products for export and higher incomes. However, it is necessary to be clearly guided by the projected planned production and anticipate as many probable risks as possible at different stages of management.

Diversification of production should not be contrasted with specialization, because diversification is the next stage of enterprise development, based on the high development of productive forces, the introduction of integrated mechanization.

As a result of restructuring, innovation-oriented enterprises have largely retained their size and activities, a wide range of production and sales, and some - and the social sphere. Some constituent subdivisions of restructured enterprises are characterized by significant technological, economic, organizational features that should be taken into account in the process of economic management and the creation of forms of diversified production [22].

Diversification makes it possible to compensate for the decline in sales of some goods by its growth on others, it should be considered as an organizational and economic mechanism to improve production efficiency. One of its results is the emergence of diversified concerns together businesses and conglomerates that bring in manv non-technological sectors of the economy. Such enterprises operate as independent, they are only financially dependent on the conglomerate headquarters. Diversified production is stimulated by the current antitrust legislation, which in turn limits the horizontal expansion of companies, which threatens the monopolization of industries, and promotes vertical expansion, which is based on diversification of activities. The result is a diversified company, whose share in a particular market does not reach critical values, is does not create a monopoly [23].

If we consider the diversification of production as an organizational and economic mechanism of management through the prism of managing the financial activities of the entity, it is a set of decisions and appropriate actions to profit from various sources of activity, which in this company correspond to the strategy. There are four areas of functioning of the subject of economic and financial activities: 1) financial equilibrium (survival); 2) profitability; 3) economic growth; 4) flexibility (maneuverability).

The fourth direction can be included in the previous three, because the achievement of any goal involves the need to maneuver in the conditions prevailing around the enterprise.

Continuous improvement of diversification processes in production is due to the formation of competitive production aimed at solving political, socio-economic problems and ensuring the security of the country. In order to achieve the projected results of economic and financial activities, diversification should involve improving performance and increasing production capacity. In this case, the first task involves ensuring the conditions of survival, and the second progressive development and prospects. Successful combination and aggregation of means of realization of both tasks allows the enterprises to function constantly. According to the conditions of innovation-oriented enterprise, each option of diversification should be established based on the state and opportunities for new development, availability of labor resources, energy and financial resources, as well as meet environmental standards. In market conditions, farms are responsible for their own financial results, so there is a high risk in choosing the strategy and tactics of diversified production. Enterprises have many opportunities for diversified production. Given the stable energy dependence, the introduction of the production of alternative energy and fuels is quite promising.

Therefore, under these conditions of development, for more effective implementation of the strategic set of enterprises, it will be advisable to implement a competitor's strategy of cost leadership.

Thus, in order to implement a competitive strategy of cost leadership, the entity must meet the following conditions:

implement energy-saving and resource-saving technologies, including through the purchase of modern equipment and machinery;

to form, if possible, a direct channel of sale of its products to the final consumer. Fulfillment of this condition will avoid the influence of intermediary organizations in the face of wholesale companies on the price of products for buyers. This will make the products of economic entities more accessible and more competitive;

to move production facilities, if the nature of production allows, as close as possible to consumers;

focus on the most popular products;

achieve a higher economic level of vertical integration compared to major competing enterprises.

In general, the proposed competitive strategy of economic entities should be aimed at increasing market share, strengthening the competitive advantages of innovation-oriented enterprises, which is the goal of the market strategy of economic entities in the future.

Currently, the most common strategic alternative is limited growth. This strategy is characterized by the definition of future goals based on achieved but adjusted for inflation. Limited growth is typical for innovation-oriented enterprises with static technology. This strategy is the least risky in terms of financial and production performance.

An equally important aspect of the implementation of the strategic set of enterprises is the formation of an effective system of strategic management. But, at the same time, today's conditions require quick decisions that have a strategic focus.

In conditions of digitalization and martial law, the strategic stability of innovation-oriented enterprises in the market is possible only in terms of its competitiveness, as well as the ability to adapt to abrupt, almost radical changes in the market, social and security environment. In order to be competitive and guarantee its long-term survival in the future, an innovation-oriented enterprise must produce a product that will consistently find buyers, guaranteed in the domestic market, and to maximize profits - and abroad while optimizing logistics. That is, the product should be so interesting to buyers that they will be willing to pay for it. Also, the interest of the buyer should be greater than in similar or similar in consumer qualities of goods from other manufacturers. Provided that the product has exactly these 2 properties, the product itself has competitive advantages.

Therefore, an enterprise can successfully exist and develop only if its product has a competitive advantage. Strategic management is designed to create competitive advantages.

In order to ensure socio-economic development and ensure the competitive functioning of economic entities, it is necessary to ensure the transition to investment and innovation model of development. This model should contribute to the formation of a new efficient structure of the whole economy, ensure its accelerated growth, strengthen its position in international markets as it moves to increase competitiveness and increase exports of products with higher added projects value. Innovation activities and that ensure social transformation should remain a priority for Ukraine.

Along with modernization on an innovative basis, inclusive development must be ensured - both as a result and in parallel as an instrument of socio-economic development, the main task of which is to improve the quality of life, in which economic, social and political rights are realized. this has the use of the advantages of the local environment, which are able to support the development of existing potential. Implementing the process in this capacity ensures the growth of economic opportunities and improves living standards within all social groups, especially for women, youth, small entrepreneurs, ethnic groups, marginalized strata.

Analysis of current modern methods of diagnosing the level of competitiveness of the enterprise allows us to make some generalizations. Thus, the competitiveness of the enterprise should be considered in two aspects: external (from the standpoint of assessing innovation-oriented enterprises in the market) and internal (from the standpoint of assessing the economic performance of enterprises). Given the systematic approach to management and for a more modern view of the levels of competitiveness of innovation-oriented enterprises, it is advisable to study both globalization and security issues of their activity.

## References

1. Антипенко Н. В., Чіп Л. О., Параскєєва А. М., Докучаєв О. А. Інтегрована модель оцінювання результативності підприємства в умовах управління змінами, економіки знань, діджиталізації та інноваційного підприємництва. *Економіка та держава*. 2022. № 1. С. 19–22.

2. Вдовенко Н. М., Сухомлин Л. В., Бачкір І. Г., Гнатенко І. А. Управлінські засади моделювання державних пріоритетів в інноваційній економіці: диверсифікація підприємницької діяльності та адаптування ринку. *Економіка та держава.* 2021. № 9. С. 19–23.

3. Вдовенко Н.М., Федірець О.В., Зось-Кіор М.В., Гнатенко І.А. Роль енергоринку в менеджменті ресурсозбереження та ресурсоефективності конкурентоспроможних підприємств агропродовольчої сфери. *Український журнал прикладної економіки*. 2020. Том 5. № 4. С. 222–229.

4. Гнатенко І.А. Методологічні аспекти розвитку інноваційного підприємництва: теорія та практика: монографія. Харків: СГ НТМ «Новий курс», 2019. 253 с.

5. Горда А. С., Стадніченко В. О., Гальонкин С. С. Управління потенціалом підприємства в рамках розвитку інноваційної моделі підприємництва. Управління ресурсним забезпеченням господарської діяльності підприємств реального сектору економіки: матеріали VI Всеукраїнської науково-практичної інтернет-конференції з міжнародною участю, 17 листопада 2021 р. Полтава: ПДАУ, 2021. С. 350–351.

6. Горда А. С., Стадніченко В. О., Гальонкин С. С. Управління потенціалом підприємства в контексті стратегій партнерської взаємодії держави та бізнесу. Студентська наукова конференція «Стратегічні імперативи менеджменту в умовах сучасних викликів»: Львівський національний університет ветеринарної медицини та біотехнологій імені С.3. Гжицького (Львів, 09-10 грудня 2021 р.) Кафедра менеджменту: Тези доповідей / Смолинець І.Б. (відп. ред.). Львів: ЛНУВМБ ім. С.3. Гжицького, 2021. С. 70–71.

7. Живко З. Б., Кредісов В. А., Гнатенко І. А., Гальонкін С. С. Інституціонально-матрична кластеризація в системі стратегічного управління інноваційною економікою в умовах зміни споживчих переваг, глобалізації, діджиталізації, формування економічної культури суспільства та сталого розвитку. *Інвестиції: практика та досвід.* 2021. № 21. С. 37–43.

8. Кожем'якіна С. М., Арбузова Т. В., Іщейкін Т. Є., Параскєєва А. М. Організаційна культура на основі посилення міжособистісної та міжгрупової взаємодії в системі інноваційного менеджменту організації в умовах глобалізації, фінансових, міграційних та корупційних ризиків. Формування ринкових відносин в Україні. 2022. №1 (248). С. 110-117.

9. Ложачевська О. М., Вдовенко Н. М., Родченко С. С., Ігнатюк В. В. Управління системою адаптивного стратегічного планування інноваційно орієнтованого конкурентоспроможного підприємства в умовах глобалізації та COVID-19. Формування ринкових відносин в Україні. 2022. №1 (248). С. 53-60.

10. Ложачевська О. М., Ольшанський О. В., Гнатенко I. А., Снітко Є. О. Державні пріоритети розвитку інноваційного підприємництва в системі менеджменту в умовах діджиталізації суспільства. Ефективна економіка. 2021. № 7. URL: http://www.economy.nayka.com.ua/?op=1&z=9067 (дата звернення: 07.12.2021).

11. Охріменко І. В., Вдовенко Н. М., Овчаренко Є. І., Гнатенко І. А. Інновації в системі стратегічного управління безпекою національної економіки в умовах ризиків та невизначеності глобалізації. *Економіка та держава*. 2021. № 8. С. 4–9.

12. Bilan Y., Zos-Kior M., Nitsenko V., Sinelnikau U., Ilin V. Projecting the social component of the efficient management of land resources. *Journal of Security and Sustainability*. Issues. 2017. № 7(2). P. 287–300.

13. Brockova K., Rossokha V., Chaban V., Zos-Kior M., Hnatenko I., Rubezhanska V. Economic mechanism of optimizing the innovation investment program of the development of agro-industrial production. *Management Theory and Studies for Rural Business and Infrastructure Development*. 2021. Vol. 43. No. 1. P. 129-135.

14. Gryshchenko I., Ganushchak–Efimenko L., Shcherbak V., Nifatova O., Zos-Kior M., Hnatenko I., Martynova L., Martynov A. Making Use of Competitive Advantages of a University Education Innovation Cluster in the Educational Services Market. *European Journal of Sustainable Development*. 2021, 10(2), 336-336.

15. Hnatenko I., Kuksa I., Prokopenko O., Naholiuk O. Management bases of modeling of business development state priorities: motivational-cognitive, socio-economic, stereotypical-behavioral factors. Вісник Черкаського університету. Серія «Економічні науки». Випуск 3. 2021. С. 58–64.

16. Kuksa I., Hnatenko I., Kolomoiets Y., Mykhailov S. Modeling of State Priorities of Management in the Conditions of Globalization: Financial, Technical-technological and Resource Aspects. *Економічні* горизонти. 2021. №1. С. 21–29.

17. Kyryliuk I., Kyryliuk Y., Proshchalykina A., Zos-Kior M., Dovbush V. Organisational and economic drivers for safety provision and quality upgrading of core livestock products in Ukraine. *Journal of Hygienic Engineering and Design.* 2021. № 36, P. 49-66.

18. Mayovets Y., Vdovenko N., Shevchuk H., Zos-Kior M., Hnatenko I. Simulation modeling of the financial risk of bankruptcy of agricultural enterprises in the context of COVID-19. *Journal of Hygienic Engineering and Design.* 2021. Vol. 36. P. 192-198. 19. Mazur N., Khrystenko L., Pásztorová J., Zos-Kior M., Hnatenko I., Puzyrova P., Rubezhanska V. Improvement of Controlling in the Financial Management of Enterprises. *TEM Journal.* 2021. Vol. 10, Issue 4, P. 1605-1609.

20. Mykhailichenko M., Lozhachevska O., Smagin V., Krasnoshtan O., Zos-Kior M., Hnatenko I. Competitive strategies of personnel management in business processes of agricultural enterprises focused on digitalization. *Management Theory and Studies for Rural Business and Infrastructure Development*. 2021. № 43(3). P. 403–414.

21. Paschenko P., Sevryukov V., Solod O., Yastreba M. Ecological and economic reengineering as a tool of the organization development mechanism. «Нові виклики для аграрного сектору України в умовах глобалізації»: матеріали III Міжнародної науково-практичної конференції студентів, аспірантів та молодих вчених (22 жовтня 2020 р.). К.: НУБІП України, 2020. С. 71–73.

22. Prokopenko O., Martyn O., Bilyk O., Vivcharuk O., Zos-Kior M., Hnatenko I. Models of State Clusterisation Management, Marketing and Labour Market Management in Conditions of Globalization, Risk of Bankruptcy and Services Market Development. IJCSNS International Journal of Computer Science and Network Security. 2021. Vol. 21 No. 12 pp. 228-234.

23. Rakhmetulina Z., Pokataieva O., Trokhymets O., Hnatenko I., Rubezhanska V. Optimization of the structure of an innovative cluster on a competitive basis in a free market. *Financial and credit activities: problems of theory and practice.* 2020. Vol. 4. No.35. P. 238-247.

24. Rossokha V., Mykhaylov S., Bolshaia O., Diukariev D., Galtsova O., Trokhymets O., Ilin V., Zos-Kior M., Hnatenko I., Rubezhanska V. Management of simultaneous strategizing of innovative projects of agricultural enterprises responsive to risks, outsourcing and competition. *Journal of Hygienic Engineering and Design.* 2021. Vol. 36. P. 199-205.

25. Stadnichenko V., Horda A., Galonkin S. Organizational and economic mechanism of potential management of a competitive enterprise. Аграрна освіта: минуле, сучасне, майбутнє: зб. матеріалів Міжнар. наук.-практ. конф., присвяч. 100-річчю ЛНАУ 15–16 лист. 2021 р. Слов'янськ, 2021. С. 315-316.